

Exploring trainers' decision-making in equine health and welfare in Dubai: a qualitative investigation of the management of flat racing horses

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By

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This thesis is based on research carried out in the Department of Equine Clinical Studies,
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Except where indicated, this thesis is my own unaided work.

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Abstract

Exploring trainers' decision-making in equine health and welfare in Dubai: a qualitative investigation of the management of flat racing horses

Flat racing is one of the most famous equine sports in UAE (United Arab Emirates). However, there has been little research to date on how trainers manage their horses, their relationship with owners, or their relationship with veterinarians. Increasingly the public is voicing its opinion around the use of animals in sport, viewed under the umbrella of 'Social License to Operate' (SLO). Thoroughbred (Tb) horseracing has recently come under greater scrutiny across the globe as social media has turned a spotlight upon its practices. In the past, welfare concerns have focused on issues such as 'wastage', prolonged rest or premature retirement of Tb horses from racing. However, welfare also relates to the ability of the Tb horse to adapt to the managed environment and workload associated with racing performance. This study was designed to examine how racehorse trainers and veterinarians in Dubai considered the welfare of the Tb horses in the context of flat racing performance.

This research gathered data using in-depth interviews from 5 flat racehorse trainers, and 3 veterinarians who worked with racehorses in Dubai. Data were analysed using thematic analysis. Trainers described their passion for horses and Tb horseracing and how they had learned their trade by observing and learning from other trainers. They had not undergone formal training nor was a science-based approach to training discussed. Trainers lived within the rules and regulations of racing in the UAE, but this framed their understanding of equine welfare issues being faced by Tb racehorses. All the trainers emphasised the effort invested in meeting key equine welfare needs in health and nutrition welfare domains. The environment domain was discussed in the context of challenges they faced training Tb racehorses in a hot and humid climate. The resultant short racing season in Dubai and welfare challenges this presented was also a focus of discussion by both groups. While trainers acknowledged the possibility of tensions between a horse's welfare and its performance, trainers consistently reported that the goal of winning was best met by providing a horse with optimal care. The role of owners in relation to a horse's welfare was less easy to discern. The importance of good preventive health care, team-working and early detection of illness or injury were considered to be key to optimising Tb racehorse welfare. Issues relating to the welfare needs of the horse in the behaviour and mental domains were rarely discussed. The welfare of the horse once its racing career had ended was the subject of much discussion by trainers and how they attempted to find 'good homes' once horses left their care.

The results of my study provide an insight on how Tb racehorse trainers and veterinarians in Dubai consider welfare in the context of flat racing. Continuous professional development (CPD) of UAE racehorse trainers could broaden awareness and discussion around Tb racehorse welfare and science-based approaches to training. Welfare concerns

related to retirement from racing and traceability of horses are areas that ERA and Thoroughbred racing stakeholders in the UAE could seek to improve.

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Finally, what I have gained and learned in this MPhil wouldn't have been possible any other way. With the knowledge and skills, I gained, I also gained more independence, courage, a wider perspective, and empathy. In the last five years I have grown and changed as a person.

Introduction

This study was designed to examine how racehorse trainers and veterinarians in UAE considered the welfare of the Thoroughbred horse (Tb) in the context of flat racing performance. Tb horseracing has recently come under greater scrutiny across the globe as social media has turned a spotlight upon its practices. In the past, welfare concerns have focused on issues such as ‘wastage’ including the number of horses that develop an injury or a disease that interferes with training resulting in lost days in work and prolonged rest or retirement from racing, and the ability of the Tb horse to adapt to the managed environment and workload associated with racing performance (Casey 2007).

In a survey of key stakeholders regarding the management and housing practices of Tb racehorses throughout Australia (Mactaggart *et al.* 2021), 14 key welfare concerns were identified. These included: horsemanship, health and disease, education of the horse, track design and surface, ventilation, stabling, weaning, transport, nutrition, wastage, heat and humidity, whips, environment, and gear. These areas cover most aspects of how a racehorse is managed and produced for competition and would be relevant to Tb racehorses in many different countries. However, as discussed further in Chapter 1, specific environmental conditions within the UAE, particularly relating to temperature, humidity, sand / dust can create additional welfare challenges. These may have a direct effect on welfare e.g. physiological effect of extremes in heat / humidity on horses in training or during

competition or may be indirect. For example, the racing season is relatively shorter in the UAE, based around months when heat and humidity are not extreme, which could therefore impact on training / recovery periods.

Regulatory bodies exist within the global horseracing industry to promote and ensure key standards are met and, in theory at least, should create a framework which supports fair and ethical practice including safeguarding the welfare of racehorses. The UAE has a regulatory agency called Emirates Racing Authority (ERA), which is responsible for regulating the racing industry and ensuring the welfare of the horse is met and taken care of (ERA 2021). In Great Britain, its equivalent is the British Horseracing Authority (BHA).

The ERA was established for five main reasons: (a) For the purpose of making, altering, amending and administrating the Rules in the UAE; (b) For the purpose of carrying on the trade or business of Race Course management and for the purpose of education, entertainment and participation by the general public in Horse racing; (c) To perform any act to encourage Horse breeding and Horse Ownership in the UAE and to improve the quality of racing; (d) To organise, represent and promote Horse racing on an international basis; (e) To promote tourism, trade and commerce in the UAE (ERA 2021). Notably this extract does not mention the promotion of equine welfare. However, the rules and regulations document reprinted in December 2021 covers trainers, owners, jockeys, veterinarians, and any professional coming from outside to participate in racing in UAE. The ERA requires any trainers, jockeys and owners involved in horseracing in the UAE to

be registered and the database also contains information about horses in training within the UAE including details such as breeder, ownership, trainer(s) and race results (race type, distance, time, track surface, date) (Emirates Racing Authority, 2023).

The areas covered in the ERA rules and regulations document which relate to equine welfare include use of the whip, permitted medications and prohibited drugs, detection of visible health concerns, (e.g. nose bleeds, skin lesions, excessive sweating, etc.) and euthanasia. It also covers the licensing of trainers including required qualifications and evidence of their ability to maintain and manage a stable. Under the regulations, veterinarians are required to detect and report any concerns regarding any horse's welfare before or after racing. Racecourse veterinarians are authorised by the ERA but are appointed by the Race Club where the race meetings take place. The stated roles of veterinary officers are to: (i) observe all Races and to liaise with the Stewards over the selection of Horses for sampling; (ii) examine all runners and their Passports prior to racing for identification and vaccination purposes and ensure that all runners are physically fit and suitable to start; (iii) inspect runners in the paddock in order to observe and report to the Stewards instances of clinical evidence of skin disease, drugs, bleeding, sweating or other abnormality and the use of non-approved or inappropriately applied gear or racing plates; (iv) provide evidence on horses marked with the whip; (v) undertake clinical examination of horses selected for sampling; (vi) supervision of the sampling unit, and responsibility for manning of the unit, the custody and delivery of Samples to the forensic laboratory;

(vii) examine horses on the Stewards' Instructions e.g. investigation of why a horse has performed badly.

Unlike the rules and regulations of the ERA, the BHA has a comprehensive focus on the welfare of racehorses and the importance of a safer, properly licensed, and regulated sport. The BHA states that it 'leads on the development and growth of racing and prioritises the health and welfare of the sport's participants. In Great Britain, various initiatives have been undertaken and various charities created to promote equine welfare, and to look after racehorses during and after the end of their career (British Horseracing Authority n.d.). These include making sure horses are provided with the best care and environmental conditions, with experienced veterinarian surgeons and officers ensuring their safety and wellbeing and minimising the risks to Tb racehorses by improving racecourses (British Horseracing Authority n.d.).

This study arose from a simple question: how do racehorse trainers in the UAE make decisions about equine health and welfare, particularly given the horse is often owned by another individual or groups of individuals? Veterinarians were included in the study because they assist trainers in their decision-making and play an essential role in the health and performance of the racehorse.

In the next chapter of this thesis, I explore the literature relevant to understanding the welfare concerns associated with the breeding, training and racing of Tb horses. I then

examine the UAE as a context for the use of animals in sport before moving on to the design of this study and the methods adopted.

Chapter 1: Literature Review

Animals and their use in sport in the UAE

The use of animals in sport has a long history in UAE. In this section I will outline the importance of falcons, camels, and horses in the UAE.

Falconry

Falconry is one of the oldest relationships between man and bird, dating back more than 4,000 years, symbolising the connection between humans, nature, tradition and passion. It evolved in Asia before becoming a sport in other areas of the world (Khalaf 2009). In the large expanse of desert within the Arabian Peninsula, the scarcity of food led the local Bedouin tribes to use falcons as a way to hunt food and hence falconry started as a means of survival (Wakefield 2012). But, with the discovery of oil and subsequent economic growth of the country, food became more readily available, the Bedouins left the desert and moved into the villages and cities. Whilst falcons were no longer needed for hunting, falconry continues to have a key place in the UAE culture (Khalaf 2009).

To preserve the heritage of falconry, the UAE government has established several institutions to safeguard and preserve falcons. Because of his passion for falcons, the late president of the UAE, Sheikh Zayed bin Sultan Al Nahyan, promoted and supported the preservation of these birds by bringing back falconry as a sport. A hospital was also built

in Abu Dhabi, specifically for the treatment of falcons which also contained a quarantine facility for the housing of falcons being transported into the UAE (Khalaf 2009). Falcons were a precious commodity to own and were a sign of wealth and prestige amongst the Bedouins. It is estimated that in 2009 there were 5,000 Emirati falconers, believed to be the highest number in the world (Khalaf 2009). This highlights the development of falconry as a traditional sport to promote for the “Heritage industry” together with the sport of camel racing (Wakefield 2012).

Camel racing

Camels were originally used in the UAE for transport, food and wool but also constitutes another animal that is now used in the UAE for sport. Together with falcons, camel ownership declined with economic growth and modernization e.g. motorised transport in the UAE and the increased availability of food. During development of strategies by the UAE government to preserve local and national traditions, camel racing was re-established as an Emirati tradition. The ruler of UAE at that time, Sheikh Zayed bin Sultan Al Nahyan, ordered the establishment of the Camel Racing Association (CRA) to oversee its development as a sport and to safeguard camel welfare (Khalaf 1999).

As a result of considerable economic investment, many racetracks were built across the UAE. Only specific breeds of camels are used for racing in the UAE: the native breed (Mahaliyat), Sudanese breed (Sudaniyat), Omani breed (Omaniyat), and the interbred camel (Muhajanat) (Khalaf 1999). Today, camel racing in UAE contributes significantly

to the national economy with some of the richest races in the world being organised in UAE, with the prizes including cash being worth over AED 100 million (£24 million) (Zacharias 2020).

Khalaf (1999) undertook an ethnographic study of camel racing in UAE in the 1990's. Using this qualitative approach, it was found that camel racing which took place at times of celebrations was distinct from competition racing for winnings' sake alone. This study also found that status and economics was a key aspect of camel racing in the UAE; camel breeders and trainers were motivated not just by the status of owning successful camels but also by the prospect of selling camels for high prices, which can go up to millions of dirhams. In 2017 it was reported that 15 young camels were sold for a total of AED 2.07 million (over £500,000 pounds) (Zacharias 2017).

In the UAE, camels are trained by 'al-mud- hamer' (literally the person who makes the camel lean and fit). These are usually people who come from desert, camel-based families where traditional knowledge and love of camels is part of their history and tradition. There are two key stages in camel training; the first stage is to establish obedience to handling which is often introduced when the camel is about a year old and the second to establish athletic fitness for racing which often begins when the camel is 3 years old (Khalaf 1999). Race camels can run as fast as 65 kilometers an hour in short sprints and at a sustained speed of 40 kilometers per hour (Khalaf 1999). Highly performing camels receive considerable attention with regards to their feeding and health care. The feeding of camels

that are chosen to race competitively varies according to the season. In the racing season, where the emphasis is on maintaining condition while racing, they are fed high energy feeds e.g. oats and barley, with vitamins and trace elements added (Khalaf 1999). Their physiological status is frequently monitored through measurement of each camel's vital signs and by performing haematological and biochemical assessment of blood samples. Camel training may now include exercising camels in swimming pools and on treadmills (Williams, 2015). Sheikh Mohammad bin Rashid al Maktoum and Shaikh Hamdan bin Rashid Al Maktoum have also funded research to improve camel breeding and performance (Nauright and Parrish, 2012).

The similarities between racing camels and horses in the UAE are therefore very strong in many ways. Winning races increases a camel's value - the UAE phrase "she won a car" is used to describe the superior quality of the winning camel. The economic value of the prizes in camel racing in the UAE is not dissimilar to those in horse racing (Khalaf 1999).

Horse racing

Horse racing is a relatively new sport within the UAE including flat racing of Tb's and equine endurance racing. The current ruler of Dubai, Sheikh Mohammed bin Rashid Al Maktoum fell in love with horse racing in 1967 when he was studying in Cambridge, UK. In June 1977 he won his first race in the UK with the filly 'Hatta', which inspired him to bring the sport to UAE (Godolphin 2022). In October 1981, the first Thoroughbred horse race took place in the UAE on the dusty camel tracks organized by His Highness (Dubai

Racing Club 2022a). Interest in horse racing in UAE has continued to develop since that time with expansion of the facilities for Tb flat racing and increases in the number of races.

Currently within the UAE, there are around 350 registered owners and syndicates with Thoroughbred / Arabian horses in training, over 35 trainers and approximately 650 Thoroughbreds competing (Emirates Racing Authority, 2023). In Dubai, there are approximately 20 Tb racehorse training yards which range in size from 10 to over 100 horses some of which are based close to the city centre and others are based further out of the city. There are five main flat racing tracks in the UAE. In Dubai, Meydan is located close to the city centre and consists of two tracks; an oval dirt track of 1750 metres in length (8¾ furlongs) and an oval turf track which is 2400 metres (12 furlongs) in length. Jabel Ali racetrack is a 30 minutes drive from the Meydan racetrack. It is 'U' shaped sand-based track with a maximum 2,200 metres in length (11 furlongs). The other three racecourses are located in Abu Dhabi, Al Ain and Sharjah. Travelling time between these tracks can vary depending on traffic and location of stable but distances between each are relatively short. For example the distance from Meydan to Jabel Ali racecourse is 22km, and from Meydan to Al Ain Racecourse is 156 km (Emirates Racing Authority, 2023).

Within Dubai, Godolphin is the best known and largest Tb racing operation and has 2 stables (Al Quoz, trainer Saeed bin Suroor and Marmoom, trainer Charlie Appleby) based on the outskirts of Dubai with a capacity for a total of 204 horses in training. Godolphin is an internationally renowned, highly successful global Tb breeding and horseracing

operation involving around 1,000 horses which has its main base in Dubai and has facilities in 11 different countries including the USA, GB, Ireland, Japan and Australia. Founded by His Highness Sheikh Mohammed bin Rashid Al Muktoum, Godolphin has played a major role in the growth and popularity of horseracing within Dubai and the UAE as a whole (Godolphin, n.d.).

In 2022, as the impacts of the COVID-19 pandemic continued to have various repercussions globally, the Dubai World Cup welcomed participants from 13 different countries, with 131 horses based outside the UAE competing. It took place in the Meydan racecourse which has a capacity of 80,000 spectators (Oommen 2022) making it the most valuable race in the world (Deloitte 2015). The Dubai World Cup prize money alone can reach \$30.5 million (£27 million) from sponsors (Oommen 2022).

Establishment of horse racing in the UAE has had to overcome a number of challenges including the lack of breeding programs in the UAE. This required transport of horses into and out of UAE; as an example, in 1994, 555 horses were imported from different parts of the world into the UAE and 148 were exported (Farr 1996). The most imported breeds in UAE at that time were Tb horses and Arabian horses. As part of the need to control the import and export of horses, the Emirates Racing Authority (ERA) was established. The ERA's stated aim is to regulate horse racing within the UAE, educate the public, encourage breeding and the improvement of horses' quality of life, and to promote tourism and trade (Emirates Racing Authority 2021). Mechanisms for preventing the spread of disease via

import/export of horses also involved the development of quarantine facilities. The first equine quarantine facility was built in the UAE in 1992 and was initially able to house 30 horses; quarantine is now available in Sharja city with 60 stables (Sharjah Equestrian and Racing Club 2022). Over time, the quarantine regulations in the UAE have evolved. Initially, with the exception of importation from Oman, horses could only be imported to UAE by air enabling imposition of tight quarantine controls. At this time UAE only imported horses approved by European Union (EU) (Farr 1996). Since that time, quarantine requirement has included post arrival recovery in their quarantine facility for horses transported for less than 6 hours (quarantine for 12 hours) and for more than 6 hours (quarantine for 48 hours) with close monitoring of their health (Dubai Racing Club 2022b). The import and export of horses has important consequences for equine health and welfare. This includes the risk of spread of diseases such as African horse sickness, glanders and infectious anaemia (Ellis *et al.* 1994, Farr 1996). Transportation of horses also has health and welfare impacts associated with prolonged travel as I will outline in the next sections.

The racing season

Another major challenge to horse racing in the UAE is the local climate, the temperatures in August, the hottest month in the year can go up to 41°C with 51% humidity (Time and Date 2022). The training and in particular the racing season in UAE is relatively short due to the extreme heat in the summer months, which would severely compromise equine health and welfare. The main racing season in the UAE is October - April but stables such

as Godolphin would move their horses overseas, particularly the UK, to compete in a more temperate climate (Deloitte 2015).

What is animal welfare?

The American Veterinary Medical Association (AVMA) defines animal welfare as “how an animal is coping with the conditions in which it lives” (AVMA 2022). Importantly, animal welfare is directly impacted by the actions of humans (Thompson and Clarkson 2019). Using the latter definition, it is easy to see that animal welfare may be difficult to assess and perhaps even more difficult to discuss as it’s always perceived in a negative light (Lofgren *et al.* 2022).

Various tools and terms have been developed to assist assessment of an animal’s welfare. Use of the term “Quality of life (QoL)” is often used in conjunction with welfare, but is viewed in a more positive light than “animal welfare” (Furtado *et al.* 2021b). McMillan (2003) defines QoL as “one’s general enjoyment of life” making it a highly individualized experience. When animals are considered “how an individual feels about their own life” poses some difficulty as they are not able to convey their feelings using language. Inevitably with animals, usually the owner or caregiver is the one to assess its QoL (McMillan 2003).

Nevertheless, other factors that should be considered when looking at an animal's welfare and/or QoL for instance its genetic makeup (McMillan 2003). Animals have evolved differently to process internal and external stimuli according to the animal's needs. This is particularly apparent with regards to flight or fight responses. Within the equine training and riding community, increased focus has been placed on the interaction between humans and horses. Equitation Science (ES) is the art and practice of using evidence-based understanding of horsemanship and horse riding (Starling and McGreevy 2016). It purports to be a scientific approach that looks at training methods without disregarding the connection of feelings such as love and respect between rider and horse (Thompson and Haigh 2018, Starling and McGreevy 2016). ES promotes the welfare of horses through training methods and devices without compromising the mental and physical state of the horse (Starling and McGreevy 2016).

Animal welfare has traditionally been assessed using "The Five Freedom" framework (Campbell 2016). This framework was adopted as the basis of the UK's Animal Welfare Act 2006, and has found its way into many codes of practice. This framework states that an animal should have:

- **Freedom from hunger and thirst**
- **Freedom from discomfort**
- **Freedom from pain, injury and disease**
- **Freedom to express normal behaviour**
- **Freedom from fear and distress**

However, the framework has been viewed as too idealistic and hard to achieve (Mellor 2016). Subsequently, a “Five Domains Model” has been developed to promote positive animal welfare (Mellor *et al.* 2020). Use of this model is useful for anyone working with animals to understand, learn and analyse how management can affect the physical and mental state of an animal (Webster 2016).

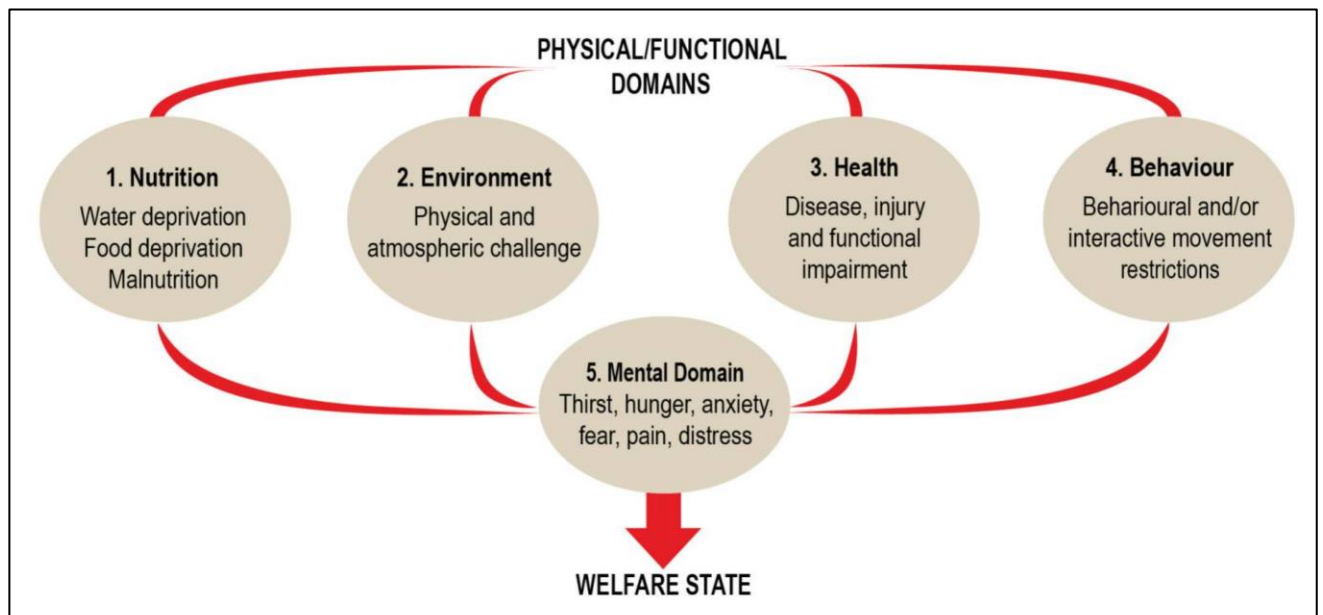


Figure 1.1. The Five Domains Model used in assessment of animal welfare (Taken from Mellor *et al.* 2020)

The Five Domains Model of Assessment of Animal Welfare

In this thesis, I will be using the “Five Domains Model” as the basis upon which equine welfare and specifically Tb horse racing welfare is assessed. Each of the domains - Nutrition, Environment, Health, Behaviour and Mental State – (Mellor *et al.* 2020) will be discussed with a specific focus on Tb racehorses.

Nutrition

The nutrition domain refers to the availability of suitable food and clean water (Mellor *et al.* 2020). This is important because availability can refer to too much or too little. The growing problem of equine obesity is linked in UK to the oversupply of food, either through access to rich grass in paddocks or too much feed offered, through management practices, such as rugging, or through the lack of exercise (Furtado *et al.* 2021a). Key issues in Tb racehorses relate to the fact that, unlike free ranging horses who spend most of their time grazing, most are stabled and may have little or no pasture turnout. In addition, the requirement for feeds that have high energy content results in most Tb racehorses receiving a relatively high starch and low fibre diet which predisposes them to Equine Gastric Ulcer Syndrome, may cause colic or laminitis and induce stereotypic behaviours (Videla and Andrews 2009, Mactaggart *et al.* 2021). Access to feed and water may also be altered during transportation to or from races (Thoroughbred Welfare Assessment Guidelines 2019).

Environment

This domain focuses on the environmental context within which a horse is kept. This covers a range of factors including stabling, turnout and external environmental conditions. As already outlined, Tb racehorses are commonly stabled for long periods of the day. In addition to limiting physical and visual contact with other horses, circulation of air and air

quality may be poor. Respiratory problems are common in Tb racehorses and may reflect sub-optimal environmental conditions. Allergens in dust, bedding and feed cause Equine Asthma (Nolen-Walston *et al.* 2013, Ivester *et al.* 2014) making it important to consider the immediate environment that the Tb racehorse is housed in e.g. bedding type, quality of feed regarding dust and moulds, and stable ventilation. Stabling also prevents social contact between horses, limits their ability to exercise and forage and can trigger development of various stereotypic behaviours including box walking, weaving, crib-biting and windsucking, all of which have been identified as important welfare issues in Tb racehorses (Mactaggart *et al.* 2021).

Heat and humidity are also factors that can compromise equine welfare. The specific weather conditions in the UAE are therefore important when assessing of Tb welfare in this study. This includes the implications of horses being transported into the country from regions of the world with different climates or, environmental conditions that Tb racehorses may be exposed to during training and competition. A huge amount of research has demonstrated how extremes of heat and high humidity can impact the health, welfare and performance of competition horses and optimal ways in which equine athletes can be acclimatised to adapt to such conditions (Marlin *et al.* 2001).

Animals that are being transported to different locations are also usually in a confined, unfamiliar environment, which exposes them to motion, vibration, strange loud noises, poor air quality, heat and cold (Pohlin *et al.* 2021). Tb racehorses are frequently transported

locally, nationally and internationally which can expose them to different environments (e.g., low or high temperatures, extremes of humidity) and stressors (e.g., noise, vibrations, confinement) (Leadon *et al.* 2008). Studies have shown that horses that are constantly transported for competition might suffer from stress related to these changes in environmental conditions especially if the animal is not accustomed to transportation (Marlin *et al.* 2001, Ivester *et al.* 2014). Horses that travel long distances by air are more susceptible to developing lower airway disease ranging from mild inflammatory changes to potentially life-threatening conditions such as pleuropneumonia, making it important for these horses to be assessed closely (Oertly *et al.* 2021). Confinement and changes in normal drinking and eating can also predispose horses to some types of colic (Padalino *et al.* 2020). Consideration of the impacts on transport itself and the local environmental conditions is particularly relevant to Tb racehorses in the UAE, either during local transport from stables to the racecourse or for horses that are transported into the UAE.

Health

This third domain is assessed through the absence of disease, injury and by assessing the physical fitness of an animal (Thoroughbred Welfare Assessment Guidelines 2019, Mellor *et al.* 2020). The most common health issue in Tb racehorses are associated with musculoskeletal, gastrointestinal and respiratory diseases.

Fractures and other catastrophic musculoskeletal injuries are common in Tb racehorses, particularly those competing at high levels (Parkin *et al.* 2004). These injuries can cause emotional strain on the public, economic loss and most importantly these are a welfare concern (Clegg 2011). This has resulted in multiple epidemiological studies being performed to identify risk factors for orthopaedic disease such as fractures, and to identify ways in which they can be prevented or the risk of fractures reduced.

In addition to the negative public perceptions that are associated with fractures that occur on the racetrack it is important to be aware that most fractures actually occur during race training; one study performed in the UK demonstrated that 87% of fractures occurred during training (Verheyen and Wood 2010). However, to date, little research has been undertaken to investigate musculoskeletal injuries that occur during this time period, with most epidemiological research studies undertaken on race-day injuries (Gramm and Marksteiner 2010, Rosanowski *et al.* 2018, Crawford *et al.* 2021).

Most focus on orthopaedic injuries has also focused on maintaining orthopaedic health in order to prolonging a racehorse's career length (Rogers *et al.* 2012). Intensive training is known to have a negative impact on horses' health (Evans 2007) and can cause microdamage to the bones with potential for catastrophic injuries such as fractures to occur, some of which happen on the racecourse (Parkin 2004). However, trainers will not all have the same view of what intensive training is. Few non-invasive tests are available to assist trainers in evaluating racehorse's performance in the hope of changing some of the training

practices that could lead to injury (Fonseca *et al.* 2012). The lack of such data from within the horseracing industry could stem from the competitive nature of the industry and lack of willingness to provide and share data (Rogers *et al.* 2012).

Colic and gastric ulcers are two of the most common gastrointestinal disorders that occur in racehorses. One study of Thoroughbred and standardbred racehorses found that gastric ulcers were present in 86% of these horses when the stomachs were examined using an endoscope (Begg and O'Sullivan 2003). Gastric ulcers in Thoroughbred horses have a negative impact on racing performance and increased prevalence of gastric ulcers has been shown to be directly related to training intensity (Vatistas *et al.* 1999). Treatment of gastric ulcers should start with medications (e.g. omeprazole) and prevention of recurrence by implementing environmental and dietary management changes such as trickle feeding of forage (Videla and Andrews 2009).

Respiratory diseases are also common in racehorses, including Equine Asthma, as discussed in the previous section. Another condition commonly seen immediately following intense exercise is a condition called Exercise Induced Pulmonary Haemorrhage (EIPH). In this condition, bleeding occurs directly into the lower airways and this may be overt, where blood may be seen at the nostrils or it may be subclinical and only detected during endoscopic assessment and sampling of the lower airways. Research has shown that there is a direct link between EIPH and racing performance, and as the severity of EIPH

increased the performance and the horse likelihood of winning the race decreased (Morley *et al.* 2014).

Behavioural interactions

This domain covers the animal's behavioural interaction with its environment, other animals and humans. In Tb racehorses, a number of welfare issues relating to this domain have been identified. Most of these are related to the fact that Tb racehorses are frequently stabled for long periods of time during the day and have limited social contact with other horses (Mactaggart *et al.* 2021). In the wild, horses live in herds and are social animals. Most owners believe that their horses' social and behavioural needs are met by letting them socialise with other horses, even if this is by horses interacting with each other with a fence between them (Thompson and Clarkson 2019). However, Tb racehorses are uncommonly turned out with other horses and may have variable physical or visual contact with others when stabled. This prevents them from developing normal social structures and social isolation can trigger development of stereotypic (repetitive) behaviours and associated health impacts such as colic (Mactaggart *et al.* 2021).

Behaviour of horses towards people can also be an indicator of equine welfare. A study that investigated the behaviour of leisure horses in UK found that stabling for 13- 24 hours per day was associated with aggressive and other abnormal equine behaviours (Hockenhill and Creighton 2014). In this study, horses that had a well-developed relationship with their

handlers were less likely to demonstrate aggressive behaviours towards people. Therefore, the long periods of stabling which are common in Tb racehorses could predispose Tb racehorses to become aggressive towards people. In addition, ways in which Tb racehorses are handled and trained are important and have welfare impacts, particularly where these methods are based on use of negative reinforcement and punishment.

Mental state

This final domain can be considered to be outcome of the 4 preceding physiological/functional domains. An animal should be in a predominantly positive state e.g. pleasure, comfort, good health, fitness and be exposed to minimal negative states such as hunger, fear, pain, isolation or frustration (Mellor *et al.* 2020). In domesticated horses and particularly those that are stabled for long period of time, stereotypic behaviours such as crib-biting, wind sucking and weaving are common and are considered to be indicators of sub-optimal current or prior management e.g. lack of environmental stimuli, prevention of normal activity, restricted diet with lack of availability of forage in particular (Cooper and McGreevy 2007). These types of behaviour are common in Tb racehorses and have been identified by Tb racehorse industry stakeholders as important welfare issues that demonstrate the need for various changes in the way these horses are managed to be implemented (Mactaggart *et al.* 2021).

Animal welfare regulations in the UAE including those relating to veterinary care

In the UAE, animal welfare is regulated by the Ministry of Climate Change and Environment (MOCCA) (UAE Ministry of Climate Change and Environment 2017). In 2017, the late president Sheikh Khalifa bin Zayed Al Nahyan issued a federal law (no 8), amending certain provisions related to veterinary care. The amendment aimed to improve veterinary services and to safeguard the health of the animals in the country. These changes included the fact that a veterinarian must explain the expected results of the proposed treatment to the owner of the animal, the owner has the right to accept or decline treatment unless the animal has an infectious or epidemic disease and in case of surgery, the veterinarian should obtain a written consent statement from the owner (UAE Ministry of Climate Change and Environment 2017).

Flat racing in the public's eyes

There is growing concern regarding the welfare of racehorses, and to ensure the sustainability of equestrian sports, it is important to ensure that it remains within the social and cultural morals and within the acceptable animal welfare frameworks (Heleski *et al.* 2020). The principle of “Social License to Operate (SLO)”, is defined as “obtaining the public approval or social acceptance over a certain project or issue” (Social License 2020). In a review paper that explored Tb racehorse welfare and SLO, the authors stated that the

sustainability of the flat racing industry might also depend on their response regarding challenges that can affect the equine welfare in the long term (Heleski *et al.* 2020). Welfare issues that were highlighted in the Australian horseracing industry are mortalities during racing, confinement, gastric ulcers, whips and tongue ties (Hampton *et al.* 2020). It is important to also note that print media can control another narrative of equine welfare. When the use of the whip is discussed, print media shines a light on people inside the industry as experts, while people that are outside of the “industry bubble” are seen as ignorant and naïve (Graham and McManus 2016, Heleski *et al.* 2020). To ensure the future of equestrian sports within the framework of SLO, this will depend on how these disciplines, challenges and concerns are addressed for the concerned parties inside and outside the racing industry.

Veterinarians’ role in the welfare of racing horses

All veterinary practitioners have a responsibility to act as advocates for animals and to provide appropriate care. Equine veterinarians working elite level sports horses also have to deal with owners, trainers, and riders (and other service providers such as ferries and handlers) which can cause conflict (McGreevy *et al.* 2011). It has been suggested that there is a need to develop a system for veterinarians to use to record injuries of racing horses and to be able to have a better understanding of fatalities that happen away from racecourses (Horse Welfare Board 2020). Another aspect in the role veterinarians have and which needs

to be considered is the way they are viewed by their clients. A study that looked at the pet owner and veterinarian relationship found that communication is the most important aspect of client-veterinarian relationship (Coe *et al.* 2008).

Relationship-centered client interactions

In veterinary medicine there are three approaches to client relationships that are recommended (Best 2018):

- Veterinary centered: where the veterinarian has the higher power in the relationship, as veterinarians are often seen as all-knowing.
- Client centered: where the client has the power due to information being available and ease of access to it online.
- Relationship-centered: this is being promoted as shared power between the client and the veterinarian. As the role of the veterinarian is the “expert” and the client can decide what is the best course of action.

Little is known about what influences trainers to make decisions about the health and welfare of the horses that they train. Dubai organizes one of the most high-profile Tb flat-racing equestrian event in the world (Oommen 2022), and yet there is little data looking at flat racing in the region and how different trainers construct the management of the horse’s health and welfare, how they work with veterinarians, and how they view Tb flat racing equine welfare.

Chapter 2: Methods

In this thesis, a qualitative approach was taken to explore, in-depth, the opinions of UAE-based racehorse trainers and veterinarians working in the Tb flat-racing industry in the UAE using one-to-one interviews. The study was designed to investigate their role in the health and welfare of Tb flat racehorses. It also examined the relationship between trainers and veterinarians with regard to decision-making.

This is an under researched area and lends itself to the use of qualitative methods for the following reasons: little is known about how trainers and veterinarians make decisions about the welfare of the racehorses for which they are responsible; the pressures and tensions which exist may best be explored in a face-to-face setting using in-depth interviews; and, recruiting people to this study would involve sensitive in-person negotiations to fully explain the study.

The distinction between qualitative and quantitative approaches

The underlying paradigmatic and philosophical approaches associated with quantitative and qualitative research are fundamentally different. On the one hand, quantitative research is concerned with the generation and testing of hypotheses derived through deductive methods that assume the world is objective, predictable and measurable. In contrast, qualitative approaches use exploratory and naturalistic approaches to understand the motivations, insights and experiences of those who inhabit the social world (Robson 2002).

While quantitative research has its roots in positivism which determines that valid and authoritative knowledge only emerges from evidence that is logical and scientific, the anti-positivist movement suggests that scientific methods of knowledge generation do not create an understanding of phenomena which takes account of individual feelings, experiences, beliefs and behaviour.

During the 1990s, the idea that the researcher was simply a passive recipient of knowledge was rejected. Instead, the researcher was viewed as actively engaging the participant in the joint production of knowledge. The researcher, rather than being independent and distant from the research process was viewed as deeply embedded, as a co-producer, in its activity and therefore capable of influencing the data and its interpretation through their background, knowledge and values.

Qualitative research is characterised as naturalistic, taking place in the everyday settings and environments through which research participants live and enact their daily lives. There are a range of qualitative techniques available to understand the worlds within which people live, work and spend their leisure time, but ultimately the choice of methods is dependent on what, how, where and when the phenomenon under study is to be explored. How individuals interact with those around them, how they manage their identity and roles and the way in which they give voice to those experiences are captured by the qualitative researcher. Qualitative research provides the route through which the unique experiences of the respondent are fully and comprehensively gathered through a detailed set of

interview exchanges. Qualitative data collection tools include in-depth interviews and observation to explore the complexity of everyday life experiences and the meanings and understanding that individuals assign to it (Bowling 2002).

The fundamental underpinning of qualitative research is to understand the individual's interpretation of the world in which they live, work and have their leisure time. As Denzin and Lincoln (1994) state:

“Qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them” (pg. 2)

Ethical approval

Ethical approval was obtained from the University of Liverpool Committee on Veterinary Research Ethics (VREC685) and through local UAE approval through the management and veterinary team at the Dubai Equine Clinic.

Study Aims and Objectives

The aim of the study was to explore the relationship between horse trainers and veterinarians in relation to the health and welfare of Tb racehorses in Dubai.

Objectives:

- ✓ To understand from the perspective of trainers the challenges they face in relation to the management of the Tb racehorse
- ✓ To explore the way in which trainers relate to owners of racehorses
- ✓ To explore how the concept of welfare fits with the training of the racehorse
- ✓ To understand the role of the veterinarian in relation to the care of the racehorse
- ✓ To identify the ways in which trainers and veterinarians make decisions about the care, treatment and management of the racehorse.

Study Design

The study was designed as an in-depth qualitative study undertaken in Dubai utilising data obtained from Dubai-based Tb racehorse trainers and veterinarians. In this research, qualitative, semi-structured interviewing was the chosen approach to data collection as it enables the discovery of new conceptual and theoretical knowledge through capturing the life experiences of the interviewee (DiCicco-Bloom and Crabtree 2006). The purpose of a qualitative interview is to develop a detailed understanding about what is important to the people being studied, when they have first-hand experience of a certain phenomenon or life event (Rubin and Rubin 2005). A semi-structured approach was chosen instead of more structured interviewing, whereby questions are pre-determined, linear and rigid. Semi-

structured interviews allow the researcher to engage participants and probe unexpected lines of enquiry which arise during the course of the interview.

Participant Recruitment

Recruitment and communication

I am employed as a Radiographer in the Dubai Equine Hospital (DEH). Sampling and recruitment were facilitated by the Dubai Equine Hospital chief of field veterinarians (DF). I had initially been interested in the recruitment of endurance and Tb flat racehorse trainers, but on the advice of the equine hospital the focus of the study shifted to trainers of horses involved in flat racing only. The rationale for this was the limited availability of endurance trainers and the remote locations in which they often worked. The chief of field veterinarians initially contacted veterinarians in Dubai who were working directly with local Tb flat racehorse trainers. The recruitment process was started in 2018. DF provided all potential participants (both trainers and veterinarians) with an information sheet (APPENDIX A & B) in which interested parties were asked to contact me if they were willing to be interviewed.

I initially aimed to recruit 7 trainers and 3 veterinarians, making a total of 10 participants. This sample size was based on the number of trainers and veterinarians who it was considered were likely to be recruited based on information from DF. This was a small

sample size but was a pragmatic approach that my supervisors considered would enable me to identify key hierarchical concepts based on other qualitative studies they had conducted in the equine industry (Scantlebury *et al.* 2014). To be eligible to participate in the study, Tb racehorse trainers and veterinarians had to be over the age of 21 and have over 5 years' experience working in Dubai.

Recruiting Trainers

Potential participants were given information about the study and were asked to contact me through the veterinarian they worked with if they were interested in participating. This process took some time.

Where a trainer responded directly to DF about their willingness to participate in the study, their veterinarian provided me with the trainer's contact information. I immediately sent a message via WhatsApp to the trainer or called them directly. I introduced myself and gave a summary of the study. We would agree on a day and time to meet and the meeting would always take place in their office which was usually located in the racing stables. The characteristics of the trainers interviewed are outlined in Table 2.1. Eight trainers initially contacted me but two were not eligible as they had < 5 years' experience working in Dubai and could not be recruited. One trainer agreed to be interviewed but did not wish to sign the consent form and so the data could not be used. The Covid-19 pandemic made

recruitment less personable and impacted upon the time available to work on this study: As a result the sample was compromised in terms of numbers. However, the trainers were all male, non-UAE nationals who had worked in Dubai for up to 30 years and were responsible for between 13 to >100 horses in training at any one time. This was considered to be a broadly representative sample of Tb racehorse trainers in Dubai based on information from DF.

Trainer Pseudonym	Sex	Nationality	Occupation	Number of horses in training	Years working in the UAE	of Interview in type
Trainer 1	Male	Indian	Trainer	>100	30 years	Face to Face
Trainer 2	Male	American	Trainer	100	26 years	Face to Face
Trainer 3	Male	French	Trainer	50	9 years	Face to Face
Trainer 4	Male	French	Trainer	25	25 years	Face to Face
Trainer 5	Male	Italian	Trainer's assistant	13	Over 5 years	Face to Face

Table 2.1 Tb horse trainers that participated in this study.

Recruiting veterinarians

The process of recruiting veterinarians followed the same procedure as the recruitment of the trainers. Veterinarians were recommended by DF as being individuals who might be interested in participating. Initial contact was made with 3 veterinarians, all of whom agreed to participate in the study. They had been working in the UAE for over 10 years.

They all came from different countries and one of the veterinarians was a woman (see Table 2.2 for sample details). Initially I had hoped to interview the veterinarians face-to-face but had to change methods as a result of the Covid-19 pandemic. I therefore applied for an ethical amendment (Appendix E) to conduct interviews online via Teams. None of the veterinary interviews were conducted face-to-face owing to Covid-19 restrictions at the time of study initiation and subsequently due to their busy schedules. Covid-19 also severely impacted analysis of data that I had collected from veterinarians. In addition to my own increased workload (including secondment to work in a human hospital in Dubai at the start of the pandemic), travel and social restrictions prevented me from visiting my supervisors to analyse the initial data in-person as planned. This severely impacted this part of the study and delayed thesis submission and also prevented further recruitment of additional veterinarians.

Veterinarian Pseudonym	Sex	Nationality	Years working with TB racehorses	Veterinary background	Interview type
Veterinarian 1	Male	British	> 30 years	Field veterinarian	Via Microsoft Teams
Veterinarian 2	Female	Mexican	> 20 years	Field veterinarian, university lecturer, intern-supervisor	Telephone
Veterinarian 3	Male	Saudi Arabian	>20 years	Field veterinarian and veterinarian officer in races	Telephone

Table 2.2 Veterinarians who participated in this study.

Interview guide

I devised an interview guide (Appendix F & G) to cover the topics required to meet the objectives of the study. During this part of the study, I discussed the different areas that I wished to explore in-depth during the interviews. Once the interview guide had been constructed, I underwent training with one of my supervisors (EP) on how to conduct one-to-one interviews. I also piloted my skills by undertaking an interview with one of her PhD students. The test interview was recorded so that I could transcribe it myself to better understand the process of interviewing and analysis of the data. Following this, I was able to start the process of formal interviews.

Data collection

Interview documentation and planning

The interviews were performed at two separate time-periods due to the Covid-19 Pandemic; the first interview period was November 2019 termed 'Pre-Covid' time and the second was October 2020 – July 2021, defined for the purpose of this study as 'Post-Covid'. 'Pre-Covid' interviews were conducted face-to-face with the Trainers group. 'Post-Covid' interviews were performed via telephone or using Microsoft Teams, all with the veterinarians. One trainer who was in this time period preferred to conduct the interview

face-to-face, and this was performed in accordance with UAE health recommendations including the wearing of facemasks.

The Participant Information Sheet (PIS) and the consent form were sent to all participants via email just before the interviews were actually conducted. Although I knew that they had already received the study information I wanted to make sure that the information was to hand and fresh in their minds before the start of the interview. At the start of the interview I asked all participants whether they had read the PIS and found that, despite agreeing to be interviewed, most of the participants did not have a detailed informed view of what the study was about and had not read the PIS. I therefore took the decision to read through the PIS with them to ensure that they understood the aims of the study, how it was being conducted, how the data were to be stored and how long it would take. Once I had gone through the PIS, I asked each participant to sign the consent form.

All interviews were in-depth, semi-structured interviews using the interview guide as a prompt for me. In-person interviews were recorded using a Sony voice recorder, which I tested before meeting the participant and before the start of the interview to make sure it was working. Notes were due to be taken during the interview, but in practice I rarely wrote down notes so that I was able to focus on the participants. I would write a short sentence if there was an idea or a question I wanted to explore but did not want to interrupt the participant. In this situation, I would write it down and go back to this question at a later point in the interview. The interviews lasted from 45 minutes to 1 hour in length. Audio

recordings were transferred securely via Microsoft Teams to a University of Liverpool based professional transcriber.

Initially, I was too eager to get to the core of the research question, glossing over the ideas and the information given by the participants because I didn't think they were important or impactful for the study. When I discussed my experience and reviewed the data with EP during a scheduled study leave to visit my UK supervisors in person, she explained that every piece of information shared by the participant is important, and explained that I missed probing on some questions which could have given me more insight on the way the participant thinks or works. Two trainers in the first 4 interviews provided short answers, and I could feel they were holding back some information which they were not comfortable sharing whilst they were being recorded. However, once the interview ended and the recording stopped, one of them shared with me his thoughts and ideas more freely and comfortably. I wrote down some points that he mentioned such as, the privacy sharing information between trainers, retiring horses, selling older horses, which were points I discussed in the interview that followed.

After coming back from that visit and continuing my interviews, I was more confident to let the participants talk and my interviews became longer. I was able to find ideas in very long answers as the participants were more comfortable to talk. This was easier for the interviews that were conducted remotely, as was the case for all but one of the 'Post-Covid'

interviews. With hindsight I wonder whether the physical barrier of the phone/ virtual technology made it easier for participants to talk.

During this process of conducting interviews, I learned to wait during any period of silence to encourage the participant to talk more and draw more ideas from what they were telling me rather than interrupting the flow of the conversation and solely relying on the interview guide.

As a human radiographer I was an outsider looking into the world of Tb horses and horseracing. This may have been advantageous as it limited the effect of my own beliefs about Tb horseracing on my analysis and interpretation of the data. However, it did mean that I was less likely to be accepted by Tb racehorse trainers who might have felt that their methods of training and their opinions about equine health and welfare were under investigation. This may have resulted in a defensive attitude towards me by some racehorse trainers such as the racehorse trainer who didn't feel comfortable signing the consent form, and may have prevented me from recruiting additional trainers easily. I tried to keep a field work diary to keep track of how I felt about the interviews and to record my observations which accompanied my data collection. In the following section I display an excerpt from one of my entries.

Field notes

During the study, once data collection had started, I recorded my personal reflections of each visit in a field note diary. This is an excerpt from one of my visits:

It was a foggy morning. The sun still has not risen and the drivers heading to their jobs drive lazily. Not in a hurry to get to their destination. I arrive at the stable as the sun gives a bit of its light to the day, but the fog holds fast and doesn't go away. The weather is cold and damp, but as agreed with Dr. X I'm there to witness the every day to day work around the stable. To understand how things work around the stable, what does teamwork looks like in flat racing, and how horses are being taken care of.

In the cold damp weather, I follow Dr. X and the surgeon to check on a horse. The horse seems to have performance issues, the veterinarians are there to monitor his breathing and heart. The horses are already out on the track. Dr. X takes out her equipment, laptop, electrodes, and bandages. She places the electrodes on the pulsing areas around the horse, tapes them properly in place with bandages so it wouldn't fall off. Checks that the computer is reading the pulses, then she takes a step back. Enters the second surgeon, with his endoscope he pushes it down the horse's nose to monitor it's breathing. Endoscope camera checked. Everything is set and in place, the horse is saddled up and escorted out of the stall to go to the tracks. We head toward the sound of hoofs against a sand track. The horses are ready on the track, slowly he picks up his pace and disappears through the fog. The surgeon watching his monitor, trying to catch the signal of the endoscope. He loses it for few minutes as the horse is now at the opposite side of the track. We squint through the fog in anticipation. Out of the fog, a horse, and its rider pass in front of us and get lost in the fog again. The trainer approaches us, chats with the surgeon, and tells him his concerns about the horse's performance. Once the assessment is done, we head back to the stall with the horse at our tail.

Placed in the stall. The endoscope is removed. Dr X picks up her laptop to read the electrograph and to check how long does it take for the horse's heart to reach resting rate. Fifteen minutes later the test is done, she got all the data she needed. She removes the bandages, the electrodes and puts her things away. Few minutes later a man walks towards us, pets the horse on the head, looks at us smiling "how is he?" he asks. Dr. X professionally replies, "I will need to go back to the office and properly read the electrographs".

As the fog lifts up so does my perspective of how things work in a flat racing stable. Workers, grooms, riders, the trainers, and their assistants are all working together like a beehive to make sure that the horses are being taken care of while training and after training. Even the owners can be there in the early hours of the day, filled with concerns about their horses. Now I have a live image in my head of what was being said to me in all these interviews. As I drive off to start my day at the hospital, I watch one of the horses being showered, enjoying the water against its heated body.

Data analysis

Analysis of the data were conducted using Thematic analysis performed using an inductive approach.

Thematic analysis

Thematic analysis is an analytical method frequently used in qualitative research when seeking to understand experiences, thoughts, or behaviours across a data set (Braun and

Clarke 2012, Kiger and Varpio 2020). Thematic analysis can produce an understanding of the social, cultural, and structural context that influences an individual's experience and perspective. It is a way to develop knowledge and understanding between the researcher and the participant (Kiger and Varpio 2020). A key advantage is its flexibility to be used in a wide range of areas to develop theoretical and epistemological frameworks. It is commonly used as a sole analytic method in the field of qualitative research (Kiger and Varpio 2020).

Boyatzis posits that *'thematic analysis allows the interpretive social scientist's social construction of meaning to be articulated or packaged in such a way, with reliability as consistency of judgment, that description of social "facts" or observations seems to emerge'* (Kiger and Varpio 2020).

A 'theme' is a 'patterned response or meaning' derived from the data that informs the research question (Braun and Clarke 2006). When looking at the themes that emerge from the data, the researcher can define it regardless of how many times it appears in the data set (Kiger and Varpio 2020). Classification of themes can be broadly identified as one of two types (Boyatzis 1998, Braun and Clarke 2006, Kiger and Varpio 2020):

- Sematic or manifest: addressed surface or shallow data items
- Latent: addresses deeper meaning, assumptions, and ideologies.

An inductive approach is one way to approach thematic analysis and was the approach I used in this study. This type of approach derives themes from the research data and does not exactly follow the questions asked by the researcher (Varpio *et al.* 2019), which tends to provide a broader approach of the entire body of data. This is in contrast to a ‘deductive approach’ which is where theory is driven and follows other works of literature.

I used the approach as outlined by Braun and Clarke (2006) which is the most widely adopted method of thematic analysis within the qualitative literature (Clarke and Braun 2017, Kiger and Varpio 2020).

1) Familiarizing yourself with the data: - sitting with the data and understanding the answers of the participants without analysis or assumptions

Generating initial codes: - looking for ideas that are significant. When a researcher is in the process of coding, a set of questions can be asked when looking at the data, such as (Castleberry and Nolen 2018): -

- What is happening in the text?
- Who is involved and what is their role?
- Why are things done in such way?

2) Searching for themes: - connecting the codes together to come up with themes

- 3) Reviewing themes: reviewing the most common theme throughout the text and between participants
- 4) Defining and naming themes
- 5) Producing the report/manuscript: putting the themes together and analysing them without taking them out of context.

I used this outline to structure the way in which I analysed my data. Each line of the transcripts was carefully read, coding each section based on the response for example, 'Love for horses' or the 'role of the trainer'. Codes were then combined to start constructing themes around the data. Each set of transcripts were first coded individually, then each transcript was compared with other transcripts in the same occupational group e.g. trainers with trainers and then finally the themes were compared across trainers and veterinarians to identify similarities and differences. I went through each transcript multiple times to understand what codes emerged from my initial data set, and I coded multiple times over. I stopped coding once no new codes and themes appeared. Given the small sample size and the nature of the individuals participating in the study it was surprising how quickly the same themes emerged across the interviews. It is possible, however, that had I had a much larger sample there would have been greater variation between the participants.

In the next section of the thesis, I go on to present the findings from my interviews with the trainers (Chapter 3) and veterinarians (Chapter 4) before discussing my findings in the final chapter of the thesis.

Chapter 3: Trainer Interviews

To understand the way in which the Trainers in this study made their decisions about the horses in their care it is important to acknowledge their history. What led them into the equine world, flat racing and training Tb racehorses? This chapter presents the analysis of the Trainer's interviews under the following themes:

- **History and background**
- **Learning their trade**
- **Trainers and their horses**
- **Racing in Dubai**
- **Knowing the horse**
- **The use of veterinarians by trainers**
- **The trainer and the owner**
- **When to retire a horse**
- **Welfare rules and regulations**

History and background

All of the Trainers identified a lifelong passion for horses. While Trainers 1 and 5 came from families who had been around horses for as long as they could remember, Trainers 3 and 4 had become interested in horses from an early age despite the absence of any family connection to horses.

“my passion and love for the horses has been since, I mean as long as I remember, so I guess three, four, five years onwards as long as I can have, I can consciously remember and it’s been that long.” Trainer 1

“I’m born in it; I’m born in a stud farm from my father running a big national stud farm” Trainer 4

“my family wasn’t involved with horses, so I decided when I was young” Trainer 3

All of the Trainers went into flat racing as a result of a series of deliberate choices. Trainers 2, 3 and 4 moved from breeding and stud farms to flat racing. Trainer 2 worked his way from being a groom to a headman to an assistant and finally to being a trainer in his current stable. Only Trainer 5, started as a jockey; riding horses in Europe and Hong Kong, before moving into training horses.

“I wanted to train and ride by start to be involved with training to see if I like it and then ... then I do it for one year and then after 1 year I decide to stop riding and to train. So that was a year transition basically.” Trainer 5

All of the trainers expressed their love and passion for horses which underpinned their chosen occupation.

“To be in this horse business, racing, polo or anything to do with the horses. First thing is you have to have the passion, love for the animals and without that I don't think anybody can be successful or be in the business. It doesn't matter if it's racing

or jumping or just endurance or anything and ... if you're, if you're just going in for glory or money, you're in the wrong business. 'cause first thing it has to be passion and love. So in my case it is passion and love for the horses” Trainer 1

While love and passion was the foundation of horse training there was recognition that this alone was not enough. Horses are seen in this case as professional athletes, not just animals. They are required to perform and win money - in this context they need to work hard to earn their keep. How trainers facilitate the performance of their horses is the subject of this thesis.

Learning their trade

In the interviews with Trainers it became clear that different types of knowledge influenced their decisions about the training and racing of horses. Most of the trainers in this study reported that their knowledge was based on experience gained through working directly with horses.

“whatever you learn you just learn it in the stable ..., you won't learn it at university or anywhere like that you know. You will learn some but after that you know most of the theory or practical is in the stable so you just learn it” Trainer 3

The horse world within which the trainers moved created the knowledge framework within which Trainers learned their craft. While for some trainers their experience and knowledge was rooted in the handling and training of young horses, Trainer 5 used his prior experience

as a jockey to assess a horse's health and performance. In this aspect Trainer 5 was unique as he experienced the horse from its back as well as through the eyes of the Trainer. For those Trainers who did not ride, learning from older Trainers was mediated almost through an apprentice type relationship.

“from knowing a little bit, to having to learn on the go, being on the phone with him, seeing when I should go forward enough and just having to do it on your own it actually very much helped when ... on my own” Trainer 2

“I went to work for a trainer in America called XX for 17 years, I was his assistant”
Trainer 3

For example, Trainer 2's experience transitioning from a trainer's assistant to a trainer involved the guidance of the trainer in charge, from starting horses to managing the stable when the trainer was not available.

“I was in charge of starting all the horses back, which was unbelievable experience and ... most of the time you're just worried about keeping everything sound until he got back in November” Trainer 2

Trainer 2 talked about the way in which he had to learn to balance the requirements of training for a race with the needs of the horse.

“I got to learn to train horses, to back off .. when they're a little sore ...” Trainer 2

Trainer 1 talked about a well-known natural horseman who had been influential in shaping his understanding of the horse. Trainer 1 continued to use the knowledge and expertise of this person to help him with particular horses. Nevertheless, most of the learning or further learning described by the Trainers arose because of the context within which the Trainers worked.

“we do share, I mean like any community, you have people you are closer to”

Trainer 4

“just be around the best people you can, and ... try to always every day learn something” Trainer 2

Perhaps because of their reliance on the experiential aspects of learning how to train racehorses the trainers talked about seeking help and advice from other trainers where it was needed.

“I’ve got a few people in the community I am close to, and I am not ashamed to pick up my phone” Trainer 4

Trainer 4 was the only Trainer to talk about a formal qualification for training horses.

“to get to where I am I had to do ... a course in France which was a course in ... training horses but as well in management ... and ... I got a Diploma. I got to be

able to have my licence when I went to America, I had to go again through this to get full course and to be approved as a trainer” Trainer 4

The importance of relying on experience as a knowledge base cannot be overestimated in terms of practices which may or may not affect the horse’s welfare. Custom and practice can embed poor practices devoid of an evidence base in the training of racehorses and this is something to which I return in the discussion of findings.

Trainers and their horses

Trainers described their role in different ways. In most cases deciding what the horse will eat, how and when they train, who rides them, and most importantly if they need medical attention from a veterinarian or whether they can manage it by themselves.

Even though the racehorses are seen as professional athletes, the need for close contact with the horses’ created relationships and attachments to which all Trainers referred.

“I know them too well probably. I spend more time with them than my wife and my children” Trainer 4

Like this morning I see one horse walking there, I said, “what’s wrong with him? I say “no he’s not right” so, “ok take his temperature” ... Because the way he acts is like a human, he’s like a human, my staff, I know my staff by heart. If I walk in the barn, I know straight away, I said “what’s wrong with you?” .. it’s sometimes your friends, .. if something go wrong you see their face, the horse is not 100% but they can show you something ... Trainer 5

This close relationship with the horse formed the basis for understanding change in a horse and for interpreting change as requiring intervention or not. The greatest challenge for all trainers working in Dubai was the seasonal nature of racing and the heat. Trainers had to maintain the health of the racehorses for the four months when it is simply too hot to train horses and then to adapt the horse's routine to the temperature with regard to training and race preparation. The temperature dictated the daily routine of all race trainers and each day training would begin under floodlight as early as 4am to avoid the heat of the day.

“basically, when they're off for that four months, because they're not training, they're not pounding on their legs, they demineralise in their bones ... I think the four months off of not pounding and training ... really helps with the longevity of horses. If we treat them correctly as we start them back and build to a certain level, ... they can run the next season.” Trainer 2

The main challenges that trainers face are the heat and humidity, especially before the start of the race season when they need to improve the horse's fitness level.

“It's very humid in the summer so early in the morning humidity ... heat so usually July, August, September, October” Trainer 3

“end part of October, so you need three months before that to get the horse ready for the first meet onwards and that is quite challenging and ... you have to be very careful ... about everything” Trainer 1

The key to training was to improve the horse's fitness while maintaining its health and avoiding injury in a short time frame.

"I stress myself 'cause we have to pack so much in from November til the end of March no its til mid-April and you're just packing it in here you know like you've got to get it done in that period of time" Trainer 2

"you are kind of pushed to ... start early and finish early" Trainer 3

The environmental challenges require a Trainer to undertake training carefully and over a long enough time before the race season to avoid injury.

"you have to monitor your training you know when they come back and full sweating and blowing hard because it's the humidity the heat so you have to put a lot of foundation before to do a strong training." Trainer 5

Managing the effects of heat on horses is not limited to the training sessions, heat and humidity can still be very high on summer nights:

"heatstroke mostly after races you know because it's an extended effort for a long period of time" Trainer 3

Trainers still need to make sure that this extended effort in such environment will not affect their welfare and health. Hydration was only mentioned once about managing horses that are training in a hot and humid environment.

“hydration factor ... is the main thing.” Trainer 1

Maintaining hydration and keeping horses cool in an air-conditioned environment or using the horse swimming pool were seen as essential to managing horses in this extremely hot climate. Most of the trainers had been training in Dubai for a very long time and were used to managing and training horses in these environmental conditions. However, it might be deemed difficult and a challenge for new trainers who are trying to establish a career in Dubai and other emirates in the UAE.

“it’s very difficult for a visiting trainer or a new trainer to .. the beginning of the season because it’s just not horses, even for human beings its very hot, it’s very humid and to train in that part of those two, three months its very ... tough and you have to be very, very careful.” Trainer 1

In the off season, the role of the trainer was to support the health of the horse and manage the everyday issues that challenge all domesticated horses. General threats to a horse’s health ranged from bacterial and viral infections to colic.

“If we have an issue with a stable like virus or something its easy, I mean you just treat the full stable.” Trainer 4

This approach to managing each horse within the context of all the other horses had the potential to promote practices such as the prophylactic use of antibiotics which might

prevent suffering in the short term but might in the long term be a suboptimal use of a therapy.

“It’s all the horses are treated the same way They get the same treatment, same feed, same everything, we don’t differentiate anything with any owner. Any particular horse, whether this horse is super champion or a normal horse.” Trainer 1

In the context of training horses for different owners or for syndicates, it was important not to be seen to be giving some owners’ horses preferential treatment. Trainer 1 saw all horses as equal but in working with the horses he recognised that each horse had a different personality, with particular likes and dislikes, and behavioural habits, which he took into account when training the horse. This is discussed later in the chapter (p65).

Racing in the UAE

All of the Trainers were proud of the racehorse industry in Dubai. They were keen to acknowledge the support of the Royal Family in developing and promoting the sport and recognised that without the investment from the Royal Family, many of the stables in Dubai would not exist as well as in Newmarket in the UK. Horseracing and its investment by the Royal family constituted a global business.

The Trainers believed in their jobs and understood how the investment in the horses made by the owners created facilities which made their job easier and more fulfilling.

“very happy here this is one of the best jobs you could ever find ... it really is, I’m not just saying that 'cause I’m working here, ... you’re given all the facilities and ... hopefully I can give back in some way but you’re given all the facilities and the people and ... the owners that are available here and stuff.” Trainer 2

The facilities involved not just the way in which the stables were equipped but the infrastructure for Horseracing. While travelling horses’ long distances forms one of the welfare concerns that surrounds racehorses, the geographical nature of Dubai and adjacent emirates makes travelling time very short.

“we have four, five racetracks within UAE and the maximum time is an hour 15-20 minutes, with other countries you have to travel, ... geographically we are very ... comfortable” Trainer 1

The country was also reported to be economically stable enabling racing to be immune from the peaks and troughs in the economy which other countries of the world face. In UAE sponsorship replaces betting as a source of income.

“they get the sponsors because what make the racing go in France betting, here is no betting ... If the economy is good that’s going to be good” Trainer 5

“racing in Dubai ...it’s a very unique country which provides the best of the best for the racehorses, not only the racehorses for polo, show jumping ... endurance, there is no other country, I mean if you look at the size of this country and amount

of equine sports we have and just not the sports, we have the aftercare, we have the logistics ... Dubai Racing is known all over the world” Trainer 1

The Trainers all adopted their own training methods which depended on the number of horses for which they were responsible. The most detailed accounts of the training involved getting horses into training before the start of the race season.

“it might be March till August or end of July they do a lot of ground work, a lot of trotting ... and then build-up canters and then it takes about, from the time we start them in early training, ... to the time that they have like their first piece of fast work would be probably seven weeks, that’s a build-up so that’s trotting, cantering easy, cantering a little quicker ... and then ... we’d have a minimum of six, seven, eight weeks before they’d run the first time ... So that’s our process as far as getting them started, and then once we get started, like from where we’re, when they’re racing, ... after they’d raced, had a race, they’d have maybe two, three days off, we are just hand walking, easy time and then build upwards the next race and ... depending on when that is” Trainer 2

Knowing the horse

Trainers reported knowing their horses through regular daily observations. These daily observations often centred upon detecting ‘change’.

The temperatures are taken, see if he finished his feed last night, his dinner, ... see if he's been drinking well, you watch his manure, how the manure is, whether his stomach, digestive system is good and water intake and so all those things are the first priority of the day” Trainer 1

“so basically it’s a daily thing of looking at their health. I mean you just have to ...know the horses, you have to know when they're coming on or they're shaking a little bit or.. they don't look as well, they don't have as much you can tell a lot with a horse in their eyes too when they're you know when they're not feeling 100% so you'll pull a blood and just try to work on those type of things there's many things that go into it” Trainer 2

“If horses eat, it means they are happy. If you have a horse that’s been eating all the time then at one stage he starts leaving feed, then you know that you have a problem. It’s either the training is too intense and he is not able to cope with the training that you are asking him or maybe he is sick could have a fever or could have something viral or ...” Trainer 3

The health of the horse was seen by trainers to be central to the performance of the horse - they performed well if they were physically well and vice versa.

If they work good, they look good; if they eat well, then usually they run well... If they don't look good, they are not training good, they are not eating then most probably when you run them, they won’t perform to ... to their peak.” Trainer 3

The difficult nature of managing relatively common issues in horses in the context of racing and the horse being owned by someone other than the trainer was identified by Trainer 5 in relation to a horse with colic.

“We had it for three weeks, four weeks. Colicked pretty good one day and then was in the hospital for about four ... came back they were happy enough with him, we

started training a couple of days later, built it up to where he worked the first time. And then he had some, it wasn't a nephrosplenic impaction or anything but, anyway we sent him back to the hospital 'cause he colicked again and they had to open him up, they didn't have to cut anything but they had to open him up. So the season was over, so I had to tell him [the owner] last year, your season's over right after we got the horse and then this horse this year, he was fly... he was doing great and then all of a sudden, he just, anyway." Trainer 3

For most trainers there was a regular focus on the horse's legs as a way of detecting issues which might affect the horse's performance. In particular, trainers were interested in identifying the presence of heat and/or swelling.

"For me checking legs every day you learn a lot, if you check the legs of the horses every day you learn a lot you know and then if one day there is a difference and you can feel it then you know, you can know that maybe there is something going"
Trainer 3

"we check their legs every day if there's a little extra filling around their suspensory that we didn't see two days ago" Trainer 2

"So when I come in the morning the first thing I go in the barn there and see the guy and I say is everything ok he said oh yes, this one have heat or this one ... got a left front bit swollen or whatever so when I go in I check all the horses he's not happy. That's the first part and then when all that is done, we start training"
Trainer 5

Trainers created a distinction between stiffness and lameness in their horses. While they viewed stiffness as something that would wear off, they reported that ‘consistent lameness’ would be grounds for not running a horse in a race.

“some horses may come out of their box for two or three minutes, five minutes, they may have a bit of stiffness but when they get to the track, they're perfect and they're good and its ok.” Trainer 3

Detecting physical issues in a horse was described as a team effort. Trainers relied on their grooms, foreman and riders to report back any issues they might have noticed before the start of training.

“we have a system here where we have one headman foreman for each barn, that look after like twenty horses so as they're coming to, we stand out at the gap, they check their legs before they leg the rider up. If they see anything different, they call out to us, we look at them. Either myself or XX look at them every day, make sure if there's a new splint coming or more filling than they've had before ... so it's just kind of a system like that, so hopefully nothing's missed, either they catch it or we catch it out there. And if they see something then they tell us and we have a closer look, ... so that's basically how the horses come and go to the track.” Trainer 2

“the grooms are very close to their horses ... so ... it's like a jigsaw .. you gather information from different people and then ... you put them together and that gives you a picture of the health” Trainer 4

The importance of the team was emphasised by all trainers as the busy nature of yards meant that single person dependency could not cover everything.

“one person can't do everything, so if you have good people, good riders, if you have a good team around you, .. that can help you, then usually you can try to manage.” Trainer 3

Understanding the importance of the groom and the relationship between the grooms and the horses was also identified as part of the trainer's role. If this relationship or pairing has an issue it might affect flow of work or the way grooms might report back to the trainers.

“some grooms and ... horses don't match; it's just not ... not working, and ... if that's already a problem here, it's become a problem everywhere else. I think, that's part of our job, to do, ... to look at all those signs ..” Trainer 4

Given the number of horses in training on the yards (Table 2.1) there was a requirement for a large number of staff. Keeping track of staff and the information that these staff collected either formally or informally about a horse's wellbeing required good communication systems.

“so, that's why communication is very important. Don't think because you're the boss you know everything” Trainer 5

“he will ride him and he will say oh today he was very quiet and he wasn't himself or, after that ... people that are around them in the stable too as well” Trainer 3

While team work, collaboration and communication are emphasised on these racing yards, the trainers were ultimately responsible for making the final decisions about a horse's care and management.

“you know your horses, the signs.. sometimes, ... two different people don't see the same things that's why I kind of like to spend time to be here. ... I rely on the people I'm employing; I listen to what they say, but I don't always agree with what they see, sometime s I see different things ... I feel different things sometimes, ... you cannot quantify it, you just know that something is not right, .. the horses don't talk, so you have to be paying attention to the signs” Trainer 4

There were many examples given of the ways in which Trainers adjusted the horse's training to the particular circumstances of the horse. Trainer 5 described how he worked with a groom to change the exercise routine of a horse which tied up after exercise. In the days before a race, the trainer adopted an exercise routine which involved walking the horse rather than working the horse 2 days before a race. The success of this strategy was measured in the horse's race wins.

“I had a horse before, when I come first in that stable every morning, every morning [I say to] the groom, not the head lad, not the foreman, the groom, I ask him how is the horse? “very good boss”. ... then some morning, “how is he?” “don't know, not sound” because this horse tied up very bad, ... he was he was coming back from the track, he cannot walk. You put him in the box, leave him alone, you come back in afternoon like nothing happened. So, for the thing not to happen, we had to help him ... we're going to walk him today, we're not going to work him and because of

this guy I find a way to train this horse. Before the race, 2 days before, no track anymore, finish, walk only, the horse won 4 races in a row” Trainer 5

Trainers tended to pair horses with riders to create a familiarity between the horse and the rider. There was a belief among trainers that the relationship the jockey had with the horse was essential to the horse’s performance. Not just because the rider would get to understand the feel of the horse, was it physically well, but also to get the best out of the horse.

“They have to have, I mean, a lot of experience before they come and ... get a job here. We do pay them well, we do look after them well. Dubai’s a beautiful place to live, the weather’s great so ... we have good high quality riders... it’s not just driving the machine, it’s also, you have to have your mind in sync with the horse” Trainer 1

“If you change horses every day it will be harder for the riders maybe to tell you, but ..., everybody is different in the approach that they have.” Trainer 3

Given the importance of the jockey’s relationship with the horse, trainers were willing to swap riders and horses if they felt there was a better partnership.

“horse’s mind and the rider’s mind and that’s my job and my assistant’s job to watch every day if, and no offence to the rider, he or she may not get along with that particular horse, so we change it. And ... and suddenly everything is fine.” Trainer 1

One of the trainers had also been a jockey and this enabled him to describe the difference between the feel of riding as distinct from the observation of the trainer on the ground.

“when you ride a horse, when you’re on the horse you’ve got the feeling, you can feel the horse straight away.. if he’s nervous, if he’s not nervous but not everybody can see that, but the way he moves out when you go and go to gallop, the way he moves, the way he breathes, ... things you can’t see because it’s the other side of the trainer, you’re on the horse” Trainer 5

However, trainers also reported that their day-to-day contact with the horse equipped them with a different sort of knowledge of the horse from that of the jockey.

“we can see a lot of things but the most important things we know the horses better than the jockey. That mean..., the jockey he rides the horse and he goes home, or he puts it in the stable or he see the horse maybe 30 second, maybe 2 minutes. We are there all the time ... it’s a lot of little detail but its small detail and if you don’t look after that you can’t run. Because detail is the most important thing” Trainer 5

“because the riders kept saying nothing’s wrong, nothing’s wrong he feels good, he feels good and we’re trotting him up and he is slightly offright front and ... and then the next day he wouldn’t be off and we just kept going and I didn’t, I, I wouldn’t press on and work him any more ... fast work” Trainer 2

Most trainers emphasised that observing detail was the most important attribute in determining how the training of each horse progressed.

“Detail and to know to push or to break, it’s exactly that. Train a horse, anybody can train, but you have to have the detail, the small detailed observation, that’s very important. The observation tells you if he’s happy, he’s not happy, if he’s got problem. You detect a lot of things and if you can push him or slow down and that’s what the people don’t get.” Trainer 5

“you have to not only keen eyes but you have to, to ... look .. only watching but looking.” Trainer 4

The solutions adopted by trainers to their observations about physical issues varied and although undoubtedly the trainer believed that the interventions they adopted were effective they were not always evidence based.

“I saw this, he doesn’t breathe properly ..., that’s why he doesn’t finish his race, you should put a tongue tie you know to help him to breath or do something you know what I mean.” Trainer 5

In horseracing injuries are common. The goal of training is to create an athlete that can fulfil its winning potential. Injuries not only remove the horse from training but risk removing the potential of the animal to win races. Avoidance of injury was seen by all trainers to guide how each horse was trained and competed. The most common types of injury involved inflammation of tendons, ligaments and joints and cuts.

“Some horses you know if they’ve got injury, you don’t want to hurt them you want to take it easy with them. Instead of doing nothing you go and swim them... so the horse keep in shape and they don’t use the muscle or .. certain muscle or the tendons especially ..” Trainer 5

Keeping track of injuries was an important element of training a horse. The horse's history of injury to legs specifically not only affected the training schedule but also the distances a horse might subsequently race, if at all. Trainer 4 maintained detailed records about each horse.

*“we look back as well, we keep record, I keep a lot of record I'm ..fanatical record, I write a lot, I ... every week I review every ... horse ... a week and I write notes.”
Trainer 4*

Were one of his horses to be injured, he could go back to his records to see its history and to understand whether there was a relationship between what had happened in its past and its current state (Figure.1). The goal of this was to see whether there was something that could be learnt from it so as to avoid it happening again.

“But you just need to try to think why maybe you got this and now you could help it or avoid to get it again.. so just and then what you learn on one. You can reproduce on some other so ... it's just got to be” Trainer 4

There was some divergence between trainers in relation to their views on the management of an injured horse. Trainer 3 with 50 horses to train acknowledged that every horse is different, and each horse has to be worth the time and the money before involving a veterinarian in the horse's care.

“.. it all depends on the injury and what you feel the injury is ... Somethings you might wait a day or two days or three days you know at the end of the day every medical treatment is very expensive... You know every horse is different and every trainer’s approach is going to be different to what they do or how they manage”
Trainer 3

Use of veterinarians by Trainers

The stables participating in this study all adopted similar arrangements to the employment of the veterinarian. Many veterinarians worked on the yards with trainers as members of the team. However, not all of the trainers who were interviewed had easy access to a veterinarian and for these trainers there was a decision-making process which preceded whether or not the trainer called a veterinarian. Trainers described trying to figure out what was wrong with the horse, by assessing the severity of the issue. When possible, they tried to manage the problem themselves, particularly if it were something minor such as a small wound.

“he had a little cut this morning .. he was freshly jumped he cut a little bit .. you put a bandage and that’s it or things like this ... But ... maybe sore foot a little bit .. you wait .. we said we see this afternoon what he looks like or but that’s it.” Trainer 5

“if there is anything normal basic we can take care of it” Trainer 1

Trainers reported that it was part of their role to use their own knowledge to monitor horses proactively, in order to avoid medical issues becoming more serious and requiring further intervention.

“and ... but there's .. part of probably my job before they get involved is, and XX's job, is catching things before they really happen.... so if you see something ” Trainer 2

“mostly we try ... ourselves” Trainer 3

Veterinarian intervention was actively sought where trainers did not have the knowledge, skills, tools, diagnostic tests or capacity to manage an issue.

“And then the science is giving you as well some help, ... I mean like you can get blood tests, you can get ECG you can get all kind of things scanners or whatever.” Trainer 4

Interestingly, this trainer reported requesting diagnostic tests, like a blood test, where he wanted confirmation of what he already suspected.

“I don't particularly need blood tests to tell me that a horse is anaemic, usually I see it and I ask a bloody test to confirm it but that's, I guess that's experience” Trainer 4

One of the reasons for avoiding veterinary assistance related to the costs that would be incurred. Trainers 3 and 5 tried to minimise the costs to the owner by using their own skills, experience and knowledge to assess an issue before a veterinarian was called.

“you have to be careful with the cost” Trainer 3

“I’m really careful, ... I call the vet when I need, I don’t want to spend money for nothing” Trainer 5

Veterinarians were more likely to be brought in during the pre-season training and during racing.

“know if I can do it myself, I haven’t called the vet for I don’t know how long because there’s no training then when we start training of course I need more. But if I can avoid I do, you know that’s the way it is” Trainer 5

High veterinary costs needed to be weighed against the monetary value of the individual horse, its racing potential and its prospective winnings. Trainer 3 weighed up his decisions about veterinary involvement based on the horse’s performance record, the cost of veterinary care, and likelihood of recovery.

“You know some horses might not be worth ... the time or the money ... some horses are worth it, I’m not saying that they are worth it or not worth it, but some horses you might give more time and see if they can come back from the injury on their own” Trainer 3

Trainer 5 identified the tension between treatment and performance in the context of managing a condition with medication. Racehorses are not allowed to be given medication or drugs prior to running in a race. Trainers reported a difficult balancing act – weighing up the likelihood of recovery from a minor injury without medication, versus medication to prevent further damage or speed up healing but delaying participation in a race. Conversations between veterinarians and trainers often polarised the two distinct sides – veterinarians representing the horse’s welfare and the trainer representing the owner’s investment in running a horse.

“most of the time I go behind the vet because it’s his job so I follow ... But if I’ve got another thing in my head, I need to tell him like I would love to do that this horse” Trainer 5

Where the horse depends upon the trainer to call in a veterinarian there is a risk that trainers may delay bringing the vet in for fear of jeopardising participation in a race. In this sense trainers act as the gatekeepers or guardians over the welfare of the horses and their access to treatment.

“your doctor, you go over there, and you say, “I don’t feel well” he goes “ok” check, “go and take that”. No it doesn’t work like this, not with horses .. because it’s a plan I’ve got a plan with the horse” Trainer 5

This means that trainers identified occasions on which the treatment of a horse could be delayed for fear of having an impact on the planned participation in races. Inevitably, delays in treatment could have an impact on the horse's long term health and wellbeing.

“you cannot give this medication 10 days before the race, my horse is racing in 10 days so you don't give anything, so they can't give anything without asking me anyway” Trainer 5

However, for trainers who had veterinarians as members of the team and who spent much of each day at the stables it was less likely that a horse would go untreated.

“it's very handy to have them around” Trainer 2

“if a horse needs any kind of treatment we have to get it from the hospital or our veterinarian, dedicated veterinarian” Trainer 1

Trainers who had designated veterinarians developed long standing, close and trusting relationships with the veterinarian.

“ I trust them and ... I'm more into working with them you know” Trainer 4

“we had one the other day that I swore was a foot, my doctor said it was an upper suspensory and I swore it wasn't” Trainer 2

Trainer 1 and Trainer 2 reported a strong relationship with their veterinarians. They are seen as being part of the team, always available.

“he's here every day” Trainer 2

“our veterinarian I mean in my case the doctor NAME OF VET he's been with me for a long time ... more than a dozen years, so ... we understand each other and he's got his schedule to cover and visit us and he knows exactly which day and what days what we are doing the treatments” Trainer 1

Although racing was described as a passion it was also referred to by trainers as a business. Like any business there was a balance sheet identifying what each horse cost and what each horse brought in in terms of winnings.

“everything has to be recorded in this business. Medicine, treatments etc.” Trainer 1

In addition, each horse had its own record of interventions and visits.

“we record our veterinary schedule and any time our officials, the judges, the stewards they can come and check on us which is, which is normal in this business.”
Trainer 1

While the role of the veterinarian is essential to safeguard a horse's welfare there were instances in which the trainers elected not to seek veterinary advice. Trainers reported that veterinarians recognised that race horing was a “business” and that the veterinarian role was to optimise the horse's health.

The trainer and the owner

Ultimately, horses are owned by people who view the animal as an investment. Trainers are responsible for the training and racing of the horse but also for realising the animal as an investment. While all trainers emphasised their connection with the horse, they were also clear that each horse was a balance sheet; costs and income. The costs of maintaining and training a healthy horse form the baseline of these costs. A sick or injured horse quite quickly begins to incur costs and at the same time the income from the horse's winnings drops away.

“you do grow attached that way but, but ... yeah when they get to a certain point if they're lame, they're lame ..” Trainer 2

“the other side, the horse is no good but the owners love him, and they told him when they bought him, he was very good and it's hard to tell him and try to make him understand, that it's not good for him here.” Trainer 5

While trainers reported often making decisions about the care and management of the horse without the owners' involvement, the trainers all described different types of relationship with their owners.

“there's many different types [of owner], there are types that are just hands off - you take care of the horse. There are people that like to come and see their horses all the time ... and which is fine, I told them it's an open door, I'd rather they come

while we're here .. just in case something happens but .. it's basically an open door for them if they own horses here and ... not a whole lot of them come ... they will see them at the races and they will get excited and stuff and I have a couple of owners that come quite often and just feed carrots to them and stuff like that and are around them that way." Trainer 2

Two trainers did not have any contact with the owners. One Trainer (Trainer 3) used a racing manager to convey information regarding the horses' health and performances to the owner.

"whether it's for one owner, ten owners or fifteen owners you know your job is the same, you still have to train the horses. ...there is a racing manager that we only communicate with, we give him all the information and he relays back to the owners. Usually we have very, very little dealing with the owner themselves .. we always go through racing manager." Trainer 3

On the other hand, Trainer 5 identified another Trainer in GB to whom he was accountable for the horses in training. He referred to this person as the "Boss" who had direct contact with the owners.

"well the good side is because you like to communicate. It's nice to call and say oh I'll send you the video, because I like take video of the horses at work. So I said oh I'll send you the video and ... the time.. we clock them, and I said .. I take the video and I've got walkie talkie. My man is in the other side and he clocked them so he talk to the walkie talkie, so when I film, we can hear the time also the section. ... so it's a not lie ... unless you lie about your clocking but there's no point and .. so you send to the owner. The owner is really happy, he's got his horses working, he got

.. the time, ... he's done very good at work and.. the horse to the race I say ok we'll race him next week, the horse wins, that's top." Trainer 5

Trainer 2 also owned shares in a racehorse and so understands an owner's desire for winning. However, he is perhaps more realistic about the likelihood of a horse winning a race.

"I bought 10% of one we have an America, well Irish guy that's really American now, he lives in America in Kentucky and we own horses together and he sent one over and he said take 10%, I took 10% and then he was going to run the first meeting on the 24th and I knew he wasn't going to win, "he was, he's going to win" and ... it wasn't so much of a let-down for me, his face was like this..." Trainer 2

Trainers were well aware of the need to have good relationships with owners. However, not all owners had the same level of knowledge and awareness about the risks of horse racing or of understanding the animal as a sentient being rather than a commodity.

"most of them have the same philosophy as I do, they love horses. ... Some new owners who are, who do not understand the business and the day to day philosophy to train horses, I have to explain to them, I have to educate them, and ... and that's part of our jobs too you know not just training horses, we have, we are answerable to the ownersbecause they're the ones who actually spend money and buy horses; without them we wouldn't be in this business. So it's very, very important to have a good relationship with the owner and understanding." Trainer 1

"the majority of them [the owners] know how tough this game is and how tough it is to keep a horse sound." Trainer 2

For all the trainers, horseracing was not an opportunity to make fast money, but was a business born out of love for the animals.

“if you have a great season, you're losing 80% of the time, but that 20% is ... it's really fun so. And I'm sure that's the same for owners too, I've owned horses and I do own horses and I get a thrill out of it.” Trainer 2

Trainers were clear that for them the health of the horse was more of a priority for them than keeping owners. Trainer 4 reported that he was *“too old to be pressurised”*

“there's only one rule, I am the one will decide, if they don't like it, the door is wide open, there is no issue .. when..., I feel there is a health issue. First, I try to explain to make them realise what's happening and what's could happen and I don't get forced to run a horse that is not .. healthy.” Trainer 4

Trainer 4 was an older experienced trainer whose main concern was to produce healthy winners. It was, however, clear that the relationships with owners were not always as straightforward as described by the Trainers. When the trainers came to discuss the retirement of racehorses, it became evident that there were tensions between Trainers and owners with regard to the level at which horses should be competing, if at all.

When to retire a horse - “I’m not running after getting runners, what I want is to get winners”

Injury and age play a significant role in ending a horse’s career. Both these elements limit the extent to which a Trainer can push a horse to run. Additionally, trainers also described horses which appeared to lose the desire and ability to run. In the case of this last group of horses Trainer 2 talked about making an effort to work out what was going on but that if this failed the horse would have to go.

“and we gotta figure out how to, ... get ... right again, and if they can’t get right again...there’s times where they just have to go.” Trainer 2

“they look good and they they’re sound but mentally they’re not, they don’t want to race, they don’t want to race and they’re going to hurt themselves if they race, and that, we don’t want that.” Trainer 5

Trainer 2 identified a situation in which he had given up on a horse which appeared to lose the motivation to run. The owner of the horse had forced the trainer to keep him going and to the Trainer’s surprise the horse started to run again and even won races.

“Had to keep him going. And I kept telling him [the owner] you know, sorry he just doesn’t want to train, and then, all of a sudden, he started training.” Trainer 2

However, Trainer 2 identified a number of circumstances in which he had wanted to retire a horse while it was at its peak but the owners had not agreed.

“for him we wanted to retire him 'cause he won his last race last year too and I was like retire them both, but they are a business.” Trainer 2

Trainers used their experience to assess whether a horse should continue to be raced. It was not always possible to get Trainers to put into words why it was time to stop for some horses.

“you don't keep every horse, so horses that we feel are not performing to par here, they have sales here, so we will sell them.” Trainer 3

“because it was time to, some it was time to stop, I want to stop, I said that's not running anymore.” Trainer 5

Trainer 2 argued that the horse conveyed to the Trainer that their racing career was over.

“they tell you when they're kind of done and don't want to do it anymore ... and they come down in the handicap as they stop being able to compete at a higher level.”

Trainer 2

It was always more difficult to convince an owner to retire a horse if it was winning. However, continuing to compete the horse risked an injury. Horses that had won a lot of money created a sense of obligation in Trainers and going out on a high was seen as more important than watching a horse perform less and less well.

“bought him for 70,000 durums 6 years ago and he's made 600, 700,000 paid for himself so many times over, paid for all the bills and everything he's ten.” Trainer

2

In the example above the age of the horse was critical in predicting its future winnings. Ten-year old's competing at the highest level were exceptional. Injury and poor performance also affected the horse's value in the sales. Like much else in the racing industry there was never a lot of certainty about the outcomes with horses.

"I understood keeping him training, I said, but if something happened to him .. "that's it". They have been too good to us, me and to you. and .. [Name of horse] ran in the national cup (38.05) the other night. No good." Trainer 2

Trainers did need to sell horses if they were not performing. This was essential to make space for new yearlings and to maintain their reputation associated with winning. While Trainers talked about putting the welfare of the horse first there was a recognition that owners were more likely to be thinking about the winnings. They did not have the same attachment to the horse that the Trainers had.

"I don't want to have to whip one to get it around there and stuff. So, anyway, plus he's done everything we've ever asked, and, I could not get it through his [the owner's] head, he's thinking of the bottom line, in thinking of the horse that I look at every day for the last six years." Trainer 2

"We will sell them most of them will go to other countries here in the Middle East where racing is not as competitive, you know and maybe they will be able to be competitive in the races that they have down there." Trainer 3

Trainers hoped to retire good horses to good homes. But it was very difficult to be assured that once a horse is sold, they received the retirement that the Trainers felt they have earned. This is particularly the case where horses are sold abroad.

“have been good to the stable won races, most of them would be retired to good places. We sent seven horses to Europe last year to be ... retired. So they were flown they did quarantine here flown in ... retired, we've got three or four that are, that have been good horses here that will be retired this year as well.” Trainer 3

“I know the horses, so I don't want somebody to buy the horse and behind my back, try to race them somewhere.” Trainer 5

“you got to try to do your best to keep him from having to be sold to compete somewhere else 'cause you know it's not right so anyway.” Trainer 2

While retirement seemed like a release from the routine of training and racing, horses that were sold abroad still had to be transported, most often flown, and then had to adapt to a completely different climate. However, the dream retirement for these horses was to become a much-loved riding horse.

“I need to be fair to the owner because if they go to the sale, he will get some money back. But to get 5 thousand and go racing or 5 thousand and go for the club I prefer they go the club, you know maybe a little girl will ride the horse every day, will love the horse bring carrots and all that, that's what you want” Trainer 5

“he was with his from, from three til ten and then we had to sell him this year and some guys bought him out in the desert and I had to talk this woman into going, she had to pay five thousand more than they spent to buy him and ... make him a riding horse.” Trainer 2

Some horses are sold into other careers, such as show jumping. All Trainers identified circumstances in which they engineered the homes for horses that they no longer trained.

“And we’ve given away some horses here as well as showjumpers. For jumpers there are quite a few riding stables around that sometimes are looking for horses, not ... thoroughbreds but we’ve given away four or five.” Trainer 3

“I called a few people, you know, and I said this horse going to the sales and I said if you want because they’ve got a club you know for riders you know a little jump like this.” Trainer 5

“he has a big farm in XX country ... and he wanted him badly and we finally got that done and he went over there so that was nice. So we, we try to do what we can with the older horses. Get them homes.” Trainer 2

Welfare Rules and regulations

While trainers had learned their trade from other more experienced people and were licensed to train horses, they all worked within the rules and regulations of racing. In the UK these are laid out by the British Horse Racing Authority and in Dubai these are

enshrined in the ‘Rules of Racing and Instructions of Emirates Racing Authority’. The rules and regulations of these racing authorities are comprehensive and cover everything from the licensing of trainers, expectations of riders, veterinary attention and the welfare of the horse. However, the detail of each country’s rules and regulations varies and trainers wanting to race their horse in different countries need to be aware of the differences.

“They have proper exams and .. sometimes in different states you have different .. exams in America, because you have different rules regarding medication.” Trainer 4

Where Trainers had worked in different countries or run horses in different countries there was an awareness of the limitations of rules and regulations and of the cultural differences in the way in which some regulations were interpreted. Trainer 3 observed significant difference in the way horses were handled in the Kingdom of Saudi Arabia.

“cultural beliefs and superstition have a lot to do with it too you know the way they handle or treat their horses and all so it’s not always what you want to see but after that you have to respect their beliefs as well.” Trainer 3

Trainer 4 disagreed with the idea that cultural differences alone were responsible for poor animal welfare. He cited the universality of abuse in support of his case.

“it’s more lack of knowledge than mostly cultural things .. because you know in Europe, in Singapore, in America you’ve got the same, you’ve got.. people who are

abusing horses or animals there's not so much a question of culture it's more a question of awareness of sensibilisation." Trainer 4

In the UAE, Trainer 3 believed, not only were horses not mistreated but "*here horses get whatever they need*". While Trainers reported that the UAE rules and regulations did protect the welfare of horses, Trainer 4 emphasised the importance of the way in which people thought about horses that was so important for their welfare.

"I think it's not so much a question of regulation.... but question of mentality."
Trainer 4

While the rules and regulations might not take into account the beliefs and attitudes of trainers they did enable action to be taken against anyone caught breaching the rules and regulations.

"any breach of welfare on the horses that has been done deliberately (whistles) the license should be revoked to me." Trainer 4

Trainer 4 had witnessed a horse being abused and mistreated and took action. The situation as described by this Trainer involved an individual who had come from abroad.

"few years ago we had somebody who came from abroad who was here and I witnessed here a horse being really abused, ... the vet of this stable had already given some evidence that ... some horses were ... abused and luckily ..we managed to get the state vet to witness it and this man was ... disciplined ... and sent back to

his country because that was unacceptable ... now I'm sorry, but I'm I was happy about it, because I could not tolerate it you know .. being the witness of it .” Trainer 4

Trainer 4 believed in the power of education to create the context within which animals were managed with respect. In his view a “*lack of awareness*” was responsible for placing the animal’s performance over concerns about their welfare. In his mind it was important to start with educating young children.

“the other day some kid asked me, where were the whips to whip the horses. I said, I mean I it’s not something we have.. that’s not something that we do.” Trainer 4

While in reality whips are used, Trainer 4 was keen to counter the view that whips were an essential element of training a racehorse. In order to educate people Trainer 4 felt that the racing stables should be more open to children and the public.

“In some countries you’ve got some open days, where people .. owners, and other people can come and see training, are encouraged to see training, to see the stable, to see what’s going on. It’s nice all these things participating in showing that.”
Trainer 4

For him, having a more open industry where people are able to interact with animals could benefit the welfare of the horses, and change the public perception of the horse racing industry.

*“the world ... perception, ... people are very much more aware of things .. social media, this could affect ..whole activity ... you have to see what’s happening in England, what's happening in a few countries, where the activists are very, very.. prone .. to make a case against our activity. I think we've got to be ... absolutely .. spotless.”*T ... er 4

Summary

This chapter of the thesis explored how trainers learned their trade and explored their relationship with their horses, with veterinarians and the horses’ owner. Trainers lived within the rules and regulations of racing, but this framed their understanding of equine welfare issues being faced by racehorses. There was no questioning of the age at which horses began their race training or whether the sport could survive without the use of the whip and tongue ties. Broader welfare issues relating to the needs of the horse in three of the five domains identified by several authors (Campbell 2016, Lofgren *et al.* 2020, Mellor *et al.* 2020) were rarely discussed. The impact of the environment on the horse, particularly the lack of free association with other horses and herd life; the significance of certain behaviours such as stereotypies and its underlying mental precursors were not discussed by trainers. However, all the trainers emphasised the effort invested in the horse’s nutritional needs, foot care and health/veterinary care.

Chapter 4: Veterinarian Interviews

Equine Veterinarians have a vital role to play in the health and performance of Tb racehorses. They were included in this study because of the role they play in relation to the health of racehorses and in the decisions made by racehorse trainers. Every veterinary surgeon in the UK who is a member of RCVS makes a declaration, which, since 1 April 2012, has been:

"I promise and solemnly declare that I will pursue the work of my profession with integrity and accept my responsibilities to the public, my clients, the profession and the Royal College of Veterinary Surgeons, and that, above all, my constant endeavour will be to ensure the health and welfare of animals committed to my care."

As can be seen from the above, in the UK, ensuring the health and welfare of animals underpins veterinary practice and this is the same in most other countries with similar veterinary professional training and registration. It is well known and widely reported that injuries are very common during training and racing. In addition, racehorses are at risk of developing the same conditions common to all managed horses. In Dubai the additional complication for horse owners is the weather - almost 9 months of the year temperatures hover around 50 degrees Celsius. This poses particular challenges for training and racing.

In the interviews with veterinarians, I wanted to explore how they worked with trainers when the goal of the trainer is to produce horses to win races. This involved asking questions around the balance between maintaining equine health and welfare versus the need for horses to win races. I was also interested in the way veterinarians interacted with other staff employed by the stable and the extent to which they were involved in discussions with the owners of horses in their care around treatment options.

The key themes that were identified in these interviews were:

- **Background to working with racehorses - A love of horses**
- **Role of the veterinarian in the racing industry**
- **Rules, regulations, and the future of welfare**

Background to working with racehorses - A love of horses

In common with the horse trainers, veterinarians emphasised that at the heart of their choice of profession was their love of the horse. All three veterinarians talked about their love for horses which predated their training. All the veterinarians had grown up with large animals, either farm animals or horses.

“I have a passion about horses since I am small kid so that took me in this long journey.” Veterinarian 1

Two of the veterinarians had been brought up on farms or with farm animals and this formed the basis for their desire to train as a veterinarian and to specialize in large animal / equine veterinary work.

“My background is more large animals rather than small animals. I ... became, I went to university ... to become a veterinarian with no intention of doing small animals because I’ve got more farming background to do large animals.”

Veterinarian 3

Once qualified the veterinarians identified different routes into working with racehorses. Two of the veterinarians went straight into roles which brought them into contact with performance horses – either in the field of racing, show jumping or dressage. It was following specialisation in respiratory medicine in the US that one of the veterinarians became interested in racehorses.

As UAE was expanding the racing industry, so the need for experienced veterinarians to look after the health and performance of young horses grew. Veterinarian 2 came to Dubai to manage youngstock and prepare them for their future careers in racing. Central to this role was a focus on joint health.

“.. usually inflammation in their joints because they’re they start very young they start ... their training so they’re not fully completely developed. So, then they get inflammation and because they’re so young their inflammatory response is very strong. So, they ...tend to need time you know to settle the inflammation and then we start again. The bones need to adapt to the type of exercise they need so when

they first start their bones are a little bit ...not weak but not as strong as is needed. So, with time and with the exercise the bones in their legs start to get more calcium and they get a little bit stronger but at the same time they maintain some flexibility for the type of sport they're required. So, the main challenge is to maintain a level of exercise that will help the horse adapt to the type of exercise without being too fast so that they don't get damaged from it. So, ... it's reaching that balance is the most difficult part." Veterinarian 2

For this veterinarian the focus on racehorses was underpinned by the challenge of 'helping an athlete to become the best they can be'.

"So basically it was a job that would allow me to work with racehorses from the very beginning like before they start their own career. So I applied for that job and I was hired to come to work with .. 2 year old's...it was the perfect place for me to be because I was in a position where I could do always whatever was best for the horse." Veterinarian 2

Veterinarian 3 started his career working in the UK in a private equine practice looking after horses of all ages, breeds and different roles; from pets, leisure horses, and travellers' horses to performance and competition horses.

“We did a lot of horses in that practice ... everything from travelling people’s horses to ..top class race horses, show jumpers, dressage horses, a wide range of horses.”

Veterinarian 3

The third veterinarian who had started in equine general practice had become disillusioned with the standards of care and welfare of horses he was seeing, sought out an opportunity to work with competition horses whereas he saw it there was a greater investment in their care. In equine general practice he was used to dealing with owners and the huge diversity of views on horses that that brought.

“..I felt that I after that period of time that I’d .. achieved everything that I wanted to do professionally and personally within the ..framework of the UK at the time.”

Veterinarian 3

For veterinarian 3 professional growth was important and his move out of UK general equine practice reflected some of the frustration associated with dealing with horse owners who did not have the resources to change the management of their animal.

"I found that working in practice was very much in general equine practice was very much dealing with ... owners .. as much as anything else.... a large proportion ..of all the problems that we saw... could easily remedied if management .. changes were made and that was very difficult for people who ... had ... limitations on how much they could spend." Veterinarian 3

Becoming part of the jockey club opened veterinarian 3 to opportunities in flat racing, resulting in him seeing his move to Dubai as a natural progression.

"..and so after spending ...Jockey Club which was obviously all flat racing and then from there I came to Dubai and I find thatit's been a natural progression."

Veterinarian 3

Although moving to Dubai was now seen as a natural progression, veterinarian 3 also recognised that in the past he had had concerns that specialising in racehorses might be boring.

At one stage I remember thinking when I was in the UK that I could never see myself ... just dealing with Thoroughbred flat race horses because it would be very ... well

rather boring, very ... monotonous and in fact that's what I've ended up doing and its ... I enjoy the competitive nature of it all." Veterinarian 3

Role of the veterinarian in the racing industry

The veterinarians divided their work in the racehorse industry into a) dealing with everyday preventive measures such as vaccination and managing common medical conditions b) detecting and managing the consequences of training and racing, and c) optimising the horse's health and wellbeing.

Everyday care

From the veterinarian's perspective the everyday care of the horse, as well as the horse in training and racing created the context in which optimal performance was created. Veterinarians talked about preventing the everyday conditions that all horses are at risk of developing such as colic as well as the injuries resulting from racing.

"So you know ... we try and ensure that all the preventive measures or maintaining the optimum health of the horse is ... regards to the vaccinations, worming, ... maintaining ... preventing or minimising gastric ulceration, maintaining their shoeing at the best standard." Veterinarian 3

The summer in Dubai is long and extremely hot, with temperatures reaching up to 50 degrees Celsius, with no races taking place, the horses are left to rest for almost 6 months. Another health threatening condition is colic.

“ And after the end of the season we go through summer and during summer most issue we deal with is colic. So, there's different problem depend on the season. But basically, lameness during winter and colic during summer.” Veterinarian 1

Colic can be fatal in some cases and horses should be assessed quickly if colic signs persist or worsen in severity. Colic surgery is not only a major financial undertaking but it can also result in a horse being unable to compete for the rest of that racing season.

The horse racing season in UAE is very short which poses many challenges for the training and management of racehorses. The role of the veterinarian also extends to the purchase of horses.

“we're also involved in advising them regards purchasing. So we've just had the sales here and the sales round the world that you're looking at ... horses and

advising them on the suitability of purchase as well and ... if only I think through .. the number of years that .. working together... we get a very good working relationship where each of us trusts ... one another.” Veterinarian 3

Detecting and managing the consequences of training and racing

The shortness of the racing season produces pressure on the trainers and vets to prevent injuries to the horse. If an injury occurs, the horse might have to rest for a number of weeks, require rehabilitation, treatment and in some cases surgery and by the time its fitness level has been restored the racing season might be over.

“Problem that we have here is that because the season is so short if you don’t make it to that race, they might not be another one for that particular horse until the next season and that means not waiting a month it will be waiting 7 months to be able to race again, because all of the summer there’s no racing.” Veterinarian 2

From a veterinary perspective there are different types of injury requiring very different management strategies.

“If there is an injury obviously, we need to know what type of injury, what is the prognosis and what is the best decision to make now and if it’s like small injury we can give some time for recovery.” Veterinarian 1

While minor injuries can be managed easily, more complex injuries requiring further investigations and treatment require more detailed discussions around treatment options and these are the discussions which are most likely to involve the horse's owner.

“If it's a big injury the owner will want to know whether this is should, should we retire the horse from racing and we keep it for something else or we wait for weeks or months until the horse recover.” Veterinarian 1

Interestingly, veterinarian 2 makes a distinction between flat racing and other horse sports with respect to the involvement of the owners.

“maybe there's just a few owners would like to be involved in the medical side. They're very few in flat racing, very few want to be involved in the medical side. In other ... athletic ..areas they do like dressage, show jumping they want to be involved but in flat racing very few.” Veterinarian 2

Discussions with owners were not always reported to be easy but from the veterinary perspective the health and the wellbeing of the horse was paramount.

“So, in that case anyone with passion to a horse they always, you expect to make decision based on the safety and wellbeing of the horse. Yes, the horse owner they invest and they want return on their investment and they expect to win a race or at least to do good at the race that’s true.” Veterinarian 1

“Occasionally the owner wants to have the problem of the injury explained and then I do get to talk to them, mostly to explain .. the nature of the injury and what’s the procedure because most of the times the trainers also don’t know the exact medical ...term and the exact medical severity of an injury.” Veterinarian 2

Lameness is a common occurrence in flat racing thoroughbreds. This can happen during training or while racing, a horse can show signs of lameness and can progress slowly if not noticed or treated early on, again such injury can have a negative impact on the horse since it will not be able to run for a while or it might miss the season entirely.

“we have seasonal racing in so horse racing UAE its only in Winter starts October until end of March or April. So, during racing season most common injuries we see is lameness.” Veterinarian 1

The veterinarians recognized that the need to create a level of fitness in young horses appropriate for racing if not managed carefully could result in damage to the horse's joints and could affect its training.

“So the main challenge is to maintain a level of exercise that will help the horse adapt to the type of exercise without being too fast so that they don't get damaged from it. So.. it's reaching that balance is the most difficult part.” Veterinarian 2

The veterinarians saw themselves as contributing to the performance of the horse in a very direct way. Injuries during the training session could be picked up and acted upon before they got worse or before a race.

“most of my work is dealing with..assessing the performance... if anything impinging on their performance ... training or racing, and correcting that, whether or not its treating the individual case or actually putting in and advising to change things so that we don't keep having repeat problems...” Veterinarian 3

Veterinarians were able to develop an overview of the management of horses which enabled them to understand the impact of different types of training method on the horses. This prevented some small injuries becoming major.

“we see an increase in .. a particular type of injury then .. we .. highlight that, so we have a broad monitoring .. of the conditions and we’ll find that individual trainers have ... from year to year .. a similar sort of .. problems ...and they might be different to ... another trainer because they train in a different way.” Veterinarian

3

But sometime ...the trainer they choose the wrong distance of a race or wrong surface type.” Veterinarian 1

In Dubai, horses start their career at 2 years old and can race for the next 6 to 7 years until retirement. It is rare to see horses older than 10 and 11 years old racing. From a veterinary perspective the management of racehorses involves the management of the young horse.

“So, we deal with the relatively younger generation. .. I don’t think we have something rare or extraordinary. But in the books, in medical books, horses above twenty years old they will have problem and they need attention for the feet, for the teeth, for the certain type of feed so yes but in Dubai generally speaking we don’t, these are not an issue we see every day.” Veterinarian 1

Optimising the horse’s health and wellbeing

From the veterinarians' perspectives, owners are rarely involved with their horse's day to day training and are not regularly in direct contact with the veterinarians. It is the relationship that veterinarians create with trainers that is fundamental to maintaining the performance of the horse.

“most of my work is dealing with .. assessing the performance ... anything impinging on their performance ... training or racing and correcting that whether or not its treating the individual case or actually putting in and advising to change things so that we don't keep having repeat problems...” Veterinarian 3

While the veterinarians and the trainers worked together to prevent injury and optimize the fitness level of the horse it was recognized that owners sometimes disrupted this relationship. Trust is the main component to a smooth teamwork and good recovery, if the owner works with the trainer to make sure that the health of the horse is more important than running the season with an injury that might cause more problems, then it is indeed a relationship build on trust and love for these animals.

“the owner dictates ... how and where the horse is run and I think that's one of the biggest difficulties .. for trainers to deal with” Veterinarian 3

“if the owner doesn't trust the trainer, saying that the horse needs ... he will force them to run the horse even if they're injured. So yes, that is ... super important that the owner has complete faith in the trainer.” Veterinarian 2

There are many challenges that a veterinarian can face when dealing with flat racehorses, but these challenges are not faced alone. Trainers are the main care givers for these horses, they need to manage their health, performance, and their everyday needs. In the stables included in this study it was common for the veterinarian to be present on the yard on a daily basis; providing the trainer with insights into the horse's performance.

“I will be meeting with the trainer and his assistant trainer on a daily basis... assisting him dealing with his owners Advising them and trying to integrate .. into.. the framework of optimising their performance of the horses .. and .. that is I think .. one of the hardest parts of it. ... because it's recognising what each trainer has a different idea of what they want from their veterinarian or the veterinary provider.” Veterinarian 3

Veterinarian 3 recognised that elsewhere in Europe it was less common for a veterinarian to be present on a racing yard on a daily basis.

“I’m very fortunate to be .. an integral part of .. the racing team for that trainer. ..economically that probably wouldn’t be ..possible in the UK just to have one trainer and therefore you know it does that mean that you do spend a lot of time dealing with the trainers .. during the training season.” Veterinarian 3

The veterinarians emphasised the importance of teamwork in optimising a horse’s performance.

“people think that only the trainer needs to be good for you to be successful but ... in racing, if you have a bad groom you are going to have a very angry horse that will be very difficult to handle. If you have a bad rider, you can injure the horse, if you have a bad .. lad or ..foreman..might make an injury that could have been prevented... So all of the staff within the stable needs to be good not just the trainer, if you have a bad farrier, you will have a lot of injuries also in the horses. So... although ... horses are individual athletes ...the entire team in the stable needs to be good.” Veterinarian 2

All the veterinarians recognised that they were members of a team and a fully functioning team was required to get the best out of each horse. Prevention means working with healthy animals to maintain optimal health and ensure that the horse will be able to run the season.

Being part of a team and being involved in the everyday work meant that the veterinarian had a more detailed understanding of each horse and how it was responding to its environment and training. Veterinarian 2 as a young woman in a team experienced a number of challenges; needing to prove herself in a man's world and having to work harder as she saw it to get the trust of every single staff member in the stable, from the grooms to the trainers. For her working hard and always showing up to do the job created the basis for respect and trust from other team members.

“for people and for the grooms to understand that yes, I was a woman, I was young but I knew what I was doing and ... and yes after a couple of years I have a lot of respect from the grooms. They, most of the stables know me so I don't have to ...prove myself to the grooms anymore, but I keep having to prove myself to the trainers when they come from outside bringing horse. So it is ...a little bit frustrating but at the same time it's made me stronger” Veterinarian 2

Being part of the team means bringing another point of view, and recognising the expertise of other team members.

“It's not for me to train the horses .. and tell the trainer how to do that because he's the trainer. ... lot of diplomacy a lot of ... time .. and effort has been spent in the

years that I've been working at this particular yard. ... and you know it's very difficult to ... change .. things ...very quickly and sometimes it's got to be done very slowly.” Veterinarian 3

Rules, regulations, and the future of welfare

The interviews with veterinarians revealed that they were members of a team but had specialist knowledge which was unique. Their focus on putting the health and welfare of the horse first often created tensions with other members of the team and occasionally with owners. In order to manage this tension, the veterinarians in this study talked about the strategies they used to ensure that the horse's needs were prioritised. The rules and regulations associated with racing provided veterinarians with a framework within which these strategies were mobilised. There are different roles that an equine veterinarian can take in racing and one of them is the regulatory side of things, and making sure horses are fit to run and are in good health to avoid them getting injured during the race.

“At certain stage I was official veterinarian officer at all races in UAE so that give me a duty to make sure horses take part in racing, they are fit to race and also .. to evaluate horses before they start a race, this come mainly by observation. So, when the horses in the warm up arena, we closely monitor the horses the way they walk

and ... if horses in questions we always take the horse aside and we do some test to make sure the horse is fit to compete.” Veterinarian 1

“there are people that that work in the clinical side like me but there is also people that work from the ... regulatory side. So the people that make sure that the horses are not on medication when they’re racing, the people that check that the horses are not bleeding too much, the people that check that the horses are not sore or lame when they’re going to race and those people have also you know with change of the years and we’re getting more experience and more dedicated people towards the regulatory side of racing. So that’s had also improved the .. level of the sport.”

Veterinarian 2

The involvement of veterinarians in executing the safety measures and rules of racing was discussed by all veterinarians.

“it is well governed by our racing board they always adopt the best rules and regulations .. to ensure horse safety during all competition. And when we meet people from outside and they know we are involving in racing in Dubai they always talk positively about our set up and our infrastructure.” Veterinarian 1

“I don’t see that there isa problem .. with regards that because in the end the horses have to race under the rules of racing of the UAE, they are pretty much internationally standardised and .. trainers are held to account if they if they breach that and people are very very good at that, at not breaching them shall I say. ..adhering to that because in the end people are just good people really and you know they don’t want to inflict unnecessary suffering or have any kind of welfare issues with the horses.” Veterinarian 3

Summary

Veterinarians who took part in these interviews had a background with large animals and made a decision specialize in large animal / equine work at an early stage in their careers. They reported that they enjoyed the challenges of dealing with elite equine athletes and the emphasis on preventive healthcare to maximise the horse’s chance of success on the racetrack. The veterinarians reported working closely with trainers, jockeys, and grooms managing common conditions and dealing with the conditions that are common to racehorses that start their athletic careers at an early age. Most of the veterinary conditions that they managed commonly were musculoskeletal conditions and this was compounded by the challenges of working in a country with a short racing season. They recognized that the way that a trainer manages horses trained on a particular yard may result in a greater level of injuries compared to other trainers. They saw their role to help educate those trainers to change their training methods but recognized that this required diplomacy and

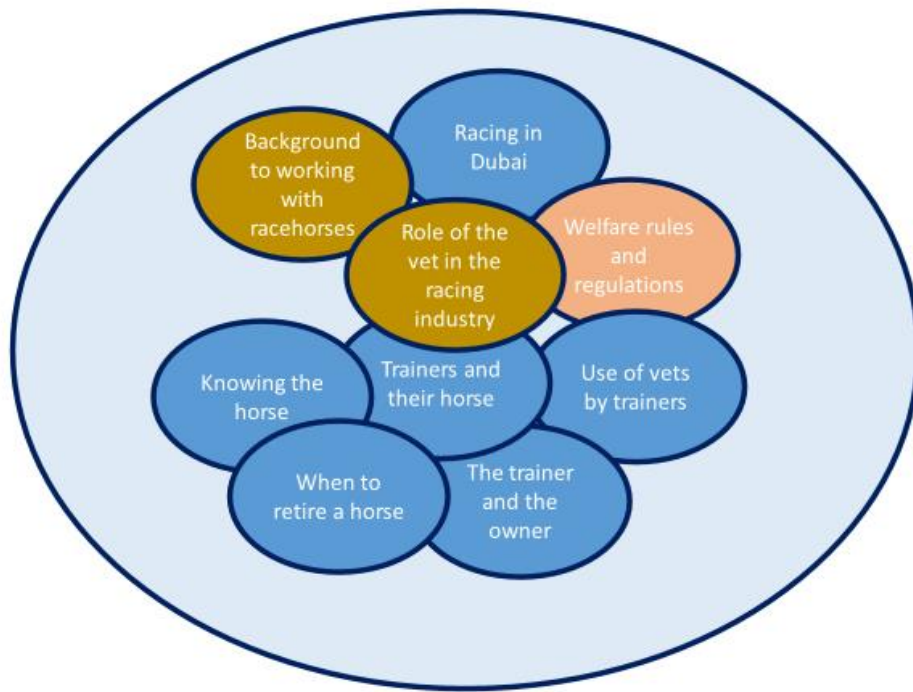
time. None of the veterinarians reported having a great deal of contact with the owners of the horses being trained in the stables in this study, but that does not mean that they were not seen as important. The regulatory framework in the UAE did enable veterinarians to be able to fulfil their role in maintaining equine welfare. These regulations were seen as an important way in which owners and trainers could be prevented from racing horses that were not fit to compete.

Chapter 5: Discussion of findings

This study set out to examine how racehorse trainers and veterinarians in Dubai considered the welfare of the Thoroughbred horse (Tb) in the context of flat racing performance. As outlined in Chapter 1, Tb horseracing has come under greater scrutiny across the globe, particularly with regards to equine welfare. Therefore it is important to explore perceptions around equine welfare in relation to the Tb racehorse to better understand areas that stakeholders within the Tb industry in Dubai recognise to be a welfare concern (or not) and identify areas for potential improvement through various interventions.

In this study, I used in-depth interviews with trainers and veterinarians who had been based in Dubai for a number of years to explore perceptions about the welfare of Tb racehorses in their care. As detailed in Chapters 3 and 4, study participants described their passion for horses, their backgrounds and how they developed their skills in racehorse training or veterinary practice. Both groups were proud of the way in which they provided care to racehorses in Dubai. They recognised that racehorses were required to perform and win and that this could not be achieved without a fully functioning, healthy horse. Various welfare issues, particularly those relating to the health domain, were identified and discussed during the interviews.

Given the current focus on the welfare of Tb racehorses and welfare issues identified by Tb industry stakeholders in other countries as outlined in Chapter 1, my interviews did not suggest that many of these were major areas of welfare concern for study participants. The trainers and veterinarians I interviewed talked extensively about the care horses received and there was little suggestion from them that their care was sub-optimal. However, it is only by looking at what was not said, that questions might be raised about welfare issues. In this discussion of findings, I will explore this further. The analysis of the trainer and veterinarian data demonstrated that there were some common themes. In the diagram on the following page, I identify the way in which these themes overlap.



Key -



Themes arising from trainer interviews



Themes arising from veterinarian interviews



Overlapping themes from both sets of participants

Diagram 1. This shows the thematic commonalities between trainers and veterinarians based on the findings from my interviews.

Welfare vs. Performance

The trainers and veterinarians I interviewed recognised that performance is a reflection of an animal's health (and associated welfare) as well as its innate ability. They discussed a number of welfare issues that they considered had an influence on horse's performance. This included reference to the climate in Dubai, the resultant relatively short racing season compared to other countries and the challenges they faced when injury or illness could result in a horse missing the whole season. Therefore for trainers and veterinarians, a key focus was on maintaining optimal health of horses in race training and detecting changes that might indicate impending illness or injury at the earliest stage.

From a welfare perspective, most discussion was therefore centered around the health domain and why this was so important in relation to performance. Tensions relating to owners wanting horses to compete when trainers were concerned about impending health issues or return to racing after injury were described. Reference was also made to aspects relating to the other welfare domains including nutrition and environment, and how to optimise these to maximise health and, therefore, performance. The importance of having a good team, including those directly looking after the horses, and working closely with their veterinarian was also evident during the interviews. Trainers recognised that each

horse was an individual and discussed the importance of interactions between individual horses and yard staff / riders. However, there was little discussion specifically related to behaviour and mental health domains e.g. lack of turnout or discussion around stereotypical behaviours.

Even though age is considered to be a risk factor for musculoskeletal injury and is an area of concern raised by the general public in several areas of the world, it is still very common in Dubai for Tb racehorses to start their training at the age of 2 years with most trainers believing that training horses at this age helps the horse to adjust to the environment of training and competing (Legg *et al.* 2020). This is an area of much debate by equine clinicians and in some countries such as the UK has been raised as a key concern by those seeking major changes to be made in the sport (see the report by the Horse Welfare Board 2020, discussed in the next paragraph). The veterinarians I interviewed in this thesis recognised the issues of training racehorses at this young age but were focused on how injuries could be prevented or averted through detecting early signs of potential problems but did not highlight this as a key welfare issue.

There was a recognition that while transporting horses to and from racetracks was an issue in some countries this was less so in Dubai / neighbouring emirates because of the small size of the UAE and the short distances between tracks – journeys as short as 20 minutes to 3 hours’ drive from Al Meydan racetrack- Nad Al Sheba. Therefore, traveling was not a

welfare topic that was extensively discussed nor was it raised as a welfare concern. However, many horses travel to and from Dubai, either by aeroplane or road transport from neighbouring countries with associated compromise to welfare and potential health impacts.

The training of trainers

Trainers need to be licensed by the ERA and they are examined once they apply for the license. They must have a good understanding and knowledge of the rules and horse management (Emirates Racing Authority 2021). However, it was clear that the trainers I interviewed had acquired their knowledge by observing and learning from other trainers using techniques passed on through generations (Latimer and Birke 2009). There was an emphasis on training horses the traditional way, based on established practices to ‘educate’ horses to familiarise them slowly with the work (Latimer and Birke 2009). Trainers did not specifically mention the welfare domains and I found it interesting that use of training methods based on science was not mentioned at all during the interviews. Trainers relied on subjective assessment of horses e.g. behaviour, heat or swelling in the limbs but did not

report use of any physiological measures apart from measures of rectal temperatures or analysis of blood (haematology / biochemistry) to monitor for disease.

Education of coaches in human sporting activities (particularly those involving children [minors]) has some parallels with the role that trainers play in the athletic training of racehorses. In the UK, the recent scandal in British Gymnastics identifies a number of issues associated with the way in which elite gymnasts are coached. These include the bullying, belittling, extreme weight management, regular overstretching, use of excessive physical force, training on serious injuries, gaslighting, coercive control and a reluctance to raise complaints/lack of opportunity to do so and these issues are often raised in relation to children. In the Whyte review (2022) Anne Whyte (QC) identified "that the governing body in the UK, British Gymnastics, had not only failed to prevent or limit such behaviours but had condoned them in the pursuit of national and international competitive success." While there was a clear failure of accountability at the most senior level there was also recognised to be a failure at the coach level where "more should have been done to educate the coaches". While there are training courses on which a coach can enrol, coaches in gymnastics most often come from gaining experience in the field. This means that most often their experiences form the basis for the nature and type of training that they will go on to provide as a coach, which are not always based on evidence nor prioritise welfare of the athlete over sporting success.

Since the early 1950's the expression "sitting by nellie" has been used to describe a particular style of learning. This excerpt from *The Birmingham Post* of Saturday 6th October 1956 states:

*'NOT ENOUGH TRAINING OF OPERATIVES
Too Much 'Sitting by Nellie'
MINISTER URGES NEW ATTITUDE*

Systematic training of operatives is not being given enough attention in Britain, Mr. Iain Macleod, Minister of Labour and National Service, said at the annual dinner of the Institution of Production Engineers in London last night. "There is too much 'sitting by Nellie,' or, more technically, 'exposure training,'" he said. "The difference between the present and past eras lies in the speed of the application of inventions. The discoveries of the 'boffins' affect the work and careers of men on the shop floor very quickly. The need for a new attitude to the training [sic] of operatives [sic] and [sic] supervisors follows from this."

While there are advantages to this style of learning there are disadvantages as outlined above in the newspaper excerpt. One of the main drawbacks relates to the lack of innovation and the time it takes for new practices to be adopted. This is relevant to the training of Tb racehorses for example in disseminating information about optimal ways to train horses based on science based approaches (Goodwin *et al.* 2009) which would have important benefit to equine welfare relating particularly to the behaviour and mental domains.

In my interviews, trainers did not detail how they kept themselves updated about training and welfare developments nor how they viewed the idea of evidence-based practice. In my study there was one trainer who identified “being a student” of a “horse whisperer”; in this context this was a well-known person who uses Natural Horsemanship in his training method. The term Natural Horsemanship (NH) is used to counter some of the more traditional methods of training (Birke 2007). NH gained its popularity between the 70’s and the 80’s, which created a revolution in horse training approaches. It is a technique that encourages trainers to learn from their horses and to use their natural behaviour as a basis for training (Birke 2007). The influence of this NH practitioner on this trainer was difficult to discern and it may be that the NH methods were used only for some of the training of some of the more challenging horses. However, the philosophy of NH encourages further training and learning, as horse owners that use NH describe themselves as always learning through different outlets and resources (Latimer and Birke 2009). People that follow the NH training methods describe constantly trying to improve themselves and their relationship with the horse based on how they treat them (Latimer and Birke 2009). Equitation science (ES) is perhaps an extension of this generating evidence-based understanding of horsemanship and horse riding (Starling and McGreevy 2016) as discussed in the introduction to this thesis. However, when looking at the data, there was no evidence of this “student” following NH in his training.

It is also interesting to reflect on the ways in which the self-selecting population of trainers becomes insular. An independent external evaluation of the 'Take the Reins' Education Programme (TTR) (Parker 2019) examined the impact of the programme on the British horse racing industry to improve access to employment and to challenge perceptions of racing at the community level. Interestingly and perhaps associated with the way in which trainers are produced there was a recognition that the somewhat 'traditional' and 'insular' nature of the racing industry can act as a deterrent to wider community engagement. So, the pool of trainers is drawn from a small population and may lack the broader diversity of the general population. Whilst the trainers I interviewed were diverse in terms of their nationality, all had followed a relatively traditional pathway into Tb racehorse training too.

Veterinarians' involvement

During my interviews it was evident that trainers of Tb racehorses in Dubai see veterinarians as part of the team, and indeed the frequency with which they attend the racing yards suggest that they are very much a part of the team. This in itself may bring professional conflicts particularly since the final decision regarding a horse's access to veterinary treatment was usually taken by the trainer. The veterinarians in this study were

used in different ways by the trainers. This included dealing with everyday preventive measures, detecting, and managing the consequences of training and racing and optimising the horse's health and wellbeing.

There were variations between the trainers as to when the veterinarians were called. A highly influential factor in calling a veterinarian was related to potential cost, the timing of races and the likelihood of interventions leaving medication in a horse's system. This gives trainers control over when a horse can have access to treatment since there is a list of drugs that cannot be used before a certain amount of time before a race (Emirates Racing Association 2022). This may mean that a veterinary intervention is delayed. Delays in seeking veterinary advice can result in a deterioration of a horse's condition and may result in death for conditions such as colic (Scantlebury *et al.* 2014). Delaying treatment requires a high level of expertise for the trainer, who does not usually have any form of veterinary training (Bergmann 2019). They are required to gauge the potential severity of a condition and the risks of delaying diagnosis and treatment; they must be able to calculate whether the type of veterinary treatment is going to change the competition plans for the horse, and; finally, they have to weigh up the costs of not treating versus the costs of treating and its impact on the horse's fitness level and the possibility of them running the short season. One study found that there is a connection between intensity of training, high demand performance trainers and distal limb fractures (Rosanowski *et al.* 2018). There is a possibility that trainers can miss signs of injury and send a horse to compete without it

being properly checked by a veterinarian. If the horse is sound at walk and trot, abnormalities may be missed by racetrack veterinarians during pre-race inspections.

It has been suggested that the way in which trainers can control a horse's access to the veterinarian can be seen as a health and welfare concern (Mellor *et al.* 2020). Access to veterinary services is important to maintain the health of racehorses and longevity, therefore, if the trainer controls a horse's access to treatment this could threaten their welfare (Butler *et al.* 2019). As per ERA (2022), trainers in the UAE are responsible for the horses under their care, and a licensed veterinarian must provide medical care for these horses. Veterinarians are aware of their position in the welfare of these horses and the consequences if a trainer chooses to ignore the medical advice of the veterinarian. Veterinarians who I interviewed did discuss some welfare concerns they had encountered and how enforcement of welfare regulations covering racehorses in the UAE enabled action to be taken.

Trainers that I interviewed were open to suggestion and discussion with their veterinarian and valued the opportunity to discuss different treatment options. This has parallels with a qualitative study that focused on veterinarian-client communication and found that clients expect to be offered more than one suggestion and multiple options for treatment for their pets (Coe *et al.* 2008). It was also evident during my interviews that trainers and veterinarians, who were employed by the same person (racehorse owner), were constrained

in their ability to maximise the welfare of racehorses under their care based on what the owner considered to be satisfactory. This is common in most Tb racing across different countries and is not unique to Dubai. However, this does create potential issues, making the role of independent veterinarians at racecourses important in being able to identify and act upon potential welfare issues in Tb racehorses.

Retirement and traceability

The question of what happens to racehorses after they have left their care was mentioned by all trainers in my interviews. ERA regulations do not cover Tb racehorses once they have retired from racing in the UAE. As discussed by the trainers, in common with other countries, some Tb racehorses were not actually retired but were run in smaller regional races (Crawford *et al.* 2021). In general, the trainers I interviewed demonstrated their commitment to place “good” horses in good places and they discussed their worries about what would happen to horses after they had left their care, including their concerns around sub-optimal or poor welfare of these horses. While Tb racehorses leave the industry at all ages and stages of training and racing across different countries, the primary reasons include poor performance, illness, injury, or behavioural problems (Crawford *et al.* 2021). In the UAE, ERA also specifies that Tb horses are not allowed to race after the age of 12 (Emirates Racing Authority 2021).

Discussion about what happens to Tb racehorses after they retire from racing and wider aspects relating to wastage within the Tb industry and traceability of horses has been an active welfare topic in other countries recently. Data from Australia suggests that only 300 out of every 1,000 foals bred to race will ever actually start a race (Horse Racing Kills 2020). Animal Aid report that about 7,500 horses leave the GB horseracing industry each year but little is known about their fate (Animal Aid 2020). Weatherby's, an agency based in GB through which all racehorses must be registered, reported that 7,590 horses left British racing in 2006. Two years later 852 were reported to be dead and 2,404 horses could not be accounted for (Weatherby's 2009). There is no current form of traceability in the UAE Tb racing industry.

In GB it is mainly private individuals and some charities who assume responsibility for retired Tb racehorses. A study undertaken in 2019 in the USA explored the satisfaction of owners of retired Tb racehorses (Reed *et al.* 2019). This online survey demonstrated that Tb horses were used for a range of various different disciplines after they retired from racing. Owners in this study reported behavioural issues, many of which resolved within the first year of ownership. However, some health issues with horses were not reported at all or were not reported correctly before purchase which resulted in some owners regretting the decision to take on ownership of an ex-Tb racehorse (Reed *et al.* 2019). The role of the veterinarian was considered to be very important including proper evaluation of the horse before (pre-purchase examination) and after rehoming and in providing new owners with

advice on ex-racehorse's nutritional and hoof health management, particularly in the first year of ownership (Reed *et al.* 2019).

Rehoming and traceability of Tb racehorses in Dubai / UAE will be discussed further in my recommendations for key stakeholders.

Limitations

This research project had a number of limitations. The sample size was small, even for a qualitative study. This was partly due to a relatively small pool of trainers and veterinarians that I had access to, and it was also affected by the COVID-19 pandemic. I had been hoping to recruit trainers from different emirates to elicit a broader perspective on Tb racehorse management in the UAE. However, I was only given the contact numbers of trainers in Dubai, so it is not possible to know whether the attitudes and beliefs of the trainers and veterinarians I interviewed are similar to those of people living and working in other emirates. Owners of Tb racehorses play a key role in horse welfare, as they cover the costs of keeping a horse in training and will make the ultimate decisions around competing, veterinary treatment and sale / retirement and rehoming, as discussed by the trainers and veterinarians I interviewed. However, it was not possible to interview owners of Tb

racehorses in Dubai to determine their attitudes and beliefs in relation to equine welfare and is an important limitation of this thesis.

Inductive analysis captures the participants' voices, views and opinions in their purest form. However, as Braun and Clarke point out that this is not fully possible, since I, the researcher will have my own preconceptions and beliefs when analysing the data (Braun and Clarke 2006). I had thought that because of my lack of previous involvement in the Tb racing industry that I would be impartial and not have any biases. However, while going through the process of coding multiple times, I realised that I was constantly reflecting on the responses from participants based on what I read in literature about animal welfare and welfare issues identified in Tb horses from previous studies and this may have limited broader analysis of the data.

Triangulation refers to the use of multiple methods to develop comprehensive understanding of a phenomena in qualitative research (Carter *et al.* 2014, Patton 1999). This was not an approach that was used in my study. As already outlined, I made field notes when interviewing participants to record additional observations that I had made. However, although this was discussed, it was not possible for me to undertake additional field trips to observe trainers and veterinarians during their daily work and to interview them for further details. This was largely due to my own time constraints and those of the trainers and veterinarians, the impacts of Covid-19 (Yanow and Good 2020) and

sensitivities around visitors such as me being present on race-yards and during veterinary treatments e.g., client confidentiality concerns.

Areas for future research

As outlined in Chapter 1, a number of welfare issues have been identified by Tb industry stakeholders in other countries (Mactaggart *et al.* 2021). Some of these issues such as health and disease and heat and humidity were discussed by trainers and veterinarians that I interviewed. However, as already outlined, many other welfare issues were only briefly discussed (e.g., horsemanship, education of the horse, use of whips) or were not discussed at all (tack, environment). This was the first study to investigate welfare in Tb racehorses in Dubai and I wished to identify the key welfare issues as identified by trainers and veterinarians. However, the questions I asked trainers and veterinarians did not provide them with the opportunity or reason to discuss wider welfare issues in relation to Tb racehorses in Dubai. Further research would enable wider welfare issues to be discussed by UAE Tb racehorse stakeholders. In the next sections, I will discuss some of these welfare topics further.

The use of the whip, either in training or during competitions, has been identified as an important welfare concern in Tb racehorses. Use of the whip during a race has been highly debated and has been reported to influence how people view the welfare of racehorses (Horse Welfare Board 2020, Heleski *et al.* 2020). On one side, equestrians argue that the use of whips during racing is for safety purposes and to guide the horse (Heleski *et al.* 2020). On the other hand, the public see the use of the whip as an inhumane and outdated practice (Heleski *et al.* 2020). In GB currently a public consultation is being conducted by the BHA (Horse Welfare Board 2020) to determine possible regulatory and/or rule modifications that might be made. Use of the whip for safety, correction, and encouragement is currently supported; BHA regulations currently state that a jockey may strike a horse up to seven times at any stage on the Flat and eight times over jumps. There are also rules on how the whip can be used, with riders allowed to strike on a horse's hindquarters and down the shoulder in a backhand position, but they must not use excessive force, use the whip over shoulder height or when the horse is either clearly winning or has no chance. Regulations on use of the whip differ between countries and Norway is the only country to have banned the use of the whip completely (Heleski *et al.* 2020). The ERA (2021) permits the use of the whip during the race up to 12 times and ERA rules (2021) state that a veterinary officer must report any marks on a horse that has been whipped. It would be interesting to explore how UAE Tb stakeholders view use of the whip and current regulations in the context of equine welfare and racing performance.

Equipment and use of training aids have also been identified as welfare issues in Thoroughbred racehorses, but this aspect of racehorse welfare was not explored during my interviews. Slitting the nostril of the horse was once believed by the Egyptians and Persians to allow the horse to take in more air and so work harder and perform better (Waran *et al.* 2007). Over time this practice ceased as it became clear that there were no scientific justifications for believing that this surgical intervention improved performance (Waran *et al.* 2007). During my interviews, one trainer mentioned the use of tongue ties as a training aid. Dorsal displacement of the soft palate (DDSP) is a form of upper airway obstruction that occurs in athletic horses during high-intensity exercise and the use of tongue ties is a traditional method used by racehorse trainers across many countries to help prevent DDSP from occurring (Holcombe *et al.* 1999). However, evidence from many studies suggests that use of a tongue tie does not improve physiological measures of respiratory function in horses (Beard *et al.* 2001, Cornelisse *et al.* 2001a,b, Franklin *et al.* 2002). However, this is largely based on clinically normal horses, and not those with suspected or confirmed DDSP (Beard *et al.* 2001, Cornelisse *et al.* 2001a,b). A retrospective cohort study looked at racehorses that were raced using tongue ties and how it affected their performance reported that the use of tongue ties, where it was used consistently, did appear to improve the performance of horses as measured by higher earnings compared with horses that were not run with tongue ties (Barakzai *et al.* 2009). In contrast, a more recent study that examined 22 Thoroughbred and 8 Standardbred horses to look at their performance found that tongue ties have no effect on the performance of horses (Barton *et al.* 2022). This illustrates the need for strong

scientific evidence to be able to inform debate around use of training aids and wider discussion around implications of their use in relation to equine welfare.

I believe that it is important to safeguard the welfare of Tb racehorses and that there is a need for research to better understand how injuries occur and are managed both during training and competition in Tb racehorses in the UAE. Factors such as the heat and humidity and short racing season in the UAE are different to many other countries in which this type of research has been conducted. The results of such research could help trainers and veterinarians based in the UAE to optimise the health and welfare of Tb racehorse and their racing performance. It would also have been interesting to explore in depth other opinions around use of objective measures that racehorse trainers and veterinarians could use to guide training and assessment of fitness. Examples of this would include monitoring of heart rates during exercise and immediately following intense exercise during the recovery period (Wilson and McGowan 2019).

Recommendations for key stakeholders

In February 2020, the Horse Welfare Board in the UK published its five-year strategic plan *“A life worth living – a new strategic plan for the welfare of horses bred for racing 2020-*

2024” to focus on horses’ welfare within the racing industry (Horse Welfare Board 2020). This is an overarching strategy that is focusing on: Quality of life, Lifetime responsibility, Safety and maintaining public trust. This strategic plan could be used as a starting point to look at what could be done in the UAE to improve equine welfare, taking into account specific aspects of Tb horseracing that are particularly important in the UAE and which are different to the GB such as climate and the short racing season.

Trainers in the UAE are required to demonstrate that they can provide horses with the appropriate environment e.g. stabling and training facilities, access to veterinary care (Emirates Racing Authority 2021). However, there is no further requirement for trainers to seek Continuing Professional Development (CPD), or to be up to date with the latest welfare requirements. The Horse Welfare Board (2020) suggests that CPD should be part of the renewal process for racehorse trainers, keeping trainers up to date and informed about the most recent effective training methods and aspects relating to equine welfare. This could be one area that could be improved to benefit Tb racehorses within the UAE.

The welfare of Tb racehorses once they had left the care of trainers in my study was an important area of discussion during the interviews with trainers. The BHA created its own charity called Retraining of Racehorses (RoR) which promotes the transition of racehorses into other disciplines after their racing careers. It also promotes the importance of ensuring optimal welfare of these horses through a nationwide ‘safety net’ that is available to assist

any former racehorse considered ‘vulnerable’ and provides funding for horses that need care prior to rehoming. They also created a national database for people to find an ex-racehorse to buy or loan, to compete with or as companion animals looking for a home. This type of charity does not exist within the UAE horseracing industry. Creation of a more formalised process for rehoming could have many potential benefits for Tb welfare and could address some of the welfare concerns that trainers based in Dubai raised. As outlined earlier in this discussion, the low rates of success in getting a horse from being a foal to the racetrack and then to competing and winning makes the issue of traceability an important one. The Horse Racing Welfare Board (2020) found gaps within the GB Tb horseracing industry with regard to a horse’s traceability. There is no mention of retirement or traceability in the ERA rules, and this should be a focus of future discussions by UAE Tb horseracing stakeholders including owners, trainers, veterinarians and regulators (ERA).

Final conclusions

In this thesis I have explored how racehorse trainers and veterinarians in Dubai viewed the welfare of Thoroughbred horses (Tb) in the context of flat racing performance. Trainers consistently reported that the goal of winning was best met by providing a horse with optimal care. Trainers and veterinarians discussed specific challenges they faced in Dubai

particularly in relation to heat and humidity and the short racing season. The importance of good preventive health care, team-working and early detection of illness or injury were discussed extensively. However, the broader welfare needs of the horse, including welfare issues identified by Tb industry stakeholders in other countries, were less commonly discussed or not discussed at all. Concerns about the welfare of Tb racehorses after they retired from racing was a key area of discussion for trainers in this study, and how they attempted to find ‘good homes’ once horses left their care.

Use of animals in sport and associated welfare issues is a current area of public debate which is widely discussed in social media. Tb horseracing has come under renewed recent scrutiny including its ‘Social licence to operate’. Welfare issues identified by Tb industry stakeholders in other countries have resulted in regulatory changes and development of interventions to improve Tb racehorse welfare. The Tb horseracing industry in the UAE is not immune to similar scrutiny and optimising Tb racehorse welfare is key. Continuous professional development (CPD) of UAE racehorse trainers could broaden awareness and discussion around Tb racehorse welfare and science-based approaches to training. Welfare concerns related to retirement from racing and traceability of horses are areas that the UAE Tb horseracing industry should seek to improve.

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Appendices

Appendix A. information sheet for Horse trainers

Appendix B. information sheet for Veterinarians

Appendix C. Consent form

Appendix D. Distress chart

Appendix E. Ethical approval letters

Appendix F. Interview guide for Horse trainers

Appendix G. Interview guide for Veterinarians

Appendix A: information sheet for Horse trainers

Horse trainer information sheet

Exploring trainers' decision making in equine health and welfare: a qualitative investigation of the management of flat racing horses in the UAE

Introduction

We would like to invite you to take part in a research study. If you are interested, please read this information sheet to understand why we would like you to take part in this research and how you will be contributing to it. Please read the information below carefully and share it with others if you wish.

What is the purpose of this study?

This study will explore how trainers manage horses in training including what influence a trainer's decision has when it comes to what is best for the horses' health and what external factors influence decision making. The key aims are to:

- *Understand horse trainers' perception of health and wellbeing of racehorses*
- *Explore the relationship between horse trainers, horse owners and equine vets and how their decision affects horses' health and careers*
- *Understand the culture of horse training, health management and horse racing in the UAE from trainer's perspective*
- *Explore experiences, ideas, and opinions from trainers about the health and welfare of horses*

Why should I take part?

We would like to collect and gather information regarding horse trainers' views on equine health. This research will help us to better understand equine health and welfare in the UAE.

What will happen if I take part?

You will be contacted via telephone to see if you are interested and to set a date and time to conduct a face to face interview. The interview will be audio recorded to make sure that all the information we receive from you is correct and authentic. The interview may last between 45 minutes to 1 hour, but the exact duration depends on how much you would like to share with us.

Ares that will be covered during the interview:

- *The relationship between trainers and horse owners*
- *The relationship between owners and their horses*
- *The way owners view their horses' health and wellbeing*
- *Different types of owners*
- *Health issue concerns in UAE racehorses*
- *Personal experiences and points of view regarding training in UAE*
- *Any advice or recommendation*

Please be informed that any information you share with us will be anonymized. Your personal information will not be shared by anyone outside of the research team.

What if there is an issue?

Please contact Hesa Almheiri (h.m.a.almheiri@liverpool.ac.uk) or call (00971 50 911 3 777) or contact Prof. Debra Archer (darcher@liverpool.ac.uk). If you are still unsatisfied, please contact the Research Governance Officer on (ethics@liv.ac.ae). When contacting the RGO please provide the name and contact details of the research or the name/ description of the study.

Who will review this study?

To ensure that your safety, rights, wellbeing, and dignity are protected the methods for this research have been looked at by an independent group of people called a research ethics committee. This study has been reviewed by the University of Liverpool's Veterinary Research Ethics Committee

What's next?

We would be very grateful if you would be willing to be interviewed as part of this study. If you are interested in participating, please send an email to Hesa Almheiri on (h.m.a.almheiri@liverpool.ac.uk) with your information and contact details or call +97143366666 during office hours from 8am to 3pm or call +971509113777 for more information.

Thank you for your time

Hesa Almheiri

MPhil student, University of Liverpool/ Dubai Equine Hospital

Appendix B: information sheet for Veterinarians

Equine veterinarian information sheet

Exploring trainers' decision making in equine health and welfare: a qualitative investigation of the management of flat racing horses

Introduction

We would like to invite you to take part in this research study. If you are interested, please read this information sheet to understand why we would like you to take part in this research and how you will be contributing to it. Please read the information below carefully and share it with others if you wish.

What is the purpose of this study?

This study will explore how trainers in the UAE manage horse's health and wellbeing. We are interested in the relationship horse trainers have with horse owners and equine vets. We will explore what influence a trainer has decision when choosing what is best for individual horse's health and welfare and what external factors might influence their decision.

Objectives:

- *To understand horse trainer's perception of health and wellbeing of horse in their care*
- *To explore the relationship between horse trainers, horse owners and equine*
- *To better understand the culture of horse training, equine health, and welfare in the UAE from trainer's perspective*

Why should I take part?

We are exploring the perceptions of veterinary surgeons who work alongside trainers and horse owners in the UAE. Your input will provide us with important information about horse training, health, and welfare from and equine veterinary perspective.

What will happen if I take part?

If you are willing to take part in this study you will be contacted via telephone to set a date and time to conduct a face-to-face interview. The interview will be audio recorded to make sure that all the information we receive from you is correct and authentic. The interview may last between 45 minutes to 1 hour but the exact duration depends on how much you would like to share with us.

Areas that will be covered during the interview:

- *The relationship between equine vets, trainers, and horse owners*
- *The way owners and trainers view their horse health and wellbeing*
- *Health issue concerns in UAE race horses*

Any information you share with us will be anonymous and the information you provide to us will not be shared by anyone outside of the research team.

What if there is an issue?

Please contact Hesa Almheiri (h.m.a.almheiri@liverpool.ac.uk) or call (00971 50 911 3 777) or contact Professor Debra Archer on (darcher@liverpool.ac.uk). If you are still unsatisfied, please contact the Research Governance Officer on (ethics@liv.ac.ae). When contacting the RGO please provide the name and contact details of the research or the name/ description of the study.

Who will review this study?

To ensure that your safety, rights, wellbeing, and dignity are protected the methods for this research have been looked at by an independent group, the veterinary research ethics committee.

What's next?

We would be very grateful if you would be willing to be interviewed as part of this study. however, if you are interested to be interviewed for this research study please send an email to Hesa Almheiri on (h.m.a.almheiri@liverpool.ac.uk) with your information and contact details or call +97143366666 during office hours from 8am to 3pm or call +971509113777 for more information.

Thank you for your time

Hesa Almheiri

MPhil student, University of Liverpool

Appendix C: Consent form

Committee on Research Ethics

PARTICIPANT CONSENT FORM

Exploring trainers' decision making in equine health and welfare.

- Please
initial box**
1. I confirm that I have read and have understood the information sheet dated [DATE] for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
 2. I understand and agree that my participation will be audio recorded and I am aware of and consent to your use of these recordings for the study only
 3. I understand that confidentiality and anonymity will be maintained and it will not be possible to identify me in any publications.
 4. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my rights being affected. In addition, should I not wish to answer any particular question or questions, I am free to decline.
 5. I understand that, under the Data Protection Act, I can at any time ask for access to the information I provide and I can also request the destruction of that information if I wish.
 6. I agree to take part in the above study.

Participant Name

Date

Signature

Name of Person taking consent

Date

Signature

Researcher

Date

Signature

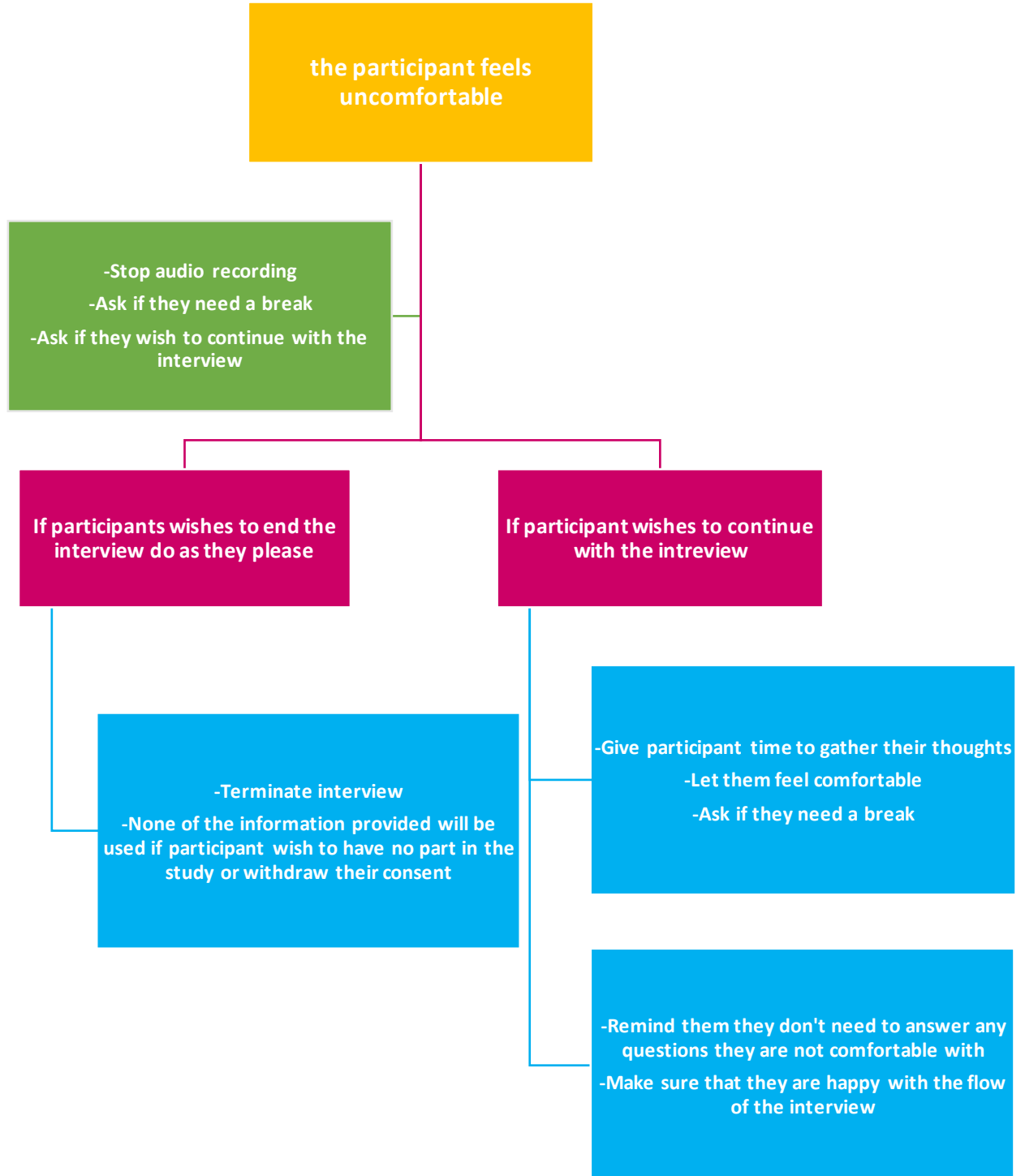
Principal Investigator:

Professor Debra Archer
University of Liverpool Equine Hospital
00 44 151 794 6041
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Student Researcher:

Hesa M. Almhier
Zabeel 2- Dubai
+9714 3366666
hesa.almuhairi@dubaiequine.ae

Distress Chart



Appendix E: Ethical approval letters

Dear Debbie

I am pleased to inform you that the Veterinary Research Ethics Committee has approved your application for ethical approval. Details of the approval can be found below.

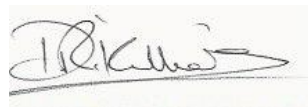
Ref:	VREC685
PI:	Prof D Archer
Title:	Exploring trainers' decision making in equine health and welfare in the UAE: a qualitative investigation of the management of endurance and flat racing horses
Institute:	Veterinary Science
Department:	
First Reviewer:	Dr A Freeman
Second Reviewer:	Prof G Oikonomou
Date of initial review:	23.7.19
Date of Approval:	17.7.19

This approval applies for the duration of the research. If it is proposed to extend the duration of the study as specified in the application form, the Veterinary Research Ethics Committee should be notified. If it is proposed to make an amendment to the research, you should notify the Veterinary Research Ethics Committee by following the Notice of Amendment procedure outlined at http://www.liv.ac.uk/researchethics/application/forms_and_templates/.

If the named PI/Supervisor leaves the employment of the University during the course of this approval, the approval will lapse. Therefore please contact the RGO at ethics@liverpool.ac.uk in order to notify them of a change in PI / Supervisor.

All serious adverse events must be reported to the Committee within 24 hours of their occurrence, via the Research Governance Office (ethics@liv.ac.uk)

With best wishes



David Killick
Chair, Veterinary Research Ethics Committee

- **An amendment had to be submitted during the pandemic.**

Dear Debbie

I am pleased to inform you that the Veterinary Research Ethics Committee has approved your application for ethical approval. Details of the approval can be found below.

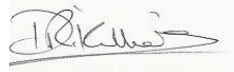
Ref:	VREC685a
PI:	Prof D Archer
Title:	Exploring trainers' decision making in equine health and welfare in the UAE: a qualitative investigation of the management of endurance and flat racing horses (Exploring equine health and welfare in the UAE)
School:	Veterinary Science
Department:	
First Reviewer:	Dr A Freeman
Second Reviewer:	Prof G Oikonomou
Date of initial review:	7.7.20
Date of Approval:	10.8.20

This approval applies for the duration of the research. If it is proposed to extend the duration of the study as specified in the application form, the Veterinary Research Ethics Committee should be notified. If it is proposed to make an amendment to the research, you should notify the Veterinary Research Ethics Committee by following the Notice of Amendment procedure outlined at http://www.liv.ac.uk/researchethics/application/forms_and_templates/.

If the named PI/Supervisor leaves the employment of the University during the course of this approval, the approval will lapse. Therefore please contact the RGO at ethics@liverpool.ac.uk in order to notify them of a change in PI / Supervisor.

All serious adverse events must be reported to the Committee within 24 hours of their occurrence, via the Research Governance Office (ethics@liv.ac.uk).

With best wishes



David Killick
Chair, Veterinary Research Ethics Committee

Appendix F: Interview guide for Horse trainers

Interview guide

Exploring trainers' decision making in equine health and welfare: a qualitative investigation of the management of endurance and flat racing horses

The interviews are in-depth interviews and questions below are considered prompts; questions may be skipped or changed according to the flow of the interview and topics discussed by the participants. Participants will have the freedom to speak on the topic presented, provide examples, stories and personal experiences they feel relevant to the study.

Introduction

Thank you for taking the time in your day to speak to me. This conversation should be an hour, but may take more or less time depending on how much you want to say. During our conversation, I may take few notes please do not feel discouraged or hesitant to keep talking, this interview will be voice recorded. There are no right or wrong answers, this means any information you provide will be only shared within the research team, and we will ensure information is anonymized so you can not be identified. If you feel uncomfortable during the interview or need a break or end the interview please let me know. Do you have any questions before we started?

Horse trainers

Introduction

I am interested in the challenges you face as a horse trainer and in particular how you make decisions regarding the health and welfare of the horses you train.

Ice breaker:

- How did you become a horse trainer?
- How long have you been a horse trainer?
- Can you tell me a bit about your role now? E.g. how many horses, people you manage, what does a typical day look like?

Owner-trainer relationship:

- How would you describe your relationship with the owners?
- How do you make decisions regarding the horse's health?
- What are the challenges you face with owners?

Owner-horse relationship:

- How do owners relate to their horses?
- *Do you notice any difference between different types of owners?*
- *Prompt emirate owners and expats?*

• Health issues:

- What are the biggest health issues you face when training a horse for the season?
- How do you balance the needs of the horse with the training requirements?

Conclusion:

Participants are welcome to add any comment or ideas in the scope of the topic
Provide contact detail and confirm confidentiality of the study

Appendix G: Interview guide for Veterinarians

Interview guide

Exploring trainers' decision making in equine health and welfare: a qualitative investigation of the management of endurance and flat racing horses

Introduction

Thank you for taking the time in your day to speak to me. This conversation should be an hour, but may take more or less time depending on how much you want to say. During our conversation, I may take few notes please do not feel discouraged or hesitant to keep talking, this interview will be voice recorded. There are no right or wrong answers, this means any information you provide will be only shared within the research team, and we will ensure information is anonymized so you can not be identified. if you feel uncomfortable during the interview or need a break or end the interview please let me now. Do you have any questions before we started?

Ice breaker:

- How long have you been practicing veterinary medicine in UAE?
- What are the most common health related problems in horses that you see in your role as a vet?
- What do you think are the biggest threats to equine welfare in the UAE?

Owner-trainer relationship:

- How would you describe the relationship between owners and trainers from your point of view?

Vet relationship with owners and trainers:

- How would you describe your relationship with owners?
- How would you describe your relationship with trainers?
- And what are the challenges you face when dealing with both?

Health and treatment:

- How would you describe owner awareness regarding equine health and treatment?
- State what ways you would recommend discussing health issues and long-term treatments with horse owners and trainers?
- How do you deal with owners and trainers who are preparing a horse for a race but the horse is might be suffering from chronic health issues?

Advice:

- Any advice on how to maintain a high quality of equine health and welfare in UAE?