Beyond the And/Or divide |
Exploring the potential for experiential learning during horse-human interactions

A study investigating what whole-body learning may occur through horse-human interactions in the outdoors, with implications for experiential learning theory and adult education in an Irish context.

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Thesis submitted to Maynooth University for the degree of Doctor of Philosophy

28 October 2022

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DECLARATION

I have read and understood the University's policy on plagiarism.

I declare that this thesis, *Beyond the And/Or divide | Exploring the potential for experiential learning during horse-human interactions*, is my own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education.

Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

Signature: Lisa M Pearce

Date: 17 August 2023

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Abstract

The research examined horse-human interactions to discover what impact, if any, these experiences had on participants' learning within and beyond the horse world. From decades of diverse experiences in education, I became concerned about the rise in disengagement. Learners who weren't given sufficient opportunities to use their whole-selves became disjointed and lost enjoyment in the learning process. Likewise, disconnects occurred when classroom learning wasn't linked to real life. The separation of the whole-person - mind, body, and emotions - in the learning process appeared to parallel societal misperceptions that academic learning with its emphasis on mental knowledge production, was more or less than practical, hands-on knowledge and skill development. To examine these educational concerns and polarities, I looked to where I find joy in learning – horse-human interactions.

This study is intended for adult learners and educators who are interested in quality experiential learning situations. Dewey, among others like Freire, have suggested quality learning happens through educative experiences which include continuity and integration between learners and what and where learning occurs. The study was framed by an analysis of continuity, integration, and aesthetics which became a united foundation for whole-body, experiential learning.

Research was conducted using qualitative, interpretive methodologies based on pragmatic and social constructivist principles. Biographical and visual methods were used to bring in the aesthetic, aimed to help readers and participants connect on a deeper level with the topic. Data were a collection of field notes. Primary data comprised of transcripts and summaries from interviews with twenty-four equestrians. Secondary data included embodied participation in the study, and biographical field notes which were written and auditory reflections from observations of horse-human interactions and learning-teaching experiences. An interpretation of results sought to honour participants' experiences and led to an organisation of emergent themes into five central findings, uncovered through an inductive, researcher-created coding system.

Conceptual/thematic findings suggested equestrians were regularly engaged in experiential learning which happened through their interactions with horses. They used their whole selves to draw on prior experiences and applied them to real challenges in the present. Collectively, these experiences prepared them to handle future situations. These educative experiences were relational, social, ecological, and held genuine interest.

This study gave whole-body experiential learning attention. Examining experiential learning through horse-human interactions may help readers consider how to incorporate similar whole-body learning experiences in their learning-teaching practices. Better understanding of how learning is impacted because of the continuously integrated

interactions between horses and humans deserves consideration because of its potential for developing and maintaining human growth. Horse-human interactions involve, among other things, movement, learning, and nature which, together, have proven to facilitate cognitive, physical, and emotional development. This study sought to contribute to experiential learning theory by moving beyond divisions of mind And/Or body towards a unified and meaningful learning approach through the unique insights of the dynamic interactions between humans and horses. A wider practice of respectful, interspecies interactions can encourage more opportunities to learn from others species and nature. This learning can promote individual responsibility, empathy for others, and actions which help us recognise and act to sustain the vital health of our natural world.

Glossary

Note: My intention for the Glossary is to provide additional background information about some key equestrian concepts. Words and language around education, experience, and learning will be discussed within the text.

Bascule: The shape a horse makes over a fence or obstacle. Ideally, a horse should produce a round shape demonstrating balance, impulsion, and proper use of their bodies.

Cross Country: One of the three phases of eventing. Horse and rider navigate a set course of natural obstacles, over several miles, and aim to complete in optimum time.

Dressage: One of the three phases of eventing. The discipline also exists in standalone competitions and can be performed individually or as part of a team. Known as ballet on horseback, dressage requires precision and harmony between horse and rider to perform a set series of movements in a pattern. The test is typically performed in a 20m x 60m arena with letters set around the perimeter.

Equestrian: (n) A person who engages in activities with horses, including horse riding, for a variety of reasons including leisure, competition, breeding, sport, and therapy. (adj) Relating to activities with horses.

Equine: Name for a horse of any size or breed. Equid is the scientific name for horse and any within the Equidae family of perissodactyl mammals, referring to odd-toed ungulates. Horses have a single weight-bearing toe, called a hoof.

Eventing: A horse sport which involves three phases of dressage, cross-country, and show jumping. Referred to as the triathlon of equestrian sport, eventing involves time consuming training and a horse/rider team capable of performing in three distinct disciplines.

Five phases of jumping: A horse and rider team experiences five phases when going over an obstacle. Each phase must be completed successfully to produce a good jump. The phases include the approach to the fence, take-off from the ground, flight, or suspension over the fence, landing on the other side of the fence, and moving away or recovery from the act of jumping the fence.

Herd: A group of horses who, in the wild, band together for survival, propagation of the species, and socialisation. Domestically, horses still form groups when given the opportunity and quickly establish a pecking order for eating, drinking, and communication purposes.

Horse-human interactions: Interactions or experiences between horses and humans. These multi-species interactions can occur in a field, over a fence, in an arena, when the human is on the ground or in the saddle during horse riding sessions.

Show jumping: A horse sport and one of the three phases of eventing. Like dressage, show jumping can be a standalone discipline completed individually or as part of a team. The discipline involves horse and rider navigating a set course of fences in a sand arena or enclosed area on grass. Typically, fences are brightly coloured with poles on standards which will fall to the ground if knocked by the horse. The objective is to complete a clear round, with no fallen fence poles or refusals. The course tests the ability of horse and rider to have balance, rhythm, and forward impulsion, and complete the challenge under a given time.

Training: A term used in the horse world to explain the art of working with a horse on the ground and under saddle. Gaining knowledge and skills about the whole horse includes learning about their paces. The level of training depends on the horse's breed and abilities and the person's goals.

Training Scale (Figure 1): A process of training a horse which guides horse and rider towards best practice is what judges look for in competitions like dressage. The training scale includes the six steppingstones of: rhythm, relaxation to mean lightness and suppleness, connection or effective communication between riders' aids and the horse, impulsion, or energy from the hind end to the front end, straightness, and collection.

Figure 1: Training Scale (Otterman, 2020)

Acknowledgements

Having time and space to conduct this research wouldn't have been achievable without the support of special people, horses like Silver, and a little dog named Nutmeg. Doing a PhD can be overly introspective. I was often reminded of the real needs of people close to me and those further afield which helped me maintain a balanced perspective. Conducting this study in a different country and culture was heightened during the Covid-19 pandemic. I want to give special, heartfelt shout-outs to my dear parents, Don and Joan, my son, Daniel, and my boyfriend, Martin. They all supported me more than they will ever realise, and I am forever grateful.

Participants and friends in the US and Ireland constantly gave me reasons to smile and their deep insights into the power of horse-human connections encouraged me. Participants receive credit for sharing photographs of themselves and approving their use in text. I'd also like to acknowledge the photographers behind images associated with chapter titles. While the images are freely usable from Unsplash.com, the photographers deserve to be named and are acknowledged in each picture's caption. The generosity of United States Pony Club (USPC), Irish Pony Club (IPC), and the Racing Academy and Centre for Education (RACE) staff and volunteers were invaluable. Participants' willingness to give voice to their experiences is what energised this study and helped it go from a walk to gallop. Without special friends Martin, Erin, Kate, and Shelley, who shared a passion for learning, horses, or both, this study would not have begun, continued, or finished.

Horses, dogs, cats, and other beautiful creatures throughout my life have been wonderful companions, partners in sport, friends in recreation, and teachers. Through working with animals in the natural environment, I have learned an abundance of equestrian and life skills. So many animals have left enduring impressions on my heart. For this study, Silver, my Irish draft horse, starred in a few creative research videos. Progressing his training provided me with enjoyment and activity, essential to my wellbeing on every level. He has the keenest hearing and eyesight of any horse I've ever encountered and eats grass with more precision than most lawn mowers. A drive to the West of Ireland to source Connemara ponies was unsuccessful but a little puppy made the drive home and became part of our lives. Nutmeg, a little terrier mix, has become quite a little farm dog. Along with exercising horses, taking Nutmeg on regular walks gave me essential brain breaks. Her daily dog-yoga stretches of downward-dog and cobra encouraged me to keep stretching too.

Several people at Maynooth University were integral to my thesis experience. My supervisor, Brid, was positive and her belief in my horsey ideas was a constant. Colleagues I have gotten to know from the Critical Skills team and the Department of Adult and Community Education (DACE) were sources of support and provided constructive critique.

As a result of tutoring and supervising in Critical Skills and DACE, I interacted with wonderfully diverse and interesting people at Maynooth University and The Irish Defence Forces. Each group of students from every module impacted me as a learner and teacher. Coming to Ireland wouldn't have been possible without a Hume scholarship, which supported fee payments. People from the Graduate Studies Office and International Office contributed to the Irish welcome I received. Instead of forgetting someone, I will collectively say, 'Many thanks'.

In sum, I am humbled by the humans, animals, and natural environment encountered during this study. There were highs and lows. However, I am buoyed by people and animals mentioned and others who gave love and care over the years. I am hopeful, ready to learn more, be more, share more, and care more. Jeremiah 29:11.

Preface

During the second half of this study, we all had to cope with Covid. On many occasions we were starkly reminded of the basics – health, loved ones, caring for others, and how quickly our lives can change. I wondered how understanding more about horse-human interactions might increase our ability to adapt to challenges in our lives, develop better awareness of other living beings, help us appreciate people's differences, and reconnect with the joys of learning. These thoughts were deepened after listening to some experiences kids had while learning at home during lockdowns …

Among the downer stories, the complaining stories, and the inane stories were stories of kids and parents and carers having fun and learning. Kids were baking banana bread with their siblings and parents. Kids were learning maths at the kitchen table and getting exercise by walking the dog with the family in the two kilometres around their home. Some were planting vegetables in the garden or watching herbs grow in a pot in the kitchen window. Others were drawing and dancing and playing music, creatively constructing costumes and mini floats to parade around the neighbourhood on Paddy's Day. And they were experiencing - doing, thinking, and feeling - all while being together … they were really learning.

I had a light-bulb moment. Recognising how much can be learned while simply baking banana bread has tremendous scope. In other words, these interactions go beyond head knowledge or physical skill, they are profoundly integrated and involve relationships. These 'baking banana bread' experiences can be factors in our human growth and improve our way of being in the world.

Likewise, there is potential to expand experiential learning models from participating in, reflecting on, and analysing horse-human interactions. Horse-human interactions appear to be powerful forms of experiential learning which occur in shared, outdoor spaces. There is potential to learn through such experiences when doing and thinking and feeling in these environments are integrated. Whole-body experiences improve our engagement in the learning process because they envelop all aspects of our humanness. Through this interesting mix of mutual trust and caring, risk and reward, high but realistic expectations, and working through challenges, perhaps our innate resilience can grow (referred to in this text as persistence, grit, and resilience).

Chapter 1 | Introduction | Groundwork

'God forbid that I should go to any heaven in which there are no horses.'

R.B. Cunningham-Graham, 1917 in a letter to Teddy Roosevelt (The Arena Media Group, 2022)

Image 1: Horse and girl. Photo by Kenny Webster on Unsplash.

Introduction

Have you ever wondered what might be learned from interacting with horses? I have often asked: What is it about horses I am so drawn to, amazed by, comfortable with, and comforted by? Are people and horses learning from each other and, if so, in what ways? Have others been impacted by their relationships with horses? And why do I keep returning to this sport after all its associated challenges?

The purpose of this chapter is to lay the foundation for the study, to establish what the study is about, why it is significant, where it is going, and what contributions may be made to the field of experiential learning. The chapter is likened to the groundwork done with horses. Groundwork establishes the foundation for future work and is where trust and relationship building begins (Image 1).

I have been fascinated by animals and nature from as far back as I can remember. In particular, the beauty, strength, and intelligence of horses captured my attention from an early age. Horses have co-existed with humans throughout history, working alongside humans to help meet basic needs, assisting with individual, familial, and cultural survival. Post-industrialisation, horses have had a different role than their ancestors. Given their magnificence, horses continue to hold deep cultural, aesthetic, and sporting appeal. People who work with horses typically exude passion. Their stories share common threads of success and failure, frustration, and exhilaration. Equestrians come from all walks of life yet have the responsibility to care for horses 24/7/365 in common. Horses don't judge where people come from, how much education they have, or what kind of car they drive, they are focused on obtaining food, water, socialisation, and exercise. Horses are concerned with respect and trust and demonstrate equality in their interactions with humans. Thus, horses can help breakdown social barriers. Horses and humans are multifaceted creatures and relationships between them are complex. Somehow, despite the differences and inevitable disappointments, a beautiful trust can flourish during these multi-species interactions.

Through a mixture of life experiences with horses, outdoor activities, learning, and teaching, I became curious how people learned through their experiences with horses. Curiosity is part of my nature. Discovering keeps me engaged in the process of learning, a concept I call, *being a Curiositor.* Experiential learning was traditionally referred to as hands-on learning and equestrians appear to primarily identify with direct, kinetic learning experiences. This way of learning has close ties with agriculture and has existed on family farms for centuries. 'Hands-on learning' or 'learning by doing' is widely associated with experiential learning, problem-based learning, and outdoor learning theories. However, a criticism of learning by doing is in its broad use and understanding (Crosby, 1995; Seaman, 2008). Another criticism is that hands-on learning may limit 'learning by doing' to the acquisition of physical skills at the expense of theoretical knowledge. Physical learning and theoretical learning, views of learning which appear on the opposite ends of the spectrum, are both narrow. In their polarity, they exclude aesthetics, the importance of emotional learning, and learning as a process of becoming (Dewey, 1958; Leddy and Puolakka, 2021). The process of becoming, in an educational context, is concerned with the uniqueness and constantly evolving nature of each learner, as opposed to singular goals of learning content for an end result (Winter and Biesta, 2011; Hagström, 2016).

To begin to address criticisms of educational binaries, utilising 'And/Or' in the title was purposeful. Learning phrases such as 'mind And body' / 'mind Or body' can divide a person in their efforts to learn. Likewise, if experiential learning is viewed solely through a lens of

‘hands-on’ or ‘learning by doing’, a division occurs. A problem exists if the value and impact of the whole person in learning is negated through these divisions, further complicated if a person’s emotions are left out of the conversation. This study will examine how experiences of all kinds can become educative when a learner participates with their whole-body and is challenged to take responsibility for their learning while continuously linking prior knowledge with present and future possibilities (Dewey, 1938, 1958; Freire, 2000a). This study’s concept of whole-body learning is based on embodiment. ‘Embodied knowing is experiential knowledge that involves senses, perceptions, and mind-body action and reaction’ (Kerka, 2002, p. 1). As children, we primarily communicated and learned through our body. As we age, we lose touch with the physical. Adults ‘play, cry, jump for joy, or run around in nature’ less often than children (Parikhal, 2021). Reconnecting with the physical and emotional ways of communicating from our youth can positively impact learning in adulthood. I suggest it is important to understand more about how people can bring their whole-selves - mind, body, and emotions - to the learning process. Whole-body learning experiences can occur on a seat in a classroom, in the yard with a horse, or on a nature walk with a friend. All experiences have potential to shape who we are.

Moving beyond educational divides is a challenge and thus the title, ‘Beyond the And/Or divide….’ indicates the direction of the study. This study seeks to contribute knowledge to identified research problems through addressing research questions, as outlined in this chapter. Providing analyses of literature and interpretations of findings will help me to reach synthesised conclusions (Bloomberg and Volpe, 2019). To confront mentioned challenges, the study will expand knowledge about the implications of educational dichotomies and their impact on learner engagement through a qualitative research philosophy and design. The perceived problems will be explored in more detail below.

Problem statement

Being a learner is part of who we are as humans (Bakhurst, 2020). The process of learning is messy because it is a fusion of challenge, growth, uncertainty, and potential (Scottish Consultative Council on the Curriculum, 1996, cited in Higgins and Nicol, 2002). For adults, learning might be associated with a mix of positive and negative prior experiences which influence their current learning outlook (Knowles et al., 2005). Bland learning experiences occurring in seats in a classroom are often far removed from the dynamic processes of discovery we do in our everyday lives (Wesch, 2012; Ryan and Walsh, 2015).

After working with a diversity of adult learners in various classroom and outdoor settings, I became increasingly concerned about lack-lustre attitudes towards learning, mainly in classroom settings. These attitudes seemed linked in some way to the lack of perceived relevance between academic learning and real-world problem solving. Furthermore, these attitudes appeared some way impacted by the exaggerated emphasis in education, especially in western culture, on thinking over doing and feeling (Kerka, 2002). Learners often report they learn best if experiences are practically connected to the real world yet are often not given enough opportunities to put theory into action (Dewey, 1938; Barkley, 2010; Wesch, 2012; Coates and McCormick, 2014; Freire et al., 2014). Increasingly, I heard comments from people working in agriculture and trades which concerned me because they seemed to view themselves as less than or not as smart as those with more formal education or white-collar jobs. Sadly, society seems to view learning preferences, and resulting occupational paths, as dichotomous, split between working class or professional class, less than or better than. Something was unjust here and I wanted to understand more about what was going on. I looked to experiential learning research and the horse world for some answers to polarities between mind and body knowledge and resulting educational and social divisions.

First, everyone experiences the world and has the potential to learn from embodied experiences. Thus, experiential learning should be available for everyone. Bodily knowledge has been increasingly acknowledged, it is no longer distrusted as something to be controlled in order for cognitive knowledge to develop (Dewey, 1938, 1974; Gómez-Pinilla et al.,1998; Howden, 2012). Through a wider understanding of whole-person learning along with research about the benefits of situated learning (Lave and Wenger, 1991; Bredo, 1994) and nature learning (Higgins and Nicol, 2002; Louv, 2012; Quay and Seaman, 2013; Bratman et al., 2015), adult educators are increasingly turning to embodied learning principles (Kerka, 2002). The move towards embodied learning principles in adult learning is important because integrating the multi-faceted nature of humans with the multi-sensory world of nature has potential to create more fulfilment and genuine growth. Educational theorists have claimed that holistic, democratic, and student-centred practices can pragmatically connect experience with nature to help humans develop their full potential (Dewey, 1994; Armitage, 2003). This study seeks to build on these ideas by shifting focus from mind or body knowledge divisions to unification of the whole person. This premise is enacted through an examination of how individual capacity can be valued within the particular social and environmental contexts of horse-human interactions.

However, I found little academic research which advanced adult experiential learning theory through the analysis of horse-human interactions. This may be partly due to the relative newness of qualitative human-animal studies (DeMello and Shapiro, 2010; Shapiro, 2020). A few studies were found which examined horses as part of therapy programmes and discussed the resulting impacts on learning (Burgon, 2014; Stock and Kolb, 2016; Singh, 2019). In contrast, an abundance of anecdotal material was available which supported the positive impacts of interacting with horses (Letts, 2012; *Horse & Hound*, 2016; Blincoe, 2017; Vollset, 2020; Hutchinson, 2021).

To proceed, I considered if the study met the ROC test (Bloomberg and Volpe, 2019). The topic of experiential learning within horse-human interactions was deemed (R)esearchable. The problem could be addressed because participants were available, and the subject was of interest and aligned with my abilities. The study is (O)riginal because it examines experiential learning from a new perspective; it seeks to address existing challenges of educational dichotomies through a lens of horse-human interactions. Finally, the study is (C)ontributory. It aspires to contribute interpretive knowledge by exploring meanings behind a situation. Considering the situation of horse-human interactions may expand thinking about possibilities for increasing whole-body experiential learning opportunities for adults.

Despite education's potential for liberation and change, disconnects in society continue to contribute to widening And/Or divides. For some, there is a disconnect in how learning is delivered and how they learn best. Sadly, we live in a culture of arrogance where some push the pursuit of higher education as the best path for personal fulfilment. I suggest this educational perspective partially exists because a narrow view of 'learning by doing' persists. Narrow perspectives promote academic knowledge above other ways of knowing *or* physical learning at the expense of theoretical knowledge. As stated, I will take a broader, unifying view of experiential learning. We must consider the full experience and the wholeness of the experiencer to grasp experiential learning (Boud et al., 1993).

Second, understanding if and how people learn through their experiences with horses might provide new perspectives on existing educational dichotomies and concerns about learner disengagement as outlined. This study celebrates the experiences of participants who interact with, learn alongside, ride, train, own and compete horses in Ireland and the United States (US). Horse-human interactions largely take place in shared, outdoor spaces. I recognised an opportunity to investigate if interactions with another species in the natural environment might help individuals make sense of what they are experiencing.

Finally, for some, a concerning disconnect between people and nature remains (Higgins and Nicol, 2002; Louv, 2008; Harrison, 2010; Quay and Seaman, 2013). However, there is increasing awareness of the benefits of being in natural environments for improving motivation and self-efficacy (Aisher and Damodaran, 2016; Bratman et al., 2015; Louv, 2012; *Sport Ireland Policy on Sport and Physical Activity in the Outdoors*, 2020; Szczepanski, 2002). This study seeks to answer calls for more investigation of nature experiences on human development (Aisher and Damodaran, 2016; Bratman et al., 2015; Louv, 2008). The study's purpose and research questions are next.

Purpose of study and research questions

This thesis is primarily concerned with studying the potential of learning through experiences which occur when adults interact with horses in natural environments, although there are many ways to investigate experiential learning (Crosby, 1995; Dewey, 1938; Freire et al., 2014; Kolb, 1984; Seaman, 2008). The purpose of this study is to investigate what happens when a person is engaged in the learning process within the stated context. I find the use of educational polarities, the Ands/Ors, unsatisfactory because they separate a learner into parts. I want to discover if adults who interact with horses and engage with all that is going on in their environment, can grow their knowledge and skills, in holistic, down-to-earth ways. Analysing the potential impact of horse-human interactions on learning is widened because the experiences take place largely in natural landscapes. Through the study, I hope to gain insights into how horse-human interactions become educative learning experiences, meeting characteristics of experiential learning described earlier. I also want to unravel what ripple effects such experiences may have on adults' learning in everyday life and how learning through horse experiences differs from conventional learning. I suggest embodied horse-human interactions can truly inform, disrupt, and motivate how we learn through experience and thus extend conversations about how to move beyond And/Or divides to widen experiential learning practice.

I will utilise interpretive, qualitative methodology to address the study's purpose by exploring the following three research questions:

- Why are adults involved with horses?
- How do horse-human interactions relate to experiential learning?
- How might any educative experiences which arise from horse-human interactions impact adults?

A summary of an experience I recorded in my experiences journal follows. The journal was a written reflective tool which joined other genres of data to form a collection of field notes. More about field notes will be presented in the methodological chapters. The reflection is an example of what I learned about educational dichotomies from reflecting on conversations with equestrians while in the West of Ireland.

West of Ireland reflections

The following reflection arose from listening to how adults who work with horses regarded their intelligence when compared with others. The entry adds to the study's relevance by giving evidence of educational challenges described earlier. The reflection aims to contextualise the research questions.

During numerous trips to the West of Ireland in 2017 and 2018, I interacted with equestrians from all walks of life. In the natural course of conversation, topics would occasionally turn to the impact of schooling and how individuals perceived themselves as adults and as learners. Ongoing conversations with two men, one young adult and one older adult, stood out. I will synthesise their experiences. Both related in one form or another they often got into some form of trouble in school and were early school leavers. They expressed their lack of 'school smarts', which I came to interpret as their lack of interest or perceived ability to learn from books. These individuals felt they were somehow 'less than' others around them. Contributing factors to their feelings of inadequacy were regularly linked to negative experiences in school. Often negative experiences came in the form of verbal messaging which made them feel they weren't good at academics. Messaging from teachers, parents, and peers was internalised. Over time, their confidence was lowered which amplified their increasing struggles to master different school subjects. Negative educational experiences, like the ones mentioned, can result in early school leaving and lower self-worth which can affect adults' sense of place and real place in society (Byrne and Smyth, 2010). These were sad stories. To me, the stories highlighted the extent of early and sustained negative messaging from educators and how it can stay with a person for a lifetime.

However, the disconnect between what I heard as perceptions of lower intelligence and what I observed was stark. In contrast to how they perceived themselves, I noted how capable and dedicated these two men were when faced with serious, real-world issues. They overcame financial difficulties of running a farm by diversifying their business. Animals who experienced unexpected illness, injury or death were treated with thought and care. They also demonstrated their reasoning and analytical skills through discussions of local and world events. The very people who claimed to be 'less than' demonstrated high levels of

mental, emotional, and physical intelligence. Even though their early educational experiences failed them, they succeeded in life. Their experiences with horses provided them with enjoyment, knowledge, and skills within environments which nurtured their learning.

Theoretically, I wondered what could be learned from these accounts. I wanted to better understand how the very educational systems designed to help people grow could end up making some feel less than others. I also wanted to examine what it was about interacting with horses that fostered engagement and motivation in learning and how these interactions helped adults move beyond any educational disparities experienced. The next section will describe the research approach to show how I will address these learning dilemmas to meet study aims outlined above.

Research theory and approach, an introduction

> '*Our bodies know that they belong; it is our minds that make our lives so homeless'* (O'Donohue, 2002).

Chapter three will explain what theories underpin the study but it is important to introduce them here. The study was theoretically centred on Dewey's experiential learning concepts but drew on an integration of ideas from multiple, relevant theories. The rational for this approach lies in my 'intention to explore the explanatory power of different theories [and] because one theoretical perspective [was] not enough to explain the phenomenon under study' (Boeije, 2010, p. 176). Dewey's perspectives of experiential learning were triarchic, emphasising the *aesthetic* nature of becoming fulfilled as a learner through engagement in *direct experiences* which were *reflected* on to address and creatively solve problems (Dewey, 1938; Quay and Seaman, 2013). Theoretically, Dewey (1938) emphasised *learning through experience* happens when those experiences have quality. Quality experiences were educative when multi-disciplinary theory and practice were integrated. Simultaneously, learners who continually participated in and reflected on experiences were challenged to link past, present, and future to create knowledge. Integrated, continuous experiences which led to positive human growth differed from mis-educative experiences which might facilitate growth towards negative habits (Dewey, 1938).

Similarly, Freire's (2000b) principles of reflection-action-reflection and hope despite struggles were considered important to this experiential learning study. For example, according to

Freire (2014), the struggle against oppressive elements in society can strengthen people and having hope for a better tomorrow can create perseverance. Having this kind of hopeful approach does not discount the very real inequalities and imbalances which pose threats and barriers of access to human needs and rights (Freire and Freire, 2007). However, this study will leave the larger political effects of inequalities in education and other social injustices aside to those who have written widely and profoundly on such matters (Deans, 1999; Freire, 2000b; Freire et al., 2014; Shor, 2021).

The study will focus on how engagement in learning through quality experiences can lead to small, incremental changes which can be transformative for an individual. Learners who are in environments where they are holistically engaged in the learning process, have sustained interest and greater capacity to apply knowledge and skills to real world situations (Dewey, 1938, 1958; Kolb, 1984; Allison and Wurdinger, 2005; Freire et al. , 2014). From this perspective, learning can help strengthen who we are and how we interact with the world. These experiences can be catalysts for liberation and justice, not only for the individual but for society, a core part of adult education. A common aim to engage in vital discourse about how to facilitate lifelong, holistic learning beyond cognitive and/or embodied learning, for all learners, at all levels, are some of the reasons this research directly intersects with adult education (*Adult and Community Education at Maynooth University About Us*, 2021).

As a researcher, I brought a mature student, long time educator, female equestrian, and international perspective to the research. An early, exploratory approach was integral to my development and was carried into this research, which will be discussed in chapter two. I considered how my background and worldview influenced what topics I was drawn to, what literature resonated, and how I approached the study. To address research concerns, I drew on a qualitative, interpretative approach (Merriam and Grenier, 2019). The study combined aspects of participatory, biographical, reflexive, and interpretive designs through an equestrian lens to answer research questions.

As a participant-researcher who was studying experiential learning, I sought to embody the research. Fully embracing the challenge of assimilating into the Irish education and horse world landscapes, reminded me that integrated, educative experiences cannot be fully realised without the inclusion of aesthetic experiences (Dewey, 1994; Quay and Seaman, 2013). Some of my experiences during the study became data as I wrote and aurorally recorded reflections from observations and participation in activities in an experiences journal, a part of a collection of field notes. The largest element within field notes was the conversational data derived from focused interviews with twenty-four equestrians in seven

small groups. Participants were encouraged to recount subjective experiences, yet I was there as a guide who had a few questions which were used to prompt conversations (Robson, 2011, p. 288). Interviews were recorded so I could replay them, reflect, transcribe, and perform further analysis from deeper reflection. As an interpretive study, participant experiences were at the forefront to aid understanding of how horse-human experiences might prompt adults to better engage with learning and dispel polarities within the learning process. Individual voices were honoured and contextualised within their environment and compared with other participant accounts, existing theory, and relevant literature.

Reflections on my experiences form the basis of a biographical approach used in the second chapter (Alheit, 2018). Chapter two is included to help readers recognise why I decided to conduct experiential learning research through a horse world lens (Maurstad et al., 2013; Stock and Kolb, 2016). Reflexivity is part of the theoretical framework of experiential learning which will form the foundation of the study (Dewey, 1938, 1994; Schön, 2011). From an early age, I was fascinated with horses and the natural world. These passions have carried into my adult learning experiences and inform how I learn through experiences. Experiences with horses have helped me learn to cope with adversity with a hopeful attitude. For me, hope is grounded in faith. However, '[i]t is not easy to have faith' because it requires constant learning. Faith 'demands a stand for freedom, which implies respect for the freedom of others' (Freire, 2000a, p. 105).

In addition to biographical reflections, visual research methods were used to encourage participants to recount their horse-human interactions. Images are also included within the thesis text to give readers a glimpse into the horse world, helping to visualise what horses bring to this experiential learning study (Wang and Burris, 1994; Harper, 2002; Lorenz and Kolb, 2009; Luttrell and Chalfen, 2010). I hope the images encourage readers to appreciate the beauty of horses and the aesthetic nature of experience (Image 2). Visual techniques of photo elicitation and Photovoice used in the study will be explored further in chapters three through five.

Image 2: Silver and friend, Redhills Stud, Co Kildare (Parce, 2019)

Thus, the study weaves biographical reflections of participation, analysis of relevant literature, interpretations of participants' experiences, and visual techniques to form an eclectic research design suitable for a qualitative study (Etherington, 2004a; Adams et al., 2015; Alheit, 2018). The significant link between horses and humans is introduced in the next section which rationalises a study involving people's interactions with horses alongside educational enquiry.

Irish people and Irish horses, an overview

Horses are an enduring part of Irish society (Jones, 2014; Brown, 2016). Horse-human connections appear from 6,000 BC, adding weight to this study because of their sheer longevity (Share et al., 2012). Horses were part of ancient Celtic mythology and in Ireland, like many places around the world, they were fully integrated into society. These powerful

animals assisted with human survival playing a significant role in agriculture and transportation. Official record keeping of native Irish horse breeds, like the Irish Draught, began in the 12th century (Lewis, 2004). Since the Industrial Revolution and mechanisation of farming, horse populations may have dwindled to nothing unless horse sports were championed.

Horses have been sports partners with humans since the ancient Olympics, documented as early as 680 BC, and brought forward again in 1912 (CNN, 2017). Today, horses continue to support humans in leisure pursuits and in various horse sports. It is interesting to note that horse sports are unique internationally as men and women compete on the same level. However, there is a history of patriarchy in the horse world and, until more recently, men dominated the top tiers of equestrian riding, coaching, and winning (Adelman and Knijnik, 2013; Dashper, 2013). Although not a central research focus, gender issues arose in conversations with participants, which appear in chapter six. My perspective about gender and equestrianism will appear in chapter two.

Horses are a part of many people's lives in Ireland and significantly contribute to the way of life and socio-economic fabric of the state. Almost 47,000 people are a part of the sport horse sector (Corbally and Fahey, 2017), and interact with horses through leisure riding, competitive sport, and producing young stock for sale. There are more than 3,000 adult Riding Club members who are a part of 125 registered clubs around the State (Association of Irish Riding Clubs, 2019). The Irish Thoroughbred breeding and racing industry is highly acclaimed and an important economic and education contributor (Corbally and Fahey, 2017). It is no wonder Ireland's affinity with top class horses is known the world over.

However, I recognise that horses might be questioned as a topic for academic research in the educational field. Some perceive horse-human activities as reserved for the upper-class, a topic explored in more depth in the second chapter. A tension within the research process existed. Limited formalised theorising was found on the potential impact on experiential learning from horse-human interactions, which will be expanded on in chapter three. It was challenging to balance the countless amounts of indigenous and anecdotal knowledge with systematic, academic evidence (Cooper, 2007).

However, it is widely accepted that horses had a deep and lasting impact on Irish society, like the proud association of Connemara ponies with the West of Ireland (Brown, 2016). Today, horses continue to impact people across society. Further discussions about why people love interacting with horses, the social traits of horses, and the various socio-cultural, political, and educational ramifications that develop from horse-human interactions will follow

in the second and third chapters. Therefore, examining horse-human interactions was perceived as important and a feasible undertaking for this experiential learning study.

The next section aims to establish common ground around key educational concepts.

The intent of study language

This section will briefly focus on how key educational concepts are intended in this study. Chapter three will explain these ideas in more depth in the context of relevant literature.

I advocate for the promotion and practice of educational equality. One way to promote equality is through clear understandings of the use of language. As such, readers should have access to the language used in the study. This study was conducted through a horse-human lens, a world in which I am familiar, but which may be unfamiliar to some readers. To address this concern, a Glossary was created with explanations of basic and frequently used equestrian terms to increase knowledge and encourage curiosity about the horse world. Educational terminology around experiential learning and learning in the outdoors will be explained as the thesis unfolds.

Getting to the heart of what is meant by education is a huge endeavour and one that cannot be resolved in this study. There are many words and phrases which help to situate experiential learning in social, cultural, and political contexts. The following discussion establishes some of my perspectives on the language of learning and serves as a link to others' work discussed throughout. This overview is brief and is not meant to undermine the depth of these concepts.

I use education in a broad sense to include the learner and the situational context of knowledge generation. 'But education, in the true sense, is not mere in Latin, English, French, or history. It is that of the whole human nature. It is growing up in all things to our highest possibility' (Clarke, 1880, p. 36). For the purposes of this study, learning from experience is viewed as an ongoing process of interacting with and reflecting on phenomena which helps the whole person develop and flourish (Dewey, 1938). A holistic, integrated perspective on experiential learning is one that values embodied and cognitive and aesthetic learning as equals (Dewey, 1916, 1938; Freire et al., 2014).

To extend the experiential learning discussion, this study investigates the connections humans have with nature through their horse-human interactions. Human-animal studies situate the study and its lean on a multi-species approach. A multi-species approach examines experiences between more than one species whose individual expectations are considered alongside the combined cultures which intersect during embodied entanglements (Aisher and Damodaran, 2016).

Finally, the concept of experiential learning is expanded again to include the whole person who uses all available senses to connect with others and interpret their environment. These eco-learning experiences can be meaningful and help individuals build their capacity for improving knowledge and skills. The capacity for knowledge development and the ability to use that knowledge to adapt to changes in the environment is a concept known as intelligence (Sternberg, 1988; Gardner, 2002).

The concept of intelligence has been associated with other experiential learning research (Higgins and Nicol, 2002; Allison and Wurdinger, 2005). Cognitive intelligence was typically associated with one quotient, known as Intelligence Quotient (IQ). There are now numerous quotients, or extents of characteristics, which expand the notion of intelligence such as Adaptability intelligence (AQ), Emotional intelligence (EQ), and Physical intelligence (PQ). Naturalistic intelligence, what this study refers to as NQ, was introduced by Gardner but utilised extensively by earlier educational thinkers like Rosseau (1979) and Thoreau (Thoreau, 1854; Gruenewald, 2002; Ingman, 2011). All types of intelligences, aptitudes, and abilities in society, add to the richness of our social, economic, and political fabric (Gardner, 2002; Higgins and Nicol, 2002; Goleman, 2005). Through active, ecological, whole-body learning people are free to express their different intelligences (Dewey, 1963; Quay and Seaman, 2013).

We each have our own experiences with education, teaching and learning, and concepts of intelligence. Some of my experiences in these areas will appear in chapter two and participants' related experiences will be presented and analysed in chapter six. For some, educational experiences were nurturing. For example, my sixth-grade teacher encouraged our interest in history through an embodied learning activity. We brought a food dish and came dressed in native costume related to reports we had written on a cultural festival. The social-cultural history we researched was brought to life. We had fun and learned about a variety of festivals from our classmates.

In contrast, the education system sometimes snuffs out the joy of learning (Wolk, 2011) attempting to mould the learner into a predetermined box, devoid of freedom and discovery (Freire et al., 2014). From humans' organic beginning of learning through sensory and social interactions, individuals enter the national education system. Many leave their younger schooling days feeling as if they are less than and never to return to formalised education, as stated in the West of Ireland reflection. In a sense, the men's' flight instinct was activated, an essential survival mechanism humans share with horses. To avoid a perceived danger, the brain releases cortisol, a chemical which focuses our energy on movement. Cortisol represses the production of the feel-good hormone, oxytocin (Gómez-Pinilla et al., 1998). Essentially, our ability to learn is shut down until the perceived danger is gone, a phenomenon which will be linked to how horses behave in chapter three. This study offers chances to reflect on what, how, and where experiences intersect with learning during adults' interactions with horses.

Structure of thesis

The study aims and research questions will be addressed in the next six chapters. The five phases of jumping a horse will be used as metaphors for the titles of chapters two through seven, apart from chapter four, as explained later in this section. Jumping phases will purposefully be presented alongside images to reinforce aforementioned visual research methods which add accessibility to the study (Lorenz and Kolb, 2009; Quay and Seaman, 2013; Grummell and Finnegan, 2020). The structure of the thesis is outlined next and illustrates how each chapter supports the study's purpose.

The first chapter provided an overview to establish the proposed educational challenges. The study's purpose, research questions, and research approach were introduced. The chapter conveyed my aspiration to fill a research niche in experiential learning literature through perspectives drawn from horse-human interactions. Chapter one laid the groundwork for the study and reminds me of a phrase, 'Walk your horses please'. This phrase evokes a strong memory, it brings me back to local horse show classes where I competed with various ponies. Show classes always seemed to officially begin with a judge calling out, 'walk your horses please'. Since walking is considered an initial pace from which the horse transitions upwards, it was appropriate to finish off this first chapter by introducing educational concepts and providing the thesis structure.

The second chapter is called, ‘Approaching the fence’, symbolising the approach to research fences which follow - literature review, methodological, and findings chapters. Chapter two will employ a biographical approach, which situates me in the research to contextualise study topics within my history with horses, learning and teaching experiences, socio-cultural, and political experiences. Developing the concept of being a Curiositor in the learning process will help the reader better understand the study’s integrated approach which unites learning, experience, nature, and horses. Growing up a female in the social and political constructs of semi-rural and rural America in the 1970s and 1980s is part of who I am. It will be important to explore the political nature of the horse world in this chapter. To realise the significance of the topic, a snapshot of horses in the US and Ireland will be included. Concluding sections will provide reflections on doing experiential learning research which help the study transition to the literature review chapter.

The third chapter will review, critique, and analyse literature to support the study’s theoretical foundations and design. The comprehensive literature review is appropriately entitled, ‘Taking off [over the fence]’ because it helps the research metaphorically launch from a firm theoretical base, built on existing theories. Dewey (1916, 1963), widely regarded as a key influencer in education and philosophy from the 20th century, was identified as an ally because of his holistic, practical, and aesthetic concepts of learning through experience. The value of aesthetics in an experiential learning approach will be investigated (Dewey, 1958; Leddy and Puolakka, 2021). Another important ally was discovered in the educational scholar Freire (2000a; 2014), his writings about a democratic and hopeful approach to education resonated. Distinctively, the influence of neuroscience research, specifically about the impact of movement on how the brain processes experiences, will be linked to a discussion on intelligences (Gomez-Pinilla and Hillman, 2013; Heffernan, 2017). Studies about being active and learning in the outdoors (Higgins and Nicol, 2002; Allison and Wurdinger, 2005; Louv, 2008; Quay and Seaman, 2013) and multi-species literature within human-animal studies (Maurstad et al., 2013; Dashper, 2016; Dashper and Brymer, 2019) will be surveyed to advance the study. A perceived niche in experiential learning literature will be conceptualised through the theoretical framework which concludes the chapter.

Chapter four will metaphorically stop to take a pause and is linked to the flatwork training needed to successfully jump a horse. As such the title employs a common equestrian phrase, ‘Jumping is 90% flatwork’; meaning, for this study, theorical knowledge creates a solid foundation for the methods, articulated in chapter five. The methodological paradigm wars experienced while developing an integrated approach will be described. The importance of integrity will be stressed. The fourth chapter will emphasise the power of

shared knowledge and experiences. The chapter guides the discussion towards pragmatism, interpretivism, and social constructivism and how aspects of these philosophies underpinned my methodological choices. An overview of the data collection process will conclude chapter four.

The research design will be explained in the fifth chapter, entitled, ‘Jumping’. Like the dynamic act of jumping and embodied process of learning through experience, the process of data collection and analysis will be shown to be actively integrated. Chapter five will explain how my epistemological, ontological, and insider/outsider positionality were put into action. Chapter five will describe how methods, including focused interviews and other elements within the collection of field notes, were used to discover findings.

In ‘Chapter 6, Landing [after the fence]’, findings will be presented as interpretations of participants’ experiences. Images will be included more frequently in this chapter. The self-provided photographs participants brought to interviews appear alongside related quotes and accounts of experience to add a multi-sensory dimension to the text (Wang and Burris, 1994). Essentially, an integrated mix of findings emerged from exploring, analysing, and interpreting the data. At the end of each of the five themes, an analysis will be offered to compare findings with others’ ideas. Conceptually, the five findings discuss how: 1) Individuals were motivated to persist in learning by their interest in and love of horses, they were sustained by a sense of community created through relationships formed with horses and with other equestrians. 2) So much learning occurred when people interacted with horses. Equestrians’ learning was embodied, their whole-selves were united through continuous and integrated experiences. 3) Horse-human interactions were more likely to become educative experiences when they happened in supportive, caring, and challenging learning environments. 4) Life skills, like responsibility, communication, adaptability, reflection, empathy, and overcoming could be developed through horse-human interactions. These skills could be transferred to new horse interactions and to other arenas of life. 5) There was a strong sense of personal reward which was felt when progressing a horse, progressing riding techniques, and working through fear or uncertainty which had a ripple effect on learners’ growth and enjoyment.

Chapter seven is about ‘Moving away [from the fence]’. The final chapter moves away from the study, it exists in the present and offers conclusions which point towards the future. Analyses from the findings were significant, indicating individuals experienced holistic learning through horse-human interactions. Data revealed horse-human interactions developed lifelong learning skills like responsibility and persistence, sometimes referred to

as grit in the text. Towards the end of the data analysis process, I realised this process of development seemed remarkedly similar to the process of developing a resilience toolkit, which will be articulated in the final chapter (Benard, 2007; Henderson, 2012). The chapter will include recommendations for educators and implications for future research. The study was timely given increasing recognition that learning happens through active engagement but most formal education is delivered to students sitting in a classroom. A challenge is how to facilitate whole-person learning and overcome concerns stated earlier about low student engagement and educational divisions which separate the learner into Ands/Ors. A few reflections on what I learned during the thesis experience sum up the chapter and thesis.

Chapter 1 conclusion

Embodied knowledge from horse-human interactions can offer new ways to reflect on experiential learning. These reflections may offer ways for adults to learn from their experiences more holistically and may help educators facilitate learning environments which increase joy and hope in the learning process (Freire, 2000a). For educative experiences to become embodied and yield growth, they require opportunities for learning to connect personal experience with theory in real-world contexts (Dewey, 1963). Horses are beautiful, powerful, intelligent creatures; they lift people's spirits. Connections to nature through horses and other active and reflexive experiences have proven health and coping benefits (Benard and Sharp-Light, 2007; Bratman et al., 2012; Fitzsimmons et al., 2014; King, 2019). These are significant reasons to investigate horse-human interactions and understand their relationship with experiential learning.

The next chapter will be biographical. It will explain my background to help readers gain insights into who I am. The express purpose of the second chapter is to facilitate an understanding of the motivations behind the study's topic, what literature was reviewed, and why methodology and methods were chosen. Chapter two will conclude with discussions about socio-cultural and political contexts from my experiences.

Chapter 2 – Background | Approaching the fence

'Horse riders are strongly motivated to take part in riding by the sense of wellbeing they gain from interacting with horses.'

British Horse Society (British Horse Society, n.d.)

Image 3: Bay horse and rider, show jumping. Photo by Philippe Oursel on Unsplash.

Introduction

This study will examine horse-human interactions to discover if any of these exchanges were forms of experiential learning. As stated, the study challenges narrow views of experiential learning. It aspires to move educational conversations beyond the And/Or divide through interpreting accounts of horse-human relationships. An interest in this topic emerged from a lifetime of learning through equestrian and nature experiences. My understanding of experiential learning is shaped by my experiences in the cultures where I lived.

Chapter two is related to the equestrian concept of approaching the fence, the initial, preparation phase of jumping a course of fences (Image 3). Gaining insights into my background may help readers make sense of research decisions. My ontology and epistemology will be introduced, explored in more depth in chapter four. Next, I will explain

which research approaches supported my decision to place myself in the study within the biographical chapter.

Flexible, qualitative research values interactive processes and is increasingly accepted in social science, and thus is appropriate for this educational study (Robson, 2002). Because this study evaluated experiences, I didn't want to separate experiences as participant and researcher. The use of biographical methods allowed me to experience the research as it evolved (Merrill and West, 2009; Alheit, 2018). My approach aligned with Dewey's (1938, 1994) experiential learning theory whereby I reflected on problems encountered to help me adjust and try new ways of doing the research. Addressing change is part of experiential learning theory (Dewey, 1938) and related to studies of outdoor learning (Higgins and Nicol, 2002; Quay and Seaman, 2013) and literature about horse-human interactions (Hausberger et al., 2008; Maurstad et al., 2013).

As a female, I looked to feminist research and learned it seeks to be disruptive and evoke change which aligned with this study's purpose. Although I only scratched the surface of this qualitative approach, I related to being a researcher with three selves – a research self, personal self, and situational self (Reinharz, 2011, p. 5). For me, these different selves are, at times, like different hats I wore during the research process. I put on a researcher hat, a more stable version of myself, when designing the study. For example, this sense of self came to the fore during reflective thinking when observing fellow equestrians, and when actively engaging in dialogue with participants. My situational self was more temporary (Reinharz, 2011) when I put on a hat that best situated me in a particular environment. If I was interacting with world class riders at an international event while volunteering, I would put on a more objective, evaluative self, informed by my horsemanship knowledge and competition experience. If I was observing a cross-country charity ride, I would put on a casual observer hat, taking in the sights and sounds of the horses and riders. By letting the atmosphere and landscape envelop me for that period, I was embodying the study's aesthetic and naturalistic approaches. In contrast to the notion of distinct selves, I reasoned my various selves were interwoven. My roles as observer and participant in the horse world, biographical writer, and learner-teacher-researcher were hard to distinguish and related to the flexibility to change and disrupt one-dimensional methods of research as mentioned in feminist research (Reinharz and Davidman, 1992; Reinharz, 2011).

Therefore, given support offered by tenets of biographical methodology, reflexive practice, and feminist perspectives, a solid rationale is built for situating myself in the study. Introducing my perspectives early in the research helps explain the study's context (Merrill

and West, 2009; Alheit, 2018). My choices around theoretical, philosophical, and methodological allies will make more sense for the reader after learning about my background and how it relates to research topics.

Additionally, this chapter presents images alongside text to create continuity with visual research techniques employed in interviews and carried into other sections within this academic document. The use of images also meets challenges of other multi-species researchers who question how we 'try and represent the deeply embodied, usually non-verbal interactions between species … when we are tied by the conventions of academia to the written word' (Danby et al., 2019, p. 293). Other scholars (Dowling et al., 2017) using visual methods in human-animal studies call for a radical rethink and challenge researchers to 'embody, image and imagine' (p. 824) as we search for ways to produce knowledge while interacting with non-humans. Using images of horses and humans interacting begins to decentre humans in research by recognising and honouring the spirit of the horse-human relationship, more on this concept in chapters three and five.

This chapter continues with *My biography*, followed by an outline of *Views on learning* with samples of how an experiential learning approach arose from my teaching and learning situations. A discussion about political and social constructs in the US and Ireland concludes the chapter. My background and a sample of experiences with horses from an early age follows.

My biography

Background

My life experiences make up who I am. I am a mother, daughter, friend, learner, teacher, nature lover, equestrian, and community volunteer. I am from the US and grew up in a family which valued faith, hard work, and adventure. I have worked with horses and on farms since I was a child and remain involved with horses as an adult. All aspects of my life have been affected by horses. I acknowledge my life experiences influence the positions from which I interpret my own and others' experiences and thus are integral to working through research questions (Walsh, 2015). Stories of personal development emerged from my horse-human relationships; some will be expressed below.

Growing up, the constancy of change

I have led a changeable, many times uncertain, yet adventurous life. Horse involvements were one of the few constants. I grew up in many areas of the US, moving often. Between kindergarten and university, I attended fifteen schools, lived in 11 different US states, two countries, and have moved house 32 times to date. This somewhat nomadic existence has created an ongoing appreciation for the vast differences yet ever-shrinking connections between people I have met. Some transitory moments are indelibly inked in my memory. One such memory is when I was 15, we were moving across the country again, this time from east coast to west coast. Looking out the window of our Ford van, nicknamed Mellow Yellow, with horse Paprika in tow and a dog and three cats on board, I thought life would never be the same again. We were leaving the green pastures of rural North Carolina for the dry arid central coast of California. I didn't want to move; we had a great horse set-up on leased land in North Carolina. I was leaving a place which had offered stability for eight years. It was an environment not to be replicated before or since. A friend made us a sign for the van, 'California or Bust'. My teenage self was nostalgic, uncharacteristically emotional yet a part of me wondered what adventures lay ahead. I remember thinking and feeling that I couldn't be facing this move without Paprika along for the ride. She was my lifeline, my friend, part of my identity, and the living connection to where I had come from to the unknown horse and social world I was entering.

My research examines how interacting with horses, who are amazing mirrors of human behaviour, can teach people so much about themselves. From these interactions, I have learned many things like the vital importance of respect and trust, and what level of care is needed when taking on the responsibility for other living beings. My connection with faith and hope grounds my life, which will be explained in the next section.

Faith and hope

Faith gives me hope. In addition to incredible family love and support, my experiences with horses, and faith in God, have helped me develop persistence in the learning process. I try to continue learning through my experiences despite life challenges such as chronic fatigue, a brain tumour, physical injuries, and a lengthy period of relational abuse. I am inspired by others who have endured much more trauma, much more opposition than I have, and yet retain hope. 'It is imperative that we maintain hope even when the harshness of reality may suggest the opposite' (Freire, 2000a, p. 106). 'Whatever the perspective through which we appreciate authentic educational practice … its process implies hope. Unhopeful educators contradict their practice' (Freire, 2000a, p. 107). 'As teachers we believe that learning is

possible, that nothing can keep an open mind from seeking after knowledge and finding a way to know (hooks, 2003, p. xiv).'

The thesis was also a leap of faith. I wasn't satisfied with doing research which conformed to a prescribed norm. I took a leap in imagination by challenging myself to develop more than one key theoretical area. Examining interactions with horses as the basis for an educational study was unconventional. A purely qualitative approach was different from my master's research which was a quantitative economic impact study (Parce, 2014). I utilised methods new to me in this study such as biographical writing, journaling, conducting group interviews, and using visual images. Undertaking this study required trust in discovery and faith in the learning process. Likewise, horse-human partnerships take a leap of faith by both species. There is an intangible, heart-felt quality to the relationship and, to succeed and proceed fairly, a bond of trust must be formed.

The next section explains my early experiences with horses. Different experiences influenced what kinds of knowledge and skills I developed. The learning process was heightened because of uncertainties and risks associated with horse-human situations. Discussions about equine educational organisations will establish context for participants' backgrounds, explored in more detail in later chapters. The section will conclude with a discussion about political aspects of the horse world.

Why horses?

It is important for me to encourage appreciation for horses because horses have given back to me and other humans for centuries. They are magnificent, smart, and relational beings. Many equestrians I've encountered work hard, their dedication and intelligence demonstrate the importance of passion and tenacity in the learning process. Reading some of my stories (Hallett and Barber, 2014) may help readers better understand the contexts of reviewed literature in chapter three, the research philosophy in chapter four, and participant accounts in chapter six.

Horse crazy from the start

I had an early love of horses. So early was this exposure to horses, it feels like I was always up on a horse. As a toddler, being hoisted up on Lolly, my grandmother's Appaloosa, influenced my wish to own a pony. Photographs of me on Lolly (Image 4) and other horses show me smiling. My parents recall I was always content when outside, with horses, and with other animals. From age six I took lessons, when possible, on ponies like Chocolate Chip (Image 5).

Image 4: Lolly and Lisa, Jensen Ranch, CA (Parce, 1972)

Image 5: Chocolate Chip and Lisa, Fairview Stables, MA (Parce, 1974)

To follow this passion for horses, I needed knowledge. My parents rightly wanted to understand if I was really dedicated enough before they supported my interests. I became familiar with the extensive responsibility and hard work that accompanied a passion for horses. Early on, I learned about caring for horses which included tasks like grooming, bathing, giving shots, treating wounds, and cleaning manure out of stalls. Experiences quickly taught me the importance of safety, teamwork, and patience. I enjoyed learning life skills through these unglamorous, direct experiences. Two brief examples follow to illustrate what I learned about grit and financial management.

First, I learned how to persist. Like many learning to ride, I had to repeatedly pick myself up off the ground and get back on a stubborn pony after being thrown off. When I saw eight, I had a serious injury which required multiple surgeries. After recovery, I went back to horse riding as soon as possible. The value of hard work was part of my family's ethos. I quickly discovered hard work was also the norm in the horse world.

Image 6: Pumpkin Pie and Lisa, NC (Parce, 1977)

Second, managing money, an important life skill, started early as I began saving for my first pony at age three. By age seven I progressed to leasing and competing a feisty pony named Flame. Having saved my pennies, at eight I purchased Pumpkin Pie (Image 6), a cute, round chestnut pony. She was kept on a local family's farm. Saving for horses and horse gear was always on my mind. I remember asking for 'anything horse related' for birthdays and Christmases. I did not want new clothes or the latest fads my peers were after; no cabbage patch dolls or Atari for me. Instead, I would ask for a bridle or horse brushes and was grateful to receive them.

Experiences with horses have been inspiring and heart-breaking. The next section will describe some experiences which effected my views on learning.

Views on learning

Horses, precarity and persistence

Horses have endured through their innate survival and herd instincts. Because horses inherently have resilience and social skills, humans have opportunities to learn from horses to develop similar skills. This back-and-forth exchange between species will be linked to the value of species interconnectedness in the final chapter. Humans, like horses, are also hard-wired for resilience. This life skill be improved through internal and external protective factors such as showing respect, positive self-talk, participating in an activity that makes you happy, and demonstrating care and support (Henderson, 2012). Chapter 7 will expand on the emergence of resilience from the research. Like what will be revealed about participants' learning, I have learned to be stronger through my experiences with horses. I believe this has occurred for several reasons.

First, a diagnosis of two chronic conditions at age 16 meant I missed half a year of high school. Despite the challenges, I became more determined to get better so I could return to riding, something doctors advised me *not to do*. Having special horses Paprika and Grey during those times kept me going. These horses' unrelenting spirts were sources of comfort. Every time I returned to horses, I felt whole again.

Second, as an adult, work and family responsibilities increased. I worked inside the home full time and was in temporary work for fifteen years outside the home. While I maintained some level of horse involvement during my 20s and 30s, I missed out on regular chances to form bonds with these wonderful animals. During this time, I looked after people's farms, and exchanged training for riding, regularly driving long distances to work with horses. These outlets were vital to my overall wellbeing, especially as my situation at home became difficult. My confidence waned and for many years I didn't feel, and was repeatedly told, I didn't deserve to be involved with horses. Thankfully, friends and family encouraged me, and I reconnected with horses. It became clear horse interactions were times of lightness, of increasing health, and were simply good for my soul.

Third, because my trajectory has been changeable, I needed to develop adaptability and flexibility to persist. Precarity is often experienced by workers in education and agricultural sectors which sits within the scope of this study. Tutoring and lecturing in third level education is regularly carried out by qualified temporary workers who are on the sharp edge of the learning experience with students yet work without job security. In agricultural industries, including equine work, jobs are physically and mentally challenging and often lack job security. People in these roles are often highly adaptable and persistent.

Persistence is a life skill and part of a resiliency toolkit (Benard, 2007). Grit can be developed through encountering challenging real-world problems. Confronting issues can encourage problem-solving when reflection, problem-posing, testing new ideas in real life, are combined - all tenets of experiential learning theory posed by Dewey (1938). Next, the roles of learners and teachers will be connected to illustrate the value of collaborative environments as places where the co-production of knowledge can thrive.

Learning and teaching today

Discussions about my learning-teaching experiences are relevant in this biographical chapter because they inform the study's philosophy and design. Many of my views on learning emerged from experiences with horses. Pedagogical approaches have developed

over decades through testing teaching and learning practices since I was 15 years old. I approach teaching from an experiential learning perspective for several reasons.

First, horses and humans are social creatures, each has something to offer in the learning process. For example, I have assumed the role of learner while teaching riding lessons, getting on students' horses to 'feel for myself' what the challenge might be. Sometimes this was the only way to achieve a breakthrough for the student, the horse, and me. Collaborative learning-teaching techniques such as these, where demonstrations are coupled with explanations of training concepts, combine *what* and *how* to create effective learning environments.

Second, I realised allowing time for learning to occur was important. Building on prior equestrian knowledge is essential to being successful with a horse in the present. If you rush the trust building phase with a horse, disaster may occur. If a horse decides they don't want to go with you, they won't, and there isn't anything you can do about it. Partnerships with horses develop with practice, patience, and repetitions of excellence. I argue that partnerships between learners and teachers also take time to develop and thus the next examples are from the classroom.

Third, in my experiences, to help students learn best, being willing to learn with them has increased engagement. One way to co-create knowledge with students is through the implementation of service-learning projects. Community partnerships were formed as part of undergraduate courses I taught. These experiences encouraged my students and me to connect academics with needs in the real-world and give back through volunteering. For example, we engaged with the National Phenology Network to gather citizen science data and learn about desert plants. We volunteered by entering data from observations which was given to national scientists for analysis about climate change predictors. Students used their new knowledge to teach lessons to their peers based on that research in a course entitled, 'Learning to Teach to Learn'. These community-engaged learning experiences revealed to me that students who are afforded opportunities to *look up and look around* benefitted from meaningful participation in activities which got them to look beyond themselves. These types of learning environments can also better prepare students for not-so-distant futures (Dewey, 1938; Quay, 2003).

Finally, collaborative learning can occur with peers. During this study I was a part of a Critical Friends group, which was formed with two colleagues as a forum to exchange ideas and teaching experiences. After one of our discussions, I reflected on potential stresses on students and teachers during times of change. We had discussed how the move away from

a prescribed educational system is met with barriers on many sides. Students have grown up being expected to memorise and regurgitate to progress through the system. In third level courses students are suddenly asked to think critically. They are asked to take risks in the classroom, have an opinion, and learn to communicate ideas which are backed up by credible sources. Some disengage from this new environment and many lack sufficient prior knowledge and skills to think critically and independently. I am convinced of this because I have assessed university students' essays and projects for more than a decade which has given me sufficient primary source material. Teachers have often grown up in similar, prescribed educational systems and many have been taught how to teach in the same way. Teachers are being asked by leadership to be innovative, take risks, reflect, and facilitate group work without appropriate training. Our Critical Friends group thought teachers were changing, more were challenging themselves and thinking critically *with* their students. To do this, they reduced uncertainties by explaining the *whys* behind new ways students were being asked to learn (Kharitonova, et al., 2017).

These examples from my background establish links between my history and the research topic, stated problems, and questions established in chapter one. To understand more about the influence of where learning takes place, experiences in equestrian education spaces follows.

Educational horse spaces

As a youth, I spent as much time as possible with horses on They's Farm, a lovely, large yet homely space. This informal space is where I felt free. Friends and I grew up quickly, learned responsibility, and benefitted from hard life lessons when mistakes were made. A sense of freedom and emersion in natural surroundings made a huge impact on how I saw the world and how my ontology evolved, which I will expand on in chapter four.

I was first exposed to equestrian education through riding lessons and 4-H, America's largest youth development organisation, reaching over six million children aged six through nineteen. The organisation practices hands-on learning underpinned by inclusivity, diversity, mentorship, and civic engagement development (National 4-H Council, 1902b). 4-H has broadened its scope from growing corn and attending agricultural shows to a host of hands-on STEM, agriculture, science, healthy living, and civic engagement activities (National 4-H Council, 1902a).

I discovered Pony Club (PC) at the age of twelve. PC provided more in-depth equestrian education and focused on eventing, the discipline I found most appealing. A voluntary organisation, PC started in England in 1929 to provide more opportunities for youth to learn about riding ponies and horses and has grown to become the world's largest equestrian educational organisation. The mix of solid content with practical applications in a holistic framework for horsemanship created a memorable learning model for me.

The democratic missions and positive, hands-on educational experiences I had with 4-H and Pony Club were hugely influential in my desire to facilitate similar learning and teaching practices in formal educator roles. The ethos of giving back I saw modelled motivated me to volunteer with PCs in the US and Ireland. From what I experienced, both organisations carried out their open-door policies by teaching horse skills and life skills in fun, inclusive environments, values I seek to replicate in my teaching. Further discussions on equestrian education will be incorporated in chapters five and six.

The fact that many horse interactions take place outdoors also influenced my research outlook. Horses and natural environments add other layers to my perspectives which will be discussed in the next section and will be expanded on in chapter three.

Horses and the draw to nature

An interest in nature and other living things formed the context for my horse-human interactions. For cohesion, it is important to link my background with others' perspectives; subsequently, discussions about nature and learning will be developed further in chapter three.

My perspectives about the natural environment began when I was young, nurtured through exploring nature, camping, hiking, and horse activities. From an early fascination with horses, my interest in nature, animal behaviour, and learning about how things work has grown. Being active in the outdoors, breathing fresh air, and taking in beautiful scenery, are essential parts of how I learn best.

Two entries written in my experiences journal during the 2020 Covid lockdowns are summarised to demonstrate how important nature is to me.

'Apart from the land, I feel adrift, grasping for a sense of purpose and belonging. It's as if time flows unnaturally and I must paddle upstream to stay on track, stay focused, stay motivated. I feel displaced when engaging only my mind. I am more settled when my whole-body is engaged with the world around me. On farms, at the stable, and while riding, I have a different, healthier outlook and sense of wellbeing. I feel purposefully calm … I feel like I am learning in, through and about our biodiverse environment. There are feelings of belonging when I'm with horses in nature. Getting to know animals, especially horses, personally is an honour.'

'The sense of freedom when riding a horse is exhilarating and liberating. It helps me shake off disappointments and distance myself from negative and, at times, oppressive aspects of life. Dynamic connections with horses as partners and engaging in horse riding serve as portals to experiencing the natural world on a whole different level. It's as if I am transported, time stands still, hues of grass, the sky, trees, ground become more saturated, my mind feels clear when it often feels foggy. The weather of the moment is accentuated when horse riding, the wind is felt deeper, the sun's rays more penetrating, the rain seems to glide off horse and rider.'

The natural environment serves as a background shared between species during horse-human interactions which has possibilities, because nature can inspire learning (Aisher and Damodaran, 2016; Bratman et al., 2015; Burgon, 2014; Wals, 1994). Within life experiences of learning, teaching, and working in agriculture and with horses, there were political undercurrents. In the next section, I will reflect on the socio-political nature of the horse world.

The horse world can't escape politics

There are potential challenges to the examination of experiential learning through the lens of horse-human interactions. How this study relates to the broader adult learning community must be scrutinised. Uncertainties and differing perspectives may emerge. Some might not want to interact with horses, let alone learn with or from them. Others who get involved with horses never look back, claiming it's a lifestyle. Some get involved with horses for social reasons while others view horses as a business. Some take advantage of horses for selfish gain while others dedicate their lives to horse welfare. Whatever the human agenda, it is important to note that horses don't see class, gender, or race; horses are truly democratic

(Vespoli, 2020). Horses care about survival and domesticated horses depend on humans to meet their basic needs. Horses appear interested in how you approach them and how well you listen to their language (McLean and Christensen, 2017). They owe humans nothing and yet many horses are willing to join-up, opening rich opportunities for learning.

Understanding the equalising nature of human interactions with horses may help educators consider how they can broaden educational practice beyond conventional teaching methods with learners on seats in classrooms towards interactions with, in, and through nature. These considerations may go some way to help educators figure out ways to unite the learner as a whole person instead of dividing them into mind, body, and emotions. All people have a right to access education across their lifespan with an expressed purpose of developing human capacity for adaptation and resilience to undertake new ways of living and learning through liberation ("Adult and Community Education at Maynooth University About Us," 2021). The political lens of this research draws on tenets of adult education including the beneficial outcome of resilience as a life skill, which will be developed in chapters six and seven.

To further the socio-political conversation, I will recount some of my experiences in US and Irish equestrian contexts. Examples will focus on participation barriers, gender balance and imbalance, and politicised socio-cultural situations. A few comparisons between agriculture sectors in the US and Ireland and an overview of horses in Ireland will begin this socio-political discussion.

Historical overview of horses in the US and Ireland

Historically, Ireland and the US have similarities and differences regarding their connections with horses. With a much longer history than the US, Ireland has the advantage of strong connections with horses established over a millennium (Letts, 2012; Lewis, 2004). Horses were used in both countries as farm workers, modes of transport, war partners, and for breeding, producing, and selling (Letts, 2012; Lewis, 2004). Both countries experienced large declines in horse populations in the 19th and 20th centuries after respective Industrial Revolutions and the World Wars. While the US classifies itself as being founded on an agrarian society, Ireland's agriculturalism was not natural but came about because of historical processes and its relationship with Britain (Lewis, 2004; Share et al., 2012). In the US, agrarianism was replaced with industrialism and then technology and mass communication. In contrast, Irish authorities dismissed the importance of the agricultural sector in the 1990s, and struggled to reconcile agriculture, industrialisation, modernity, and the rise of globalisation (Share et al., 2012). This struggle is understandable because there was a time in Ireland where the English and Irish elite had greater access to horse sport and

leisure activities such as racing or hunting. A shift began in the 20th century as horses in Ireland were increasingly bred and produced for a greater variety of horse riding activities (Lewis, 2004). Irish horses became sought after for their qualities of endurance and adaptability (Irish Defence Forces, n.d.).

Additionally, and perhaps less well known is that both countries engage with horses in the justice system. An Garda Síochána's Mounted Police Unit was established in 1998 with horses housed at the Phoenix Park and officers undergoing a 12-week educational training programme (An Garda Síochána, 2021). Although mounted police units have been downsized in the US, cities such as New York, New York, Birmingham, Alabama, and Houston, Texas still have four legged officers (Cooper, 2011). Horses are also part of prisoner rehabilitation in Arizona, US (The Associated Press, 2016) and Castlerea, Ireland (Shannonside News, 2018).

The modern horse sector in Ireland is comprised of two areas. The bloodstock industry is involved with breeding, training, and racing thoroughbreds. The Irish Thoroughbred Breeders Association (ITBA) concluded their 2006 report by stating the 'industry is synonymous with Ireland and represents one of the few viable alternatives farming opportunities to contribute significantly to the rural economy'. The Irish horse sport sector is broader and encompasses breeding, training, and riding horses for different sporting disciplines and leisure riding activities like trekking, usually associated with eco-tourism. Irish Sport Horses remain the breed of choice in the discipline of eventing, evidenced by their top listing on the World Breeding Federation for Sport Horses (WBFSH) Eventing studbook twenty-two times since 1996 (FEI, 2020). Combined, the Irish equine industry has an economic impact calculated at approximately €700 million per year which comes from breeding, sport horse sales, tourism, and a general category (Corbally and Fahey, 2017).

Ireland is one of the few countries in the world with a national stud farm and a military horse school. The Irish National Stud (INS) officially opened in 1946 and remains an internationally respected thoroughbred horse breeding and education centre. Open to the public, education extends beyond the hands-on residency course to anyone who wants to learn more about Irish thoroughbreds. Recently, the INS opened an interactive experience which, 'brings the visitor through the lifecycle of the Irish thoroughbred, providing them with an opportunity to become owner, trainer, and jockey' (Irish National Stud, 2022). Hands-on activities include the chance to ride a mechanical horse in a racing simulation and try commentary skills in a sound booth, both excellent examples of nonformal experiential learning. The Army Equitation School maintains its almost 100-year-old mission of promoting Ireland and Irish

bred horses (*Signal*, 2008; Slavin and Parkes, 2010). Historically Army riders excelled in eventing, having great success with Irish bred sport horses. The Irish horse is bred for its unique combination of athleticism, endurance, and even temperament which makes it a favourite of professionals and amateurs around the world (Pickeral, 2002).

Although the role of the horse has changed and the sector has become more accessible, resource availability remains a justifiable concern to participation. Being involved with horses involves sacrifices, no matter what your circumstances. The following section will review some barriers to horse involvement.

Barriers to horse involvement

Some barriers may discourage people from being involved because horses are expensive to keep and are time consuming. Interactions with horses can be associated with negative physical or emotional experiences such as getting bitten or bucked off as a child. Since horse activities are risky, physical injuries do happen. Pain can also be emotional, like memories of being ridiculed which can be real, inflicted by others, or imagined, inflicted by negative self-talk (Ojanen, 2012). From these experiences, a person might carry a negative emotional association into adulthood. Injuries, clashes with other commitments, and family resource conflicts were reported by 16.2% of one survey's respondents to be the worst reasons about involvement in Irish Pony Club (IPC) activities (Harvey, 2017). Surprisingly, just 4.3% of respondents felt financial resources were the main challenge to IPC involvement (Harvey, 2017). Not taking part in IPC activities appeared mainly due to barriers of time, feelings of inadequacy in experience, not being interested, and being too young or too old (Harvey, 2017).

For some, a wall goes up when 'equestrian' is mentioned. At times, negative reactions to my research revealed a social bias. I felt my study was sometimes marginalised because I undertook a mainstream educational topic of experiential learning with an un-marginalised group of equestrians. Interestingly, a 2019 University of Kentucky study revealed most US equestrians identified as middle class (Pekarchik and Tumlin, 2019). I have been questioned why the study's focus wasn't on critiquing elitism which admittedly still exists in equestrian sectors (Ojanen, 2012; Adelman and Knijnik, 2013; Dashper, 2013). Some wondered why I wasn't researching equine assisted services. There are experts already conducting research in both areas and increasing numbers of studies, for example, have shown the benefits of horses for improving therapeutic and learning goals for learners across the spectrum of ability (Notgrass and Pettinelli, 2015; Singh, 2019).

When considering topics like participation barriers and horse involvement, issues of gender equality also arise. As Adelman and Knijnik (2013) highlighted, there is a need to better understand the intersection of gender issues in horse-human relationships with class, race/ethnicity, sexuality, and culture. It may be a surprise that gender equality exists in aspects of the horse world. Equestrian Olympic disciplines of eventing, dressage, and show jumping, are among the few high-level sports where all people compete equally. Likewise, at national and local level, all genders compete for the same prize money and recognition. However, gender imbalance remains in the horse world. Young girls fill riding schools and pony clubs, and female amateur horse riders make up the majority of adult equestrians; yet men are more likely to be professional riders, trainers, judges, course designers, and owners.

As a young person involved with horses during the 1970s and 1980s, I noticed there were more girls riding ponies than boys. While youth organisations do not keep track of membership by gender, it is accepted that more girls participate in Pony Club and 4-H in the US (*2018 American Horse Publications (AHP) Equine Industry Survey sponsored by Zoetis*, 2018) and Britain (Boden et al., 2013). In my teens, I became increasingly aware that although more girls and women were involved in horses at the grassroots levels, men dominated the sport at the highest levels. At that time, my female instructors who competed at the top levels tended to be hard on themselves and hard on horses. From a young person's perspective, I attributed this to their need to survive the toughness of the sport and a male-dominated environment. This was a barrier, from my perspective, as I sought to advance in the sport.

In the early 2000s, I worked for the largest US equestrian retailer and the gender inequality in advertising remained. Girls still filled the pages of horse magazines and advertisements, and few boys or men were seen. I often wondered what kind of messages we were sending to young boys who were into ponies and horses. I felt we had a responsibility to dedicate more space to males to help balance the representation on catalogue pages.

To understand why this imbalance remains, it is important to look to the past. Historically, men were the majority members and leaders in agricultural and military sectors. Thus, decision making about horse breeding, training, and sales were made mostly by men. Modern horse sports arose from military roots which, until the 1948 in the US and 1980 in Ireland, only enlisted or commissioned men (Pickeral, 2002; Slavin and Parkes, 2010; Sanchez, 2017). As a result, until the 21st century, men dominated the upper levels of national and international sport. One-sidedness in sport is a social injustice. Likewise,

inequalities in education, like the divides between mind and body in learning theory, do not align with ethics of care in teaching and learning (Smith, 2004). Over time, the image of a male-dominated horse world has been changing (Adelman and Knijnik, 2013). However, in some areas like horse racing, change has come more slowly with women remaining in a 'subordinate position in the racing field' (Butler, 2013, p. 71).

In Ireland, there have been increasing accounts of female success stories in the racing sector. Rachael Blackmore's historic Grand National win in 2021 was a result of years of hard work and determination. After her win, Blackmore stated that she 'didn't feel male or female right now. I don't even feel human' and West wrote, 'forget male or female, at the 2021 Grand National Rachael Blackmore became superhuman' (Horse Racing Ireland (HRI), 2021). Likewise, several scholars (Adelman and Knijnik, 2013; Dashper, 2016) have highlighted female experiences in various horse sports and recreational pursuits. Despite gender imbalances, equestrian research shows adult amateur females are empowered throughout life as they gain energy and power from the physical strength of their horse (Adelman and Knijnik, 2013; Dashper, 2016).

The lack of recognition of women in equestrian activities and the slow changes in gender balance parallel the slow rise of gender equality for women in Irish education. The women's movement took off in Ireland in the 1980's and focused on literacy. It brought other groups into the fold, like older men lacking basic reading skills who needed help to compete with the rapidly changing workplace (Quilty et al., 2016). The movement has grown to include connections with adult and community education, receiving support at a national level. The woman's community education movement has advocated towards removing entrance and participation barriers to higher education and has worked to improve community and educational partnerships (Quilty et al., 2016). Fairness in education takes a willingness to attentively listen and be open to others in the teaching-learning process (Lynch and Baker, 2005; Noddings, 2013; Smith, 2004). Gender stories like these from the women's movement and from the horse world can inform how we navigate equality in education.

Discussions about horses may produce concerns of access, gender, economic barriers, and elitism. The horse sector, like all areas of society, has its positives and negatives. Unfortunately, if society continues to view horses as a zero-sum game, reserved for the haves versus have-nots, the topic will remain divisive. Taking a pragmatic approach, I hope to widen discussions about access to horses and the current place horses hold in Irish culture (Lewis, 2004; Adams et al., 2015; Corbally and Fahey, 2017; Irish Defence Forces, n.d.). To add support to this study's central inclusion of horses within an experiential learning

study, the following examples are some of what I have learned about horses in Irish society. These accounts have broadened my perspectives about socio-political aspects of the Irish world horse and have produced some unlikely heroes who broke some of the mentioned barriers to participation with horses.

Irish horse stories and their political undertones

A Guinness commercial (Image 7), featured the Compton Cowboys, a group of men destined to join crime gangs in LA. Instead, they are introduced to rescue horses, learn to care for horses' physical needs, and thus reimagine their lives in a positive way that benefits them, the horses, and the community (Kocev, 2017). The commercial's lead said, 'Did I save the horses or did the horses save me?' It appears horses gave the men reason to be proud and provided a healthier identity as members of their horse posse versus their neighbourhood gang (*The Compton Cowboys: Made of More* [Guinness advertising campaign], 2017). I find the Guinness commercial a timely parallel to inner city horses in the news and evidence of the wonderful opportunities for learning and growth given when humans get involved with horses.

Image 7: Compton Cowboys shine in new Guinness advert (Kocev, 2017)

For context, Guinness horses were iconic and played an important part in making the brewery famous since its beginning in 1879. Many of the people who handled the horses and the horses themselves resided in the Liberties. A subculture of boys and horses remains in this inner-city neighbourhood along with the last 12 horse yards. Accidental experiences with this culture were portrayed in several songs written by a Norwegian street musician, aka *The Musical Slave,* who spent two years living in the area after her van crashed into a wall.

As a result of the warm welcome and sense of community she felt, Vollset (2020) bought a horse and became a part of the boys' urban horse culture. She felt free with the horses and believed nature still had a place in an urban jungle. ‘Do we really want a society where economic growth is the only standard our lives are measured by, where people don't have a say in how their own neighbourhoods are shaped, where kids don't have any community centres to go to?’ (Vollset, 2020). Her statement reinforces my claim that horses intersect history, society, politics, and culture and can cut across class and gender. Horse-human interactions can be found in the most unexpected of places.

Opposed to the first two examples, a final example shows that tensions and barriers to equestrian participation remain. In early 2021, there was public controversy about the relocation of Horse Sport Ireland out of Co Kildare to a commercial horse facility in Dublin called Greenogue. Questions were raised about the loss of jobs and connections to Co Kildare, known as a significant equestrian base. Additionally, concerns were raised that this new Centre of Excellence catered to the elite. There are very few Irish based elite riders because many are based in the US, UK, and Europe to take advantage of larger numbers of facilities, competitions, and clientele. Most high-level riders based in Ireland have access to well-equipped private facilities for training and competition. Politicians, equestrians, and the public weighed in on this topic for weeks in the media. It was interesting to observe how keen people were to get involved in the conversation about the horse sector. Callers to different radio programmes were from different backgrounds, with varying levels of equestrian knowledge and skills. To me, this was evidence of how entangled horses are in Irish society and politics and how the topic of horses could cut across socio-cultural and political divisions.

The rationale behind why I pursued doctoral research will follow to link discussed perspectives to experiential learning research goals.

Doing experiential learning research in Ireland

> *‘May I have the courage today to live the life I would love … to postpone my dream no longer. But do at last what I came here for and waste my heart on fear no more.’* John O'Donohue

I wanted to engage in research because I wanted to keep learning. I am particularly interested in ways people learn from experience. I realised I had spent decades being deeply impacted by experiences with horses and from the educational paths I had taken.

During two years of study at a Canadian university, I experienced a European style of education which emphasised experiential learning through projects connected to real-world problem solving and offered more in-school and community-based apprenticeships. Interest in experiential learning models increased when I studied international business. Courses were taught by professors who remained active in their fields as top business lawyers, international marketers, and financers. In my next role as an art college recruiter, I advised American and Canadian high school students on future academic paths. During this time, I met two positive high school teachers. Their practical, community-centred experiential teaching methods influenced my decision to obtain an education degree. I then taught in public schools and worked in agricultural-related industries. Returning to education as a non-traditional master's student was daunting. At first, I felt like my head was filled with cobwebs and I couldn't think as fast as I should. I realised there were advantages to having life experience and stepped into roles of teaching and advising. Courses I facilitated were taken by students across disciplines and were infused with experiential learning methods like community engagement with its real-world applications. Experiences like these fuelled my desire to further investigate experiential learning from a European perspective and I pursued a postgraduate degree.

Since undertaking studies in a new culture, I coped with uncertainties best through physical activity. Learners of all ages need physical breaks from intense mental study to aid mental retention (Voss et al., 2011; Gomez-Pinilla and Hillman, 2013). At times, I got saturated in the theorising and I searched for dynamic, outdoor breaks. Research supports my decisions. Walking has been shown to increase problem posing, enhance creative thinking (Oppezzo and Schwartz, 2014; Merrick, 2015), and boost mental and physical health (Thoreau, 2002; Ipsos MRBI, 2020). No debate remains in educational science that movement is essential to learning (Dwyer *et al.*,

Image 8: Lady and friends, Co Kildare (Parce, 2018)

2001). Movement fuels me on a holistic level because it crystallizes my thinking, benefits my physical health, and is a way to manage stress (Gomez-Pinilla and Hillman, 2013). Stress management during the thesis included active reflection. It thus seems fitting I pause to give a personal example to conceptualise the importance of movement in learning.

During the 2018 snowstorms, I needed a brain break. I went out and experienced day three of The Beast from the East and Storm Emma. I ventured out to check on Lady, a horse I was leasing (Image 8), and had an amazing time playing in the snow. I felt a strong sense of community seeing the village come together. People were out walking, talking, and taking the storm in their stride. They appeared more at ease and the fresh air seemed to have brightened people's outlook. Conversations and observations of the playful actions of kids and adults, building igloos in local estates (Image 9), and sledding in Castletown (Image 10), were evidence.

Image 9: Snow day, Celbridge (Zink, 2018)

I wondered if people returned to their routines of work and family responsibilities after the storm refreshed from outdoor activities. I pondered if we were changed by the storm which necessitated a slowing down. People of all ages took tech breaks and enjoyed face-to-face interactions with friends and neighbours. I imagined new friendships were formed through the vulnerability that came with challenging conditions. Following the snow

Image 10: Falling down, Castletown House (Anonymous, 2018)

experiences, my head was much clearer. Movement played a part in my own reset that day. The principle of movement is a vital undercurrent throughout this research project.

Without years of experiences with horses and in learning and teaching environments which challenged and encouraged me, I could not write credibly about experiential learning. Hardships taught me something about myself and I realised I could face fears and overcome difficulties. An entry from my experiences journal concludes reflections about undertaking this study.

> *'Our horse-human stories of dedication, persistence, hard work, overcoming physical and emotional trauma, often with little pay or reward, are highly nuanced, individually special yet part of a larger social network. For me, horse involvements have been essential to getting me to Maynooth … and loving the social fabric of Irish life. Ongoing athletic partnerships and the very company of an animal who understands the essential value of social support have helped me overcome ...' (Lisa) (Image 11)*

Image 11: Lisa and Silver (Nolan, 2019)

Chapter 2 conclusion

The purpose of the chapter was to ground the topic through biographical accounts. I described a selection of stories from my background with horses and growing up learning from the constancy of change. These accounts explained realities of hard work, persistence, and uncertainty that accompany a passion for horses. The prevalence of learning by doing and learning through moving was discussed in relation to my experiences to stress the important role embodied learning played in the genesis of this study and its implementation. A US social, gendered, and political context influenced my early experiences. Early experiences were shown to sit alongside my adult experiences and were linked to observations and new perspectives gained in the wider socio-political context of Ireland. This

chapter was included to provide important context to bridge my experiences with participants' and the literature (Dewey, 1963; Merrill and West, 2009; Alheit, 2018).

The third chapter is an in-depth literature review which will build on themes raised in the first two chapters. The literature review will examine various publications and aims to add new perspectives to experiential learning discussions (Murray, 2011). The third chapter will critique experiential learning theory to analyse what role uniting the whole person in the learning process plays in increasing engagement to help move learning experiences beyond educational polarities, as described (Dewey, 1938; Kolb, 1984; Freire, 2000b; Quay and Seaman, 2013). Experiential learning theory will be supported by an ecological approach through an analysis of related nature and learning literature (Higgins and Nicol, 2002; Louv, 2008; Harrison, 2010; Quay and Seaman, 2013). Because the study examines experiential learning through a horse-human lens, multi-species studies will also be reviewed (Hausberger et al., 2008; Maurstad et al., 2013; Aisher and Damodaran, 2016; Shapiro, 2020). Pragmatic, social constructivist, and interpretivist perspectives will be shown to underpin the study (Dewey, 1938; Armitage, 2003; Merriam and Grenier, 2019). In some ways eclectic life experiences illustrated in this chapter parallel the mix of unconventional allies who appear in this study. The integrative nature of this study is an experiential learning principle which will be examined further in chapter three (Dewey, 1938).

Chapter 3 - Literature Review | Taking off [over the fence]

'The horse moved like a dancer, which is not surprising. A horse is a beautiful animal, but it is perhaps most remarkable because it moves as if it always hears music.'

Mark Helprin (The Arena Media Group, 2022)

Image 12: Bay horse taking off over a fence. Photo by Markus Spiske on Unsplash.

Introduction

This research explores horse-human interactions to discover what opportunities for experiential learning may exist for adults in these situations. Exploring these experiences may expand our understanding of how the whole person is involved in learning. Expanded

awareness may help educators move beyond educational polarities and towards the facilitation of learning experiences which offer greater potential for fulfilling the whole person. This chapter will survey relevant theorists and related literature to establish what is known about study topics, what can be learned from scholars, what might be controversial, and where niches might exist to add to educational conversations (Murray, 2011). The chapter is like the 'taking off' phase of jumping a fence (Image 12) as the review will prepare the study to be launched from its theoretical foundations. Literature underpins the study around three interwoven areas of scholarship: 1) experiential learning, 2) nature and learning, and 3) horse-human interactions as part of human-animal and multi-species studies. To organise the chapter and unify literature from different genres, key traits of experiential learning will be analysed under the subheadings of continuity, integration, and aesthetics.

Review of experiential learning posited by Dewey (1938) and Dewey's theories as explored more recently by Quay and Seaman (2013), among others, will help to clarify what is meant by whole-body experiential learning. To understand the move away from dichotomous And/Or thinking towards experiential learning for all, democracy in learning will be examined (Dewey, 1916; Freire et al., 2014). Because horse-human interactions occur largely in natural landscapes, nature experiences will be analysed to understand their potential to stimulate creativity and engagement in the learning process (Higgins and Nicol, 2002; Louv, 2012; Quay and Seaman, 2013). To understand the horse-human context, multi-species research within the broader field of human-animal studies will be evaluated (Maurstad et al., 2013; Aisher and Damodaran, 2016; Danby et al., Maurstad and Dean, 2016; Shapiro, 2020).

Although an extensive literature review was conducted early in the study, the process of researching, selecting, and critiquing sources was ongoing (Bloomberg and Volpe, 2008c). This process was another way *doing* was integrated with reflection to inform and refine the study. An inductive approach established a firm contextual anchor and freed me up to learn from existing research and participants to discover niches the research might fill (Gray, 2004).

Mining the literature for opportunities

As discussed in chapter one, there arose an opportunity to discover more about the intricacies of horse-human interactions and how those experiences may be forms of

experiential learning. As I began the literature search, I discovered a bibliometric study which focused on mapping author citations from lifelong learning journals using a software visualisation tool (Larsson et al., 2019). The research caught my attention because data visualisation had become the norm during the Covid 19 pandemic. I performed a search in each journal to satisfy my curiosity. I wondered if keywords, 'horse', 'horses', and 'equestrian', would yield any matches. Although the results were disappointing, I was not surprised. None of the five journals - Adult Education Quarterly, International Journal of Lifelong Education, Studies in Continuous Education, Journal of Education and Work, and Journal of Workplace Learning - had articles on horses when I conducted the search. Along with rationale stated in chapter one, this new bit of knowledge provided me with confidence. There appeared to be opportunities to contribute to experiential learning knowledge through a multi-species lens.

Similar keyword searches were performed on multiple information sites. Although the search was expanded to include 'experiential learning', 'nature learning', 'outdoors', 'mind and body', 'active learning', 'movement and learning', and 'environmental education', among others, experiential learning literature through a horse-human interaction lens remained scant. Multiple genres including education, sociology, anthropology, and human-animal studies intersected the spheres of knowledge I wanted to explore. Media included books, eBooks, peer-reviewed journal articles, masters and doctoral theses, government statistics and repositories, and magazine articles. I searched for and selected sources through Maynooth Library, including MURAL (MU Research Archive Library), which led me to sources primarily available through ERIC and ProQuest. To stay up to date on relevant topics and to gain different perspectives, I sourced information from popular resources including online news articles, industry journal articles, video talks, and websites from experiential learning, nature learning, equine, and agricultural organisations.

It is important to situate this study in existing theory. However, the purpose of this literature review is not to provide an exhaustive history of experiential learning, solve questions around the purpose of education, or compare adult learning theory, andragogy, to childhood learning theory, pedagogy. I interacted with adult participants in equestrian contexts to contribute to experiential learning theory for improving adult learners' lives. Even though Dewey's educational theories were pedagogical in nature, the chapter will substantiate why there are strong overlaps with his theories and how adults learn. I will start with Dewey's central themes and organise discussions around these themes to develop a framework for the study. Other scholars will be brought in to critique thematic concepts. As stated, the overarching thematic structure will examine key experiential learning elements of continuity,

integration, and aesthetics. The chapter will incorporate discussions on the impact of learning in, with, and through nature to expand the framework to include human-animal studies literature. The environmental situation is vital as it is where the ripple effect begins in this study, with the horse-human interaction. The theoretical framework is conceptualised in Figure 2 which will appear at the end of this chapter.

I am interested in how we learn from all kinds of experiences and what constitutes experiential learning. The following section will critique experiential learning theory, the bedrock of this study.

Experiential learning

'Good for the body is the work of the body, good for the soul the work of the soul, and good for either the work of the other.'

Henry David Thoreau (Thoreau, 1854)

This section will review educational philosophers and practitioners who have long highlighted benefits of learning in and through experience (Dewey, 1938; Kolb, 1984; Freire, 2000b). The potential for experiences to yield learning and growth is not a new discussion and scholars representing myriad disciplines have interpreted the broad concept of learning through experience in different ways. Educational theorists have approached experiential learning through integrating active and reflective experiences, learning through experiences which involved struggle, and learning through nature and natural environments (Dewey, 1938; Kolb, 1984; Higgins and Nicol, 2002; Quay and Seaman, 2013; Freire et al., 2014).

Experiential learning has numerous advocates and critics (Seaman, 2008). Not everyone agrees with how to think about, feel about, and do experiential learning (Crosby, 1995). Some see learning through experience as a type of 'learning by doing'. This knowledge is seen as skills-based, physical knowledge. In some circles, hands-on learning became synonymous with vocational education and work-based learning (Boud et al., 1993; Crosby, 1995). These definitions have been criticised for excluding the elusiveness of human experience and reflection and omitting social and cultural influences (Seaman, 2008). It may be that some experiential learning definitions were created out of a need to assuage educational policy, suiting the needs of a banking education system of assessment and categorisation (Freire, 2000b). The banking mindset results in learning which is driven by economics and employment agendas and is in opposition to Freire's problem-posing

educational theory which encourages learners to question (Freire, 1996). Learners who learn from questioning have power to assert their own views in the process (Jarvis et al., 2003). Advocating for situations which put learners' experiences first are experiential learning theorists who view the innate interplay between embodied, cognitive, and emotional learning as catalysts from which genuine learning experiences are possible (Dewey, 1938; Quay and Seaman, 2013; Freire et al., 2014).

Modern experiential learning theories are often based on Dewey's philosophies. Dewey wrote about education and philosophy during a time of social, political, and educational transition in the US. Dewey started to publish early in the 20th century, at the end of the second industrial revolution, and continued to produce work until close to his death in 1952. At the turn of the 20th century people were starting to rebel against country life and were flocking to cities, embracing urban life. This population redistribution along with the industrialisation of agriculture and the technological revolution, began to change the shape of American life. The world wars, intensive commercialised farming, and mass manufacturing created further challenges and changes in society. In parallel with these socio-economic shifts was a restlessness in educational circles. Debates about traditional and progressive education prevailed. Dewey (1938) recognised several dilemmas in these polarising debates and saw how they divided educational theorists and hurt the way education was carried out. Instability in so many areas of American life left learners in the middle of the debate between traditional and progressive education. Dewey (1938) offered his approach to experiential education based on the process of experience and content of subjects which enveloped real-world experiences (Hunt, Jr., 1995).

To stabilise and harmonise education, education needs to be founded on a 'sound philosophy of experience' (Dewey, 1963, p. 91). Dewey (1938) sought to integrate prevailing distinctions between *either* head knowledge *or* physical skill under one concept of *experience*. Learning through experience was viewed as multi-dimensional, it integrated experiences, had continuity, and was interactive (Dewey, 1938). However, as explained in the first chapter, not all experiences were seen as educative (Dewey, 1916). Experiences became educative when past and present experiences were integrated to become part of who we could be in the future (Dewey, 1938). Furthermore, first-hand experiences became educative when theory and practice 'mutually reinforced' each other (Dewey, 1938; Harrison, 2006, p. 4). Dewey aimed for the range of a person's selves in the various aspects of their lives to be celebrated which saw values and emotions recognised as legitimate aspects of experience and thus as important dimensions of learning through those experiences (Dewey, 1958; Leddy and Puolakka, 2021).

Critique of traditional and progressive education is appropriate. Discourse around educational approaches is beneficial because they relate to how we move beyond the barriers created by And/Or thinking. Dewey (1938) discussed the contrast between traditional and progressive forms of education and stressed the need for fairness and balance. He sought to disband traditional teaching with its authoritarian stance that knowledge is contained in books and equally disband the progressive philosophy of his day which emphasised experiences as the pinnacle of education (Hunt, Jr., 1995). Dewey (1938) stated a danger with progressive, 'free for all' liberal education, was that students' tended to lack the ability to develop interpersonal skills. Without capacities of sensitivity and civility, students were held back in reaching their potential. Dewey (1938) stated that attention to planning was needed to create educative learning experiences and shouldn't be rebelled against by the progressive educator. On the other hand, Dewey believed traditional education asserted power and control at the expense of the individual, all in the name of education for the good of society (Dewey, 1938). Both schools of educational thought created polarising effects and a way forward was needed. Learning through educative experiences, in Dewey's opinion, could help meet this call.

For Dewey (1916), democracy in education was viewed as a way to unite individuals and their experiences with society. Participation in learning could encourage independent, critical thinking which could help learners better participate in and help sustain a democratic society (Dewey, 1938; Lave and Wenger, 1991). If learning guidelines were established democratically with concern for equality and justice, not oppression, a sense of educational freedom could emerge.

A Deweyan view of democracy and experiential learning had similarities with and differences from the influential Brazilian educational philosopher, Paulo Freire. Freire started publishing in the 1960s and his work, like Dewey's, evolved over time as both scholars embraced their own lifelong learning experiences. However, Freire's (2000b) views on democracy and learning were understandably shaped by the oppressive culture he experienced. Unlike Dewey, democracy, according to Freire (2000b) was a political system which needed radical overhaul due to its oppressive nature and experiential learning was a way to liberate learners in their efforts to create political change. Freire (2000b) accentuated learning could occur if people willingly and actively struggled with the learning process despite real challenges imposed by various socio-political agents. However, he felt the struggle should not come at the expense of positive educational strategies and philosophies, current and historic (Freire, 2000b). For Freire (2000a; 2014), the combination of theory and practice, known as praxis, was a way to fuel change without hurting positive progress in education.

Praxis came alive through an 'action-reflection-action' process when ideas were acted on within teaching-learning practices (Freire et al., 2014). Individuals' freedom and their freedom to learn were part of the political struggle. The political couldn't be separated from the person or from education (Deans, 1999). Freire's primary concerns were 'the potential for personal and political transformation through dialogue, … praxis, and encouraging development of critical consciousness' (Deans, 1999, p. 15).

There are notable overlaps between Dewey and Freire. Both scholars stressed individuals could be freed to learn in different ways when best practices from traditional and progressive forms of educating were integrated. The Freirean perspective of praxis was much like how Dewey viewed the process of becoming as innate to the learner (Dewey, 1958; Leddy and Puolakka, 2021). Like Dewey (1938), Freire (2000b) stressed the importance of experience and felt we must 'respect … the knowledge of living experience' (p. 20). Another intersection between the scholars is their shared belief in unification as central to meaningful learning. Between them, there is unification of theory and practice, unification of the whole person - body, mind, and emotions, and unification of the past, present, and future. 'It is for this reason that I never advocate either a theoretic elitism or a practice ungrounded in theory, but the unity between theory and practice' (Freire, 2000b, p. 18). Both scholars concerned themselves with transformation through life's experiences. More can be discovered by reading works of scholars who have written widely on the intersections of Dewey and Freire (Deans, 1999; Shyman, 2011; Durakoglu et al., 2013; Shor, 2021; Wilcock, 2021).

Learners of all ages benefit from freedoms. There is an associated power that comes with choice, it is an important aspect of learning from experiences and often better allows for 'native capacity' in the learning process (Dewey, 1938, p. 48). Understanding the importance of having freedom in the learning environment is stated as an important factor in adult learning (Knowles, 1978). Adult learning scholars agree that what is important for adults is to move away from outcomes-based learning and towards continuity which encourages action and reflection, giving learners skills to insert themselves in the process and make choices relevant to their development (Jarvis et al., 2003; Knowles et al., 2005; Taylor and Marienau, 2016). However, some adult learning theorists like Knowles and Mezirow have been criticised for separating how adults learn from how children learn (Jarvis et al., 2003). I suggest adults' perceptions and processes of learning are directly impacted by their early experiences, as evidenced in the West of Ireland reflection in chapter one.

Since this study is about adult learners, it is important to point out Dewey's critics who claim his focus on children was at the expense of adult learners. Adult learning theorists base

many of their ideas on pedagogical theories, like Dewey's theories of learning through experience (Knowles, 1978). Like Dewey, adult learning theorists stressed the importance of experiences and situations as more influential in the learning process than books or teachers (Knowles, 1978; Mezirow, 1996; Knowles et al., 2005; Taylor and Marienau, 2016). Over a lifetime, changes experienced through a growth process can incite micro and macro scale changes (Freire, 2000b). Thus, learning has the potential to help build democratic communities through improved reasoning and problem-solving which flow from early learning into the many different situations in which adults learn (Dewey, 1916). Dewey (1974, 2015) placed attention on putting the whole of a learners' interests at the centre of what constitutes experiential learning. He also sought to integrate the whole-person and disagreed with theories and practices which raised physical or mental knowledge above the other (Dewey, 1938). From my understanding, Dewey kept the whole of the learner in mind because he recognised the individuality learners brought to the social environment of learning. I submit that Dewey's principles (1994), when applied as intended, can prepare learners of any age for responsible citizenship through meaningful experiences. Thus, basing this study about adult learners on pedagogical theorists is reasonable.

Underlying conflicts between old and new remain in the 21st century, even if some of the definitions of what constitute today's 'old' and 'new' differ. When Dewey was writing, some suggest the 'old' he critiqued was religion and its influences on traditional education. From some constraints of traditional education, the 'new' progressive educational movement with its emphasis on fewer rules was liberating (Bredo, 1994). The debate continues today with some viewing science in the role of oppressor because of its unilateral concern with big data management rather than the wellbeing of a group; others feel literature, dialogue, and content-rich educational pedagogy is the 'new', liberalising agent at the expense of practical application (Bredo, 1994). Based on Dewey's pragmatism, we need to combine the old and new, science and data with discourse and aesthetic experience. Integration can encourage social learning environments for individuals to learn through a rich diversity of quality experiences.

I also considered the ways knowledge was being created during horse-human interactions as significant because of its potential to help participants change as part of lifelong learning (Gray, 2004, p. 168). As described, the study will examine if experiential learning occurs through interactions with horses to discover if the integrated aspects of continuity and interaction are present (Dewey, 1938). To understand the framework used in this study, key elements of continuity, integration, and aesthetics will be discussed from a triangulation of different theories, as explained earlier.

Continuity

One of the hallmarks of Dewey's (1938) experiential learning theory is that experiences have continuity. Continuity means experiences are ongoing. An experience without connection to the past, to others, with one's surroundings, and to the future, doesn't satisfy the whole learner. Learning occurs in social, environmental contexts where prior knowledge informs practical applications in the present, which are linked to the future for deeper learning (Dewey, 1938; Quay and Seaman, 2013).

Experience has been called 'the name we all give to our mistakes' (Wilde, n.d., cited in Morely, 2000, p. 88). Experiences do involve making mistakes; however, experiences are richer than failures because they become part of who we are. Building on earlier discussions, experiences become learning opportunities when they are first-hand experiences which combine both active and passive elements (Dewey, 1938). These first-hand experiences can become educative when theory and practice 'mutually reinforce' each other (Harrison, 2006, p. 4). For this study, how we act on our experiences, process them and then respond is critical because of the consequences we either 'suffer or undergo' as a result (Dewey, 1916).

My early understandings about experiential learning, both theoretical and applied, were based on Kolb's Experiential Learning cycle. Kolb's (1984) model stressed the importance of an ongoing cycle of meaningful learning emerging from works by Dewey and Piaget. Experiential learning, according to Kolb (1984), is cyclical and includes concrete experience, reflective observation, abstract conceptualisation, and active experimentation which leads back to concrete experience. I value Kolb's contributions to experiential learning yet have points of convergence from his approach. Examination of Kolb's theory raised a question of whether experience 'stages' occur in some pre-determined order. This type of questioning motivated a reconceptualisation of his theory as a spiral. However, I wonder if the spiral model really overcomes critique of Kolb's circular models because it also doesn't 'really suggest a progressive dimension to learning' (Higgins and Nicol, 2002). Kolb (1984) asserted his experiential learning model was fluid and a learner could move forward and back along the circular pattern. However, his four events have been criticised for appearing to occur in isolation, with his model appearing two-dimensional (Seaman, 2008). When aspects of the learning process are viewed as isolated instances, an individual may miss out on the fullness of the experiential learning cycle as Kolb may have intended.

A horse-human interaction example reveals a frustration with Kolb's Cycle. A person may want to learn the equestrian skill of riding transitions like a basic transition from walk to trot.

The person may have some first-hand experiences of interacting with horses on the ground. They may have watched countless hours of others having direct experiences riding horses. Observing others involved with direct experiences constitutes Kolb's 'concrete experience'. Thinking about these observations would be part of Kolb's 'reflective observation'. The person may have abstract knowledge gained from reading a book or watching videos of horses moving from walk to trot. Kolb would call this knowledge abstract conceptualisation. The person may be able to verbalise how a horse mechanically changes gait or describe the appropriate riding aids necessary for a horse to change his gait from walk to trot. The novice rider may be fortunate enough to get on a well-mannered horse. An instructor could give a familiar voice command cueing the horse to transition from walk to trot. Although actively maintaining balance to stay astride, the novice would be a passive passenger. Horse and rider would successfully and simultaneously experience the change of pace but no 'active experimentation' would occur before the 'concrete experience'. Additionally, I submit there would be no genuine concrete experience to begin with because the reality of the task at hand, riding a walk to trot transition, had never been a first-person experience. This person could move on from the experience never truly 'reflecting' on the 'concrete experience', an important part of Kolb's Cycle. Without reflection, the horse enthusiast in this story might not realise it was the instructor's verbal cue that moved the horse from walk to trot. The novice might have prior knowledge and some form of experience observing a transition but would miss out on the full learning cycle. Thus, the individual could be satisfied with a mis-educative experience (Dewey, 1938) and not benefit from a continuous experience. Therefore, experiences do not build on each other neatly, they do not occur in a predictable cycle; education is not a neat division between cognitive and non-cognitive experiences (Quay and Seaman, 2013). As such, isolated experiences don't meet Dewey's criteria for continuity.

In the context of this study, isolation is perceived as a contributing factor to disengagement. Isolation in the learning process can occur when learning is an And/Or exercise, focusing on mental or physical skills. When theoretical learning is over emphasised, students may go through the motions, completing assignments, projects, and getting credit for courses which may hold little personal meaning. In such environments there are missed opportunities for experience-based learning with its potential to impact how learners responsibly operate within the real-worlds of the present and future. Likewise, when physical skills are learned in isolation, the learner may lack the depth of knowledge to sustain them when more complicated, real-world challenges are presented. The overemphasis on physical skill or skills solely for employment can also mean the individual isn't exposed to opportunities to develop important interpersonal and intrapersonal skills like empathy and communication.

My Critical Friends group collectively agreed that our course modules, although in different field, were based on *embodied doing* and thus helped us merge theory and practice (Kharitonova et al., 2017). Two members of the group work in computer engineering and explained that agile methodology (Anslow and Maurer, 2015; Kharitonova et al., 2019) associated with software engineering is an iterative, prototyping process. I related the iterative aspects of agile methodology to Kolb's (1984) learning cycle and the contiguous aspects to how Dewey posited learning and doing (Dewey, 1938; Quay and Seaman, 2013). These embodied approaches to being agile in the learning process are a few ways to prepare students to work collaboratively on real-world projects (Anslow and Maurer, 2015; Kharitonova et al., 2019).

Continuity is also linked to the quality of experiences and the momentum that can result. With Dewey's focus on education for children in mind, he stated that for education to have purpose, educators must 'ask the right questions' and 'create quality experiences' (Dewey, 1963, p. 25). It was the role of the instructor to guide this momentum, a responsibility of the progressive educator (Dewey, 1938). Too often a new generation takes the educational reins and almost rebelliously departs from the 'old'. The question is posed, 'How shall the young become acquainted with the past in such a way that the acquaintance is a potent agent in appreciation for the living present?' (Dewey, 1963, p. 23). The concern for this study is how adults learn; really, a concern for how all learners learn best. Therefore, a better understanding of what creates quality experiences for all is needed.

To better understand quality experiences within educational discourse, roles of teacher and learner will be considered. Educational experiences which embrace liberation and value freedom required a shift in the balance of power between learner and teacher, subject and method (Dewey, 1974; Weimer, 2013). For teachers to become collaborators, they need to move away from their roles as 'sages on stages' and towards learners. The starting point for education, from an adult learning theory perspective, is life experience versus subject or curriculum (Knowles, 1978). Ideally, the teacher in an adult learning environment is a guide and is someone who humbly seeks to learn with their students. 'Teaching is not about what I know but what I enable others to do' (Phelps, n.d., cited in Weimer, 2013, p. 7). Freire (2014) raised the issue of the traditional disparity between teachers and learners. He extolled virtues of a democratic education system where both students and teachers were involved in dialogue (Freire, 2000b; Durakoglu et al., 2013). Macedo recounts Freire's (2000b) use of dialogue in teaching as a process of learning requiring a curiosity of knowing truth and belief behind concepts. For educators to be change agents, Freire (2000b) espoused a concern for freedom through dialogue with different stakeholders, listening to students who felt

suppressed in their educational pursuits. Listening to those who hold negative views of formal education may help educators understand why some fear liberation from what is normal, even if that norm is mis-educative. It is even more imperative to view educational change as a process *with* students and teachers not *by* teachers *for* students (Freire, 2000b, p. 48). Likewise for Dewey (1916), discussion was a way to prepare learners to function in life using reasoned arguments within a democratic society. This idea of discussion was linked to continuity when active engagement helped learners manage successes and failures. What resulted from this continuity was the development of knowledge and skills necessary for solving problems of everyday life (Dewey, 1938).

Dewey and Freire valued the student's interests much like the adult learning theorists who followed them (Dewey, 1938; Knowles et al., 2005; Allison *et al.*, 2011; Freire et al., 2014). If educational environments continue to disconnect the interest of the learner from the learning, the mind is further displaced from the body, and the process of becoming is de-valued for learners of all ages. If knowing is undemocratic and focuses solely on outcomes or subject matter, there can be a lack of attention to the plurality of meaning making as it coincides with socialisation (Winter and Biesta, 2011). Meaning making in educational circles is considered the process of how we interpret our situations based on our prior experiences. This principle coincides with Dewey's principle of continuity and Freire's concept of action-reflection-action.

Continuity has been shown to be a key trait of learning through experiences. Drawing out internal experiences in the wider social context, an expert teacher can help expose students to problem-posing skills and solution-finding situations. However, it is up to the learner to insert themselves in the process and link their prior knowledge with present experiences and future growth (Mezirow, 1996; Higgins and Nicol, 2002; Knowles et al., 2005). The value and potential of experiential learning is realised when learners and educators work together. An analysis of integration follows as the second key experiential learning trait used as a framework for this study. Integration and continuity work in tandem.

Integration

We are still experiencing a disconnect in education (Dewey, 2015, 1916). Since the 1980s, we have lived in a post-modern culture and seen in increase in diversity, freedoms, and individual choice, along with a rise in a consumer driven, fragmented society (Thompson, 2019). Education in this post-modern environment has similarly encouraged diverse perspectives, provided more choices, and embraced playfulness yet has seen a proliferation of metanarratives and scepticism, and a move away from the role of curriculum (Crişan,

2019). Thus, social and educational dualisms remain and there is a need to re-join mind and body learning and integrate them with emotional learning. Integration in the experiential learning process is a way to mitigate ongoing dichotomies. The following examination of ways to integrate the whole person in the learning process is thus fitting.

Dewey's lifelong learning approach was integrative and spanned disciplines. Experiences, according to Dewey (1938), were 'a series of situations' (p. 43). Learner's needs were met when they experienced situations of 'learning to know, learning to do, learning to live together, and learning to be' (Thompson Klein, 2006, p. 14). These types of experiences were interactive – internal and external, individual yet intertwined with the social context of who and what surrounds us. Learning was not an either-or activity (Dewey, 2015).

Schön (1983), like Dewey and Freire, did not separate the thinking and doing, he believed in 'knowing in action'. In actuality, full learning experiences take the whole person into account because three processes - cognitive, mental, and physical - are integrated (Dewey, 1938; Quay and Seaman, 2013). Such an approach can liberate the separate components of the learning experience and unite them through the recognition that thinking, doing, and feeling are in constant motion (Dewey, 1938; Kolb, 1984). Wenger's (1998) learning theory about communities of practice supports Dewey's theory of integration by stressing the simultaneous nature of learning. Through integration, our brains and bodies experience ongoing multi-tasking and are better able to handle challenges.

As mentioned, not all experiences were deemed educative (Dewey, 1916, 1938). Unfortunately, the learner has been dichotomised and mis-educative experiences abound. To better understand mid-educative experiences, a brief examination of related neuroscience concepts follows. Some neuroscientists, like Delaney (2017), have used Dewey's (1938) theory to claim our brain's capacities were stymied by the mis-educative learning systems of our youth. The true key to unlocking our brain's potential to transfer learning, according to some scholars, lies in practical, applied, expert thinking (Biederman and Vessel, 2006; Delaney, 2017). This metacognitive transfer empowers our brain to practically solve higher level problems quicker, with greater unique solutions, and at an expert level. Applied expert learning, in essence, is what experiential educational philosophers have touted for centuries. While I understand and agree with some of Delaney's concepts as a nonexpert, I wish his notion of practice and application included an integrated learning approach and took the physical aspects of learning into consideration. Perhaps this is an instance of neuroscientists putting their blinders on, to borrow a horse racing phrase. Learning, according to experiential learning theorists, is a function of the brain

but also occurs contextually, holistically, inter-personally, and intra-personally and is thus relational (Dewey, 1963; Voss et al., 2011; Leddy and Puolakka, 2021). Delaney's (2017) practical applications of accelerating expertise rely on mental exercises. Dewey argues that an overreliance on mental exercises interferes with progressive growth and leads to mis-educative experiences (Dewey, 1938). To reduce mis-directed learning, continuity and integration can help unite all aspects of a learner (Dewey, 1938).

The dilemma of educational dichotomies and lack of integration in learning continues with the examination of the etymology of 'education'. The historical roots of education (n) and educate (v) are traced to the practice of 'educere' and 'educare'. Educere has roots which mean 'bring out or lead forth', often connected to the preservation of traditional knowledge, perpetuating the predominant culture of the day, and teaching skills to create productive workers (Whitney, 1895). Educare focused on preparing people to manage change through flexibility and creative problem solving (Bass and Good, 2004). Educere was historically about bodily nurture while educare focused on mental growth (Dewey, 2015). The differences between the two terms were often muddled and the use of educate as being a one-sided process of mind training is not substantiated by the original intent of education adhering to the whole person (Whitney, 1895). For this study, a way to recentre experiential learning conversations and work through educational divides is through adopting integration principles, thus re-uniting educere and educare (Quay and Seaman, 2013; Dewey, 2015).

Dewey has been misunderstood as discounting the importance of cognitive learning in favour of hands-on learning with the end of securing work (Shor, 2021). I will dispute this critique by continuing the discussion of integration as it applies to 'learning to earn' and 'learning to learn'. Dewey (1974) challenged ideas put forth by trade schools of his day and described the notion of occupation differently than how the term is applied today. Occupation was defined broadly as a democratic pursuit and spoke to the preparation of young people with knowledge and skills for societal contributions (Dewey, 1974; 'Democracy and Education 1916, by John Dewey', 2008). Skills training within the educational environment should be more than a means to an end; it needs to hold relevance and intrinsic value for the individual. Within this discussion, there is a need to recognise the freedom and creativity involved in practical problem solving when developing employability skills. However, manual skills gained without attention to intellectual parts of the manual experience were not deemed educative experiences (Dewey, 1974). Preparing students solely with skills for job acquisition and retention is not viable as an experiential learning goal because it doesn't satisfy the whole learner. A problem emerges when we value work-based learning above theoretical knowledge.

Equally, there is a need to value theoretical study (Robson, 2002). Learners realise greater leaps in knowing through an integrated approach where theoretical learning is the foundation of knowledge which is immediately applied to real-world applications (Sin, 2017). Not all real-world experiences within educational environments must occur away from classrooms or places of learning. Theoretical learning may occur in a classroom setting and meet the test of 'integration' through direct experiences with real-life case studies, perhaps through partnerships with external organisations. Laboratory experiments and work placement experiences related to a course or a student's area of interest are other examples of how theoretical knowledge can be applied to meet criteria for integration. Without knowing in the mind, embodied knowing is left unfulfilled, and disparity remains. However, cognitive knowledge cannot sit opposed to a vocational outlook (Dewey, 1974). Education and work skills are life skills, they are much better combined than apart. Therefore, it was shown that a didactic approach from either angle, mind Or body, promotes classism and leaves learners' unfulfilled.

In an Irish context, some are upset that education is trending towards applied 'learning for earning', believing this undermines creative, liberal education (Garvin, n.d., cited in Share et al., 2012). Garvin claims Ireland has a strain of anti-intellectualism; he states education should be valued apart from preparation for work (Share et al., 2012, p. 114). However, intellectualism can be a form of elitism which causes a great divide in society and achieves the opposite of Freire's desire for education to be a democratic opportunity for all (Freire et al., 2014). To achieve worthwhile goals of social justice, offering unbalanced solutions is ironically close-minded (Bredo, 1994). Some educational systems can be unfair in practice and promote the very exclusive, hierarchical system they oppose (Goodlad, 1994; Wenger, 1998; Bass and Good, 2004; Ehrlich and Jacoby, 2009; Wesch, 2012; Weimer, 2013). Hence, the rationale for promoting an integrated, equitable, and embodied approach to learning.

Another point of discussion about integration is Dewey's association between the freedom of intellect and the freedom of movement. This critique will further explain how the concept of integration is a key element in this study's framework. Freedom of intellect is internal while freedom of movement is external, the 'physical side of an activity' (Dewey, 1938, p. 61). The interconnection of these two freedoms supports whole-body learning. Internal and external interactions are enveloped by aesthetics, enabling the development of the 'true nature of the student' (Dewey, 1938, 1963). It is important to note that intellect and movement are integrated even during what might be perceived as solely an academic activity. Cognitive learning practices usually have a physical side. For example, a student engaging in a mental

process through reading or listening to a lecture is often connected to their physical self by writing note cards, highlighting text to remember key concepts, or role playing to understand different sides of a debate. A traditional lecture-based, analytical approach has its place as *part of* intellectual pursuit which is a holistic effort (Sternberg, 1988). A discussion on intelligences follows logically from this line of thinking.

Integrated intelligences

As discussed, disconnects between embodied and cognitive learning are polarising (Dewey, 1938; Freire et al., 2014; Schön, 1983). These disconnects can filter into devaluation of different intelligences. Thus, the subject warrants inclusion in the literature review. Intelligences are defined as capacities to learn from experience to respond to new situations (Duckworth and Seligman, 2005). Acquiring knowledge and the capacity to apply that knowledge to respond to changes in the environment are linked to concepts of continuity and integration. These definitions form a working understanding of intelligence for the purposes of this study.

A brief background on intelligence theory follows. Widely known in education is the IQ test. The test is one way of measuring a person's cognitive abilities through a predictive psychological testing approach. Developed by Stern in 1912 (Editors of Encyclopaedia Britannica, 2021) the IQ test was once accepted as the gold standard to measure intelligence. This is a controversial test which indicates a particular set of aptitudes, the most glaring one being the ability of a person to successfully navigate the test itself (Duckworth and Seligman, 2005; Editors of Encyclopaedia Britannica, 2021; Salovey and Mayer, 1990). Questioning about the IQ test as a sole measure of intelligence gave rise to critical thinking about different types of intelligences.

A cognitive based test to measure intelligence was challenged in the 1970s and 1908s by Gardner when he was developing his theory of multiple intelligence. Gardner's theory claimed the types of intelligences which exist are vast (Sternberg, 1988; Gardner, 2002; Goleman, 2005; Sathya, 2020). Multiple intelligence research supports the concept of integration because learners learn through an integration of learning styles and an integration of their capacities (Gardner, 2002). The capacity to learn in a whole-body, inclusive way, means that different types of native capacities or intelligences all hold intrinsic value (Gardner, 2002). Gardner (2002) and other scholars (Goleman, 2005; Sternberg, 1988) have challenged the traditional view of intelligence as something we are born with, a set potential whose capacity is hard to change. Instead, as mentioned previously, learning is

a process of becoming and it's in the doing (the holistic *doing* promoted in this study) that true evaluation of each person's combined uniqueness begins (Gardner, 2002).

Delaney (2017) dismissed Gardner's work, stating his seven intelligence categories lead to putting people in boxes and students were disserved when told to consider learning styles. Instead, he (Delaney, 2017) claimed neuroscience research showed deep learning reliant on mental exercises and visual models was most effective in accelerating learning. However, I suggest that by boxing in an accelerated learning model to a visual model, a disservice is done to other types of knowing. Beyond the thinking and visualising is also action and feeling, important links missed in accelerated learning theory. I propose a triarchic model of intelligence creates a fuller learning experience because it combines internal information-processing, experiential ways of dealing with new tasks and solving problems by outside-the-box thinking, and practical, applied intelligence (Sternberg, 1988). A triarchic model of intelligence is akin to an integrated, whole-body experiential learning practice (Dewey, 1938, 1958; Freire, 2000b) and thus better supports this study's experiential learning approach.

Other types of intelligence research came to the fore which built on a definition of intelligence 'as the ability to solve problems, or to fashion products, that are valued in one or more cultural or community settings' (Gardner, 2002, p. 7). Over the past three decades, a vocabulary of different quotients has emerged. Emotional Intelligence (EQ) theory came to the fore in the 1990s advanced by Salovey and Mayer (1990), and advanced again by Goleman (2005). Since then, scholars and educators (Duckworth and Seligman, 2005; Duckworth *et al.*, 2007; Duckworth and Gross, 2014) have spoken about the importance of grit and concluded self-discipline was a greater predictor of academic success than IQ. Perhaps more widely infused into the world of business and management than education, are the uses of Curiosity Intelligence (CQ), and Adaptability Intelligence (AQ). Adaptability, creative problem-solving, divergent thinking, and collaboration are touted as key traits for future proofing the workforce (Sathya, 2020). CQ is recognised as a key trait of leaders who foster cultures of innovation during uncertain times (Berger, 2015; PwC, 2015). The Chairman of Dell Inc. states, 'if you're not curious, you're not learning, if you don't have new ideas, you're going to have a real problem' (PwC, 2015, p. 35). Another 'Q' is Spiritual Intelligence (SQ), seen as fostering trust and happiness linked to a feeling of personal satisfaction (Salovey and Mayer, 1990). Nature Intelligence (NQ) is a concept built on ideas from Naturalistic Intelligence (Gardner, 2002) but broadened in this study to include a multi-species, environmental, perspective, which will be explored later in this chapter.

Research on learning, education, and intelligences have shown that narrow approaches like looking at students as one-dimensional are inaccurate (Lynch and Baker, 2005). Society still places higher value on 'knowledge, capabilities, and cognitive intelligences' (Lynch and Baker, 2005, p. 9). These three elements are perceived as higher-class, applied in occupations such as law and medicine, whereas other types of intelligences, like spatial and bodily-kinaesthetic associated with labourer and farmer, are given less emphasis and fewer resources (Gardner, 2002). Society's misdirected perceptions create inequalities of social capital and thus reduce opportunities to embrace genuine discovery in learning through interests and goals. These ideas of valuing different types of intelligences relate to earlier discussions about the importance of integration, including the need to integrate 'learning to earn' and 'learning to learn'. If we don't embrace an integrative approach, different intelligences may go undervalued (Gardner, 2002; Goleman, 2005). A shift to valuing embodied experiences can be extended to appreciate how a balanced view of intelligences creates a healthier society.

Integration of movement and learning

Another vital aspect of integration in experiential learning theory is the importance of active learning. Movement has an important impact on cognitive and emotional functioning (Zuber-Skerritt and Teare, 2013; Fitzsimmons *et al.*, 2014). What is problematic is that some educators still view students as followers and deliver learning in static situations. 'If students learn what they do… what are they learning sitting here?' (*A vision of student's today*, 2007). Instead, educators should be asking learners to help them lead through dynamic situations.

Movement is 'found in the very nature of the learning process' (Dewey, 1938, p. 62). Active teaching methods can effectively reach a broad range of learning styles thus encouraging use of multiple intelligences through a student-centred approach with 'engagement, participation, empowerment, facilitation and process' (Kenny and Hynes, 2008). Research indicates physical activity impacts cognitive plasticity which intersects with adult learners' motivation, retention, and self-efficacy (Voss *et al.*, 2011; Gomez-Pinilla and Hillman, 2013; Fitzsimmons *et al.*, 2014). Active learning and exercise research also suggests students are more likely to get the most from their collegiate experience when they actively participate and contribute within the learning environment (Bruffee, 1999; Barkley, 2010).

New research which combines neuroscience, movement, horses, and learning has opened a field of discourse which has great potential for autists and learners of all abilities. Neuroscientists and other scholars have endorsed Movement and Horse Boy Methods because they are effective (Gomez-Pinilla and Hillman, 2013; Heffernan, 2017). Essentially,

the multi-species learning method works because it utilises kinetic learning during horse riding to ‘turn off the cell danger response in the brain, reduces cortisol, activates the learning centres of the brain, and creates neuroplasticity’ (Issacson, 2022). Movement, especially the rocking movement of a horse who has been well trained in the canter, is effective at triggering the body’s release of oxytocin, the happy chemical. Moving and problem-solving then releases a brain protein, called brain-derived neurotrophic factor (BDNF), which promotes neuroplasticity. ‘A happy brain is a learning brain’ (Jennings, 2020).

It is useful to consider that the simple act of learning while being physically active may unlock creativity and deepen learning experiences (Dewey, 1938; Swartz et al., 2011; Bratman et al., 2012; Zuber-Skerritt and Teare, 2013; Merrick, 2015). Walking, for example, has health benefits for our physical (Swartz et al., 2011; Bratman *et al.*, 2015) and mental wellbeing (Bratman et al., 2012). Steve Jobs was famous for holding walking meetings to combat the long hours of sitting that his job required and to increase creativity (Merrick, 2015). Creative thinking is linked to concepts of play and discovery learning and will be discussed next.

Play

Play is underestimated in education. There is documented disconnection from our inherent way of learning through playful discovery (Dewey, 1916; Louv, 2008). As we progress through the stages of formal education, the joy of learning can seem to be a distant experience, not to be mixed with the serious business of academic learning (Dewey, 1916). If students and instructors joyfully engage with each other as they engage with educational material they mutually benefit from the collective effort (Wolk, 2011). This idea builds on views that learners and teachers have dual roles and learning is a social endeavour, as discussed earlier. In academia, you may learn all about a subject through methods which focus solely on cementing the knowledge into your brain. However, until the mental actions are applied and experienced fully in the real world, a complete experience remains in waiting. A way to unearth this full, aesthetic experience, is to rediscover play.

Adult learners and educators can take a page from the way kids play. Our willingness to reconnect with the importance of play as a part of experiential learning may take a leap of faith, a willingness to take ourselves less seriously. Young things constantly perform experiments on their environment, puppies test the limits of their yard through sensory exploration; toddlers touch and feel to gain understanding. Young adults desire independence through ‘learning by doing’ on their own. Adult learners can also benefit from

observing the playful character of horses. Horses have a natural desire to play, it is part of how they learn. Play and diversity in training horses creates a ‘happy athlete’ (Tate, 2012).

Often learning really sticks when we are let off to explore, take a break from the constraints of the curriculum, get our hands dirty, and make mistakes (Dewey, 1916). While mistakes are made during playful discovery, curious adults can creatively solve problems while they rediscover the joy in learning (Wolk, 2011; Louv, 2012). A type of experiencing which embodies playful experimentation (Goodlad, 1994; Wolk, 2011) can bring hope to the trauma of our everyday lives (Freire, 2000a; Freire et al., 2014).

Rediscovering the joy in learning through curiosity and play can be increased through interactions in nature. The incorporation of nature in the learning process is a critical aspect of integration. The next section investigates literature about nature and learning and the possibilities of learning in the outdoors. The aim of this next section is to investigate how the horse-human focus of this study is integrated within experiential learning theory.

Being in natural environments and learning while outdoors

The potential to learn in the outdoors is worth considering. Without a re-valuation of learning as the integration of experiences which are set in and constantly influenced by the external world, the separation of the learner from their environment will continue to cause polarity (Dewey, 1916; Bredo, 1994; ‘Democracy and Education 1916, by John Dewey’, 2008). Learning is influenced by where the learning takes place (Lave and Wenger, 1991; Wals, 1994; Burgon, 2014). I submit that horse-human interactions largely happen in outdoor environments which is why the study analyses the potentials of the integration of nature in the experiential learning process.

How we define learning spaces is contested because some view the concept as too abstract, missing the link between the process of learning and where learning takes place (Illeris, 2009). Dewey (1963) was convinced the learning process was influenced by the learning setting because experiences became educative when engaged learners interacted with their environment via ‘real-world experiences’ (p. 69). Situated learning unites internal learning with the learning context and draws on experiential learning theory. Illeris (2014) claimed, situated learning is the context in which a learner experiences change.

What is important for this discourse it to question polarising views of learning which separate the learner from nature. From this stance, a problem exists for learners. Today’s youth have become increasingly disconnected from nature (Louv, 2008). The retreat to indoor living,

working, and the sedentary (Swartz et al., 2011; World Health Organization, 2018) and sometimes isolating nature of virtual play (Louv, 2012) has been questioned. I suggest this disconnect is a universal problem which transcends age and thus applies to this study's focus on adult learning. In our fast-paced, digitally charged world, we often experience nature through car windows and on screens. We then miss out on the joy of learning through doing and discovery and reflection that being in nature affords. The consequences of not being free to playfully discover in natural landscapes has led to a reduced ability to pay attention and increased rates of emotional and physical illness (Louv, 2008). Lack of connection and awareness of our natural environment is a societal condition to the detriment of citizens, their skills, and the planet (Louv, 2008; Zuber-Skerritt and Teare, 2013; Coates and McCormick, 2014). The art of education, of really knowing in a full sense, is thus missed (Clarke, 1880).

There are several possible solutions to the problem of nature detachment. Valuable for this study is extensive research which demonstrates 'positive associations between multiple forms of learning in the natural environment and a range of educational, social, developmental, and mental or physical health outcomes' (Lovell, 2016, p. 1). A surge of studies reported positive impacts of nature on physical, mental, and emotional health (Wals, 1994; Kahn, 1997; Louv, 2008; Bratman et al., 2012). These and similar studies extend understanding of how direct nature experiences can improve cognitive ability and resistance to negative stresses (Louv, 2008, 2012; Bratman et al., 2012; Berg et al., 2021). There are, however, differing views on the purposes, agendas, and applications of learning in nature, some of which will be queried below.

Learning in natural environments can encourage youthful and exuberant attitudes towards learning where learners feel more confident; thus, it contributes to a better-informed citizenry (Leopold, 1972; Rousseau, 1979; Louv, 2012). Freire (2013) insisted that 'love of the world' (p. 94) was essential to effective education. Learning through experiences which are nature driven is associated with the critical pedagogy of Freire which gave rise to international eco-pedagogy (Kahn, 2008). At times, ecopolitical agendas were fraught with controversy in the most radicalised forms of eco literacy. The foundations of critical pedagogy and associated drives for social, cultural, and political justice through eco literacy are ones I appreciate. However, it is Freire's pedagogy of hope when applied to experiential learning that I embrace for this study. This study's experiential theory strives for socially derived transformative education that unites people to educate for 'sustaining life', 'towards a more peaceful, harmonious, and beautiful world for all creatures great and small' (Kahn, 2008, p.

11). Ecological learning is seen as a ‘valuable interdisciplinary framework for investigating the human affiliation for nature’ (Kahn, 1997).

Alongside theories discussed above, outdoor education theories are briefly considered. Outdoor education has been viewed as a broad, cultural construct, reflecting the diversity of the teachers, learners, and places it occurs (Higgins and Nicol, 2002; Higgins and Loynes, n.d.). Outdoor education can be adopted by most curriculums because ‘it is used to satisfy the aims of those wishing to encourage outdoor recreation, environmental awareness and personal and social development: a role as broad as any subject area within the field of human experience’ (Higgins and Loynes, n.d., p. 6). Confusion and debate can result from this diffusion. Some link outdoor education with environmental education, thought to have developed from informal educators who supported inquiry and expanded the context of learning outside the classroom (Gruenewald, 2002). Outdoor education and environmental education can be viewed as learning subjects while others view the outdoors or the environment as places where learning occurs (Ford, 1986). A teacher took a practical approach and, after taking students on a field trip to a farm, stated she wished all learning could happen outdoors versus in classrooms where students were constrained behind a desk (“FACE,” n.d.). Learning, she claimed, occurred more organically when doing hands-on activities like caring for animals and plants because it provided space for discovery, open communication, and peer teaching (“FACE,” n.d.). Some Irish students are learning through nature experiences such as planting a tree to learn about sustainability (Farrell, 1999) and growing vegetables in a sustainable school garden to learn the importance of healthy, farm to fork eating (Biodiversity in schools, 2021). However, these experiences presume learners have access to nature and have time to understand and resolve environmental issues. Critics argue, both outdoor and environmental education can be in danger of a man versus nature philosophy where curriculum objectives come at the expense of environmental wellbeing (Parkin, 1998). There is a concern that environmental education can become elitist unless it takes learners’ prior experiences in nature and their perceptions of nature into account (Wals, 1994). Nature may be viewed as a place for having fun, as a challenging place, a place for peace and reflection, as a dangerous, threatened place, and as an inviting place for learning (Wals, 1994).

Debates remain about how adequately different branches of learning in natural environments fulfils learners’ needs for self-development. However, most practitioners agree there is value of learning through a ‘direct educational experience which encourages awareness of self, others, and the environment’ (Higgins et al., 1997, p. 7). A professional view of outdoor education puts ‘safe and professional practice’ as an overarching goal and was

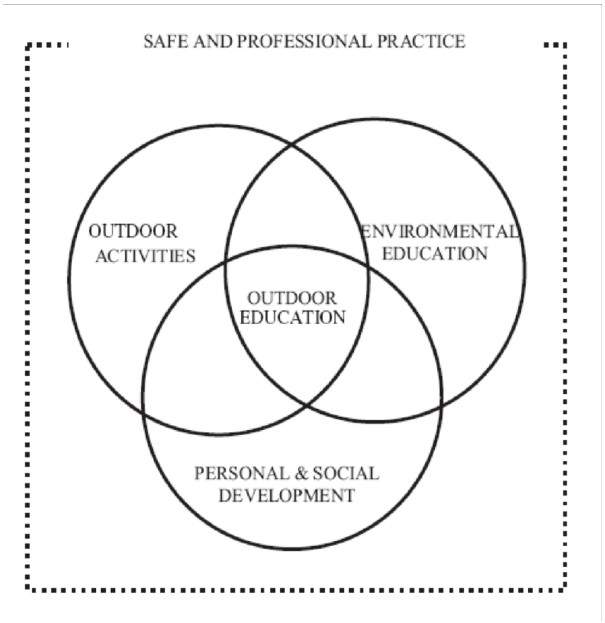


Figure 2: Outdoor education model (Higgins et al., 1997, p. 6)

conceptualised (Figure 2) to show the commonalities among outdoor and environmental education, and outdoor recreation (Higgins et al., 1997). Many reported such experiences were 'effective as a means of personal and social development, and in increasing awareness of community and environment' (Higgins and Loynes, n.d., p. 6). I modified and expanded the graphic, moving personal and social development to the centre of the diagram (Figure 3). Figure 3 illustrates how personal and social development can be realised through a variety of learning in nature modes which are encompassed by an experiential learning approach.

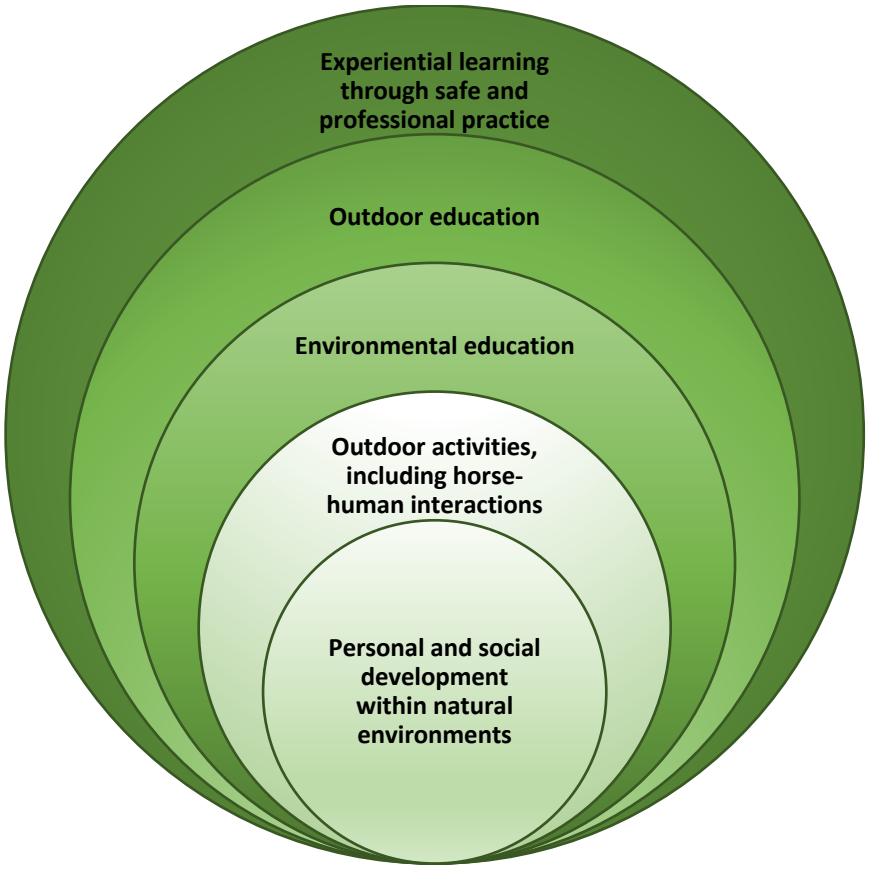


Figure 3: Nature and learning model (Parce, 2022)

Being firstly aware of nature and our biodiverse ecologies and geographies, we can use our whole bodies to respond to animate and inanimate goings on in 'our world' (Boud et al., 1993; Quay and Seaman, 2013). Some nature and learning scholars argue that humans are inherently drawn to nature engagements, known as biophilia (Kahn, 1997; Wals, 1994). This cellular level view is contested because it doesn't account for the emotional link and response humans have to nature. For the purposes of this study, biophilia is understood holistically to join humans' biological, intellectual, and emotional draw to nature (Burgon, 2014; Kahn, 1997; Louv, 2008). The concept of linking nature, learning, and reflection was advocated by Thoreau, a seminal nature educationalist and philosopher. Thoreau included nature activities in his educational situations, decades ahead of their popular acceptance (Ingman, 2011). He desired to unite education and nature, 'like so many others, I require contact with nature and wildness, and for a long time I have wondered how to bring my love for places that nurture me into the work of education' (Thoreau, 1947, p. 609).

An example of the rise in nature awareness has grown out of the Covid-19 pandemic. People are increasingly participating in outdoor activities (*TheHorse.Com*, 2020; *Sport Ireland Policy on Sport and Physical Activity in the Outdoors*, 2020). People reported increased connections to outdoor spaces and experiences in nature have provided mental and physical respite and increased environmental consciousness during the rolling lockdowns (Ipsos MRBI, 2020). This evidence reinforces existing knowledge of the physical, mental, social, emotional, and spiritual benefits when people get outside, breathe fresh air, and engage with green spaces in cities, suburbs, and rural areas (Thoreau, 2002; Oppezzo and Schwartz, 2014; World Health Organization, 2018; Aitken *et al.*, 2021). Society and education are at a turning point in a post-pandemic world where awareness of the positive impact from connecting movement, learning, and nature (Higgins and Nicol, 2002) is gaining momentum (Ipsos MRBI, 2020).

Like the pulling apart of education into physical and mental activities, there has been a separation in how learners interact with nature. Perspectives on learning in natural environments were examined in this section to provide possible solutions to this disconnect and critique different approaches to learning and the outdoors. What the theories have in common is that the 'world and human beings do not exist apart from each other, they exist in constant interaction' (Freire, 2000b, p. 50).

Therefore, to better understand nature integration from this study's multi-species approach, it is important to consider implications of adding another species to the experiential learning mix. The next section will investigate human-animal studies literature to better understand

what it reveals about learning possibilities. By addressing research questions, this study seeks to answer calls from scholars who claim learning with horses is a valid area needing more scholarship (Adelman and Knijnik, 2013; Coulter, 2014; Maurstad et al., 2013).

Human-animal literature

This study builds on existing research related to human-animal studies to interrogate horse-human interactions (Margulies, 2019; Morton *et al.*, 2020). Several studies have advocated for more research to analyse horse-human relationships (Hausberger *et al.*, 2008; Maurstad et al., 2013; Hagström, 2016). Within human-animal studies literature is a branch of ethnographic research called multi-species ethnography. These studies were informative because they examined how humans and other species experience each other in contact zones (Haraway, 2008) where human and animal lives are entangled (Aisher and Damodaran, 2016).

Historically, studies involving animals were conducted from human-centric approaches. Fortunately, there has been a change; other species have become more respected, and research moved away from methods and philosophies where animals were used or studied for humans' gain (DeMello and Shapiro, 2010; Ford, 2019). I agree with scholars and am convinced horses have agency, meaning they can think, respond, and learn independently; they are not merely instruments to be used for human gain (Maurstad et al., 2013; Coulter, 2014; Davis et al., 2016). Since their domestication and evolution to the modern riding horse, horses deserve to be treated with respect, cared for with their welfare always in mind, and partnered with through mutual trust (Pickeral, 2002; Lewis, 2004; Maurstad et al., 2013). There is now a body of research (Adelman and Knijnik, 2013; Maurstad et al., 2013; Dashper and Brymer, 2019) which values shared spaces between humans and nonhumans. Scholarship has moved towards an ethos of respect where humans strive to understand animals (Hagström, 2016). Similarly, and related to this study's use of interviews, interactions with horses are seen as forms of interviews which occur in negotiated spaces (Merrill and West, 2009).

Human-animal studies and multi-species literature is diverse and includes domestic and wild animals (Haraway, 2008; Ogden et al., 2013). I know of horses turned out with cows and sheep, goats acting as companions to nervous racehorses, and mini ponies serving as therapy animals along with dogs, cats, and pigs. The sheer number and types of animals

written about in human-animal studies literature validates this study's focus on horses and the possibilities for humans to learn through multi-species interactions (DeMello and Shapiro, 2010). Equestrians can offer unique insights into multi-species interactions such as the value of forming bonds and mutual trust, and joy that can arise from learning to communicate with another species (Davis et al., 2016).

To ensure the equestrian dimensions of the study weren't too narrow, I critically examined and reflected on academic and popular sources (Share et al., 2012). Existing studies (Hausberger *et al.*, 2008; Adelman and Knijnik, 2013; Coulter, 2014; Brown, 2016) contextualise equestrian settings as being influenced by their natural settings which reinforced this study's emphasis on where learning takes place. Academic and anecdotal material (Pickeral, 2002; Corbally and Fahey, 2017) contained evidence of the powerful horse-human relationship. Nonfictional accounts like Snowman, *The Eighty Dollar Champion* (Letts, 2012), further confirmed that the horse world is rich with social context and worthy of research effort. The horse Snowman was rescued from a slaughterhouse by de Leyer and became part of the Dutch emigrant's family. De Leyer and Snowman formed a special bond and the pair excelled at the highest level of show jumping (Letts, 2012). Relevant multi-species ethnographic studies supported my position that meaningful knowledge is a social experience which includes other species and involves reflection (Maurstad et al., 2013; Aisher and Damodaran, 2016; Dashper, 2016; Dashper and Brymer, 2019).

Our learning is richest in social contexts. Horses, like humans, are relational. They prefer to live in groups called herds. When given the chance, horses avoid isolation and seek social contact for mutual support, grooming, and learning (Pickeral, 2002). Horses are usually more relaxed and safer for humans to interact with when they live in groups (Hartmann et al., 2017). Humans who interact with horses become part of an equine herd, and horses are amalgamated into human groups. A unique, multi-species herd and thus a new element of the social learning dynamic is created through horse-human interactions.

As discussed about human learning in chapter one, horses struggle to learn if they are unsettled or physically unfit (Horse Sport Ireland, 2017). Their innate flight instinct takes over and communication efforts are lost, at least temporarily. Because horses share the flight instinct with humans the two species are further connected around key themes of security, social behaviour, and social learning.

Furthermore, learning for horses is natural, an inherent process, similar to human learning. Horses ideally begin life in the protective cover of darkness. Since horses are prey animals, broodmares are driven to give birth in the middle of the night. Mares encourage their foals to

get up on all fours within the first few hours and start suckling milk to gain strength so that when light dawns, the pair can react and move away from danger if needed. Each foal learns from the sounds and sights of their mother and other horses in the herd. Although horses are now domesticated and thousands of years away from their wild ancestors, they retain their distinct nature, prey personality, and sensitivity (Horse Sport Ireland, 2017). Horses are thus social learners (Lewis, 2004; Horse Sport Ireland, 2017), animals who innately practice social support (Hartmann et al., 2017).

Bandura is considered a founder of social learning theory in which learning processes are viewed as socially constructed (Hannafin and Land, 2000). His theory states cognitive process, observation, and modelling simulate direct experience and enable sound decision-making based on observed successes and failures (Bandura and Walters, 1977). However, Bandura's theories overemphasise cognition which, as this study has advocated, does not lead to human fulfilment in the learning process. Instead, learning for humans is organic and like horses, we have innate capacity for direct experimentation with the world (Thoreau, 1854; Dewey, 1974; Hunt, Jr., 1995; Gruenewald, 2002; Quay and Seaman, 2013). Individual learning takes place in social-environmental communities because experiences are knitted together by shared places or shared identities in relationships (Share et al., 2012). Experience is established as, at once, individual, and social, continual and interactive (Dewey, 1938; Quay and Seaman, 2013). Equestrians' present experiences are commingled with their past cognitive, emotional, and physical experiences which aligns with the concept of continuity. 'Horses who taught Hester and Nell to ride have provided them with embodied memories to be reactivated by other horses later in their lives. A kind of lifetime embodied affinity emerges as horses and riders mutually come to constitute each other' (Davis et al., 2016, p. 353). The examination of multi-species literature showed horses and human interact and thrive through similar means of social learning.

Dewey refers to enjoyment, appreciation, and fulfilment as aesthetics, a concept he theorised more about later in his life (Dewey, 1958; Leddy and Puolakka, 2021). Emotional responses are prevalent when humans interact with horses. Thus, an examination of aesthetics will follow to conclude the chapter. The topic of aesthetics will be connected to love and care to add to concepts of whole-body experiential learning embraced in this study.

Aesthetics

Dewey (1938) championed the importance of aesthetics in learning by proposing that for humans to learn through experiences, the whole person must be considered. Aesthetics is the process of becoming who we are in the world (Dewey, 1938, 1974; Quay and Seaman, 2013). Aesthetics incorporates awareness of and appreciation for beauty, realised internally through direct experiences (Dewey, 1958; English and Doddington, 2019; Leddy and Puolakka, 2021). For learning to become educative, learning should encompass direct and aesthetic experiences (Boud et al., 1993; Quay and Seaman, 2013; Leddy and Puolakka, 2021).

Aesthetics include emotions and are considered non-reflective, because they are elemental parts of how all creatures take in and process their environment (Dewey, 1994; Armitage, 2003; Leddy and Puolakka, 2021). With attention to aesthetics in learning, join up of a learner's mind, body, and emotions is possible (Dewey, 1938; Quay and Seaman, 2013). An example of the emotional side of a horse-human interaction follows to explain that emotions are an important element of whole-body learning. A range of temporary, fluid emotions occur when you jump a horse which can include a trepidation, excitement, and uncertainty. Emotions also have continuity and thus a permanent element. A feeling of confidence from past successful jumps with a horse connects to how an individual responds in the current situation. Through reflection, a rider might draw on the emotion of confidence. As discussed, horses sense, reflect, and absorb human emotions. Thus, a confident rider can fundamentally change how horse and human navigate the next fence together. These examples add to earlier discussions about experiential learning concepts of continuity and integration.

Whole-body experiential learning as proposed in this study, seeks to move beyond binaries. Subjects and learning spaces offer potential for learning. Learning in a natural, outdoor space appears to be special because it holds such widespread opportunities for reconciliation. In the outdoors, different forms of knowledge unite. Therefore, there are more chances for humans as multi-sensory beings to develop 'intellectual, physical, emotional, aesthetic, and spiritual dimensions' (Higgins and Nicol, 2002).

A discussion follows to support the inclusion of reflection within the discussion of aesthetics.

Reflexivity

Experiential learners are learners who interact with real-world experiences and reflect on them (Dewey, 1938). Educationally, reflection gets at the heart of experiential learning because it aims to connect interior mental spaces with the external world. Reflexivity is integral to integration and continuity, action-reflection, and aesthetics (Dewey, 1938; Schön, 1983; Kolb, 1984; Freire et al., 2014). Aesthetics are non-reflective links between pre and post reflective activities of doing and knowing which aid in the process of becoming a whole person (Dewey, 1938; Seaman, 2008; Quay and Seaman, 2013). Through reflection, experiences with the external, others and the environment, get reabsorbed in our internal spaces. When interior and exterior spaces become co-mingled, that integration rejuvenates our existing knowledge and relates to Dewey's concept of continuity.

In Kolb's (1984) experiential learning model, the idea of having concrete experiences and taking time to reflect on real-life experiences can lead the learner to conceptualization and experimentation. Through reflection, a learner can build on prior knowledge to form new learning pathways, the concept of continuity. Through reflection, we may even turn experiences which initially appeared non-educative or mis-educative, because no immediate knowledge was produced, into useful knowledge (Schön, 1983; Kolb, 1984; Etherington, 2004b). However, knowledge alone does not equal understanding (Sandlin, 2015). Observation assists with understanding which can help to develop new knowledge (Dewey, 1963). Dewey (1963) referenced the ancient Greeks who claimed that the process of learning involved self-control. The act of pausing in the learning process involves self-control, and pausing is a form of reflection (Schön, 1983; Seaman, 2008)., Reflection, an intelligent activity (Dewey, 1963), involves stopping, looking, and listening which can deepen holistic learning. Spending time in nature can also be a powerful catalyst for

Image 13: Silver age 4, Co Kildare (Parce, 2018)

deep reflection and thinking outside ourselves (Gruenewald, 2002; Seaman, 2008; Ingman, 2011). Dewey 'was convinced that every reflective mind could refract the many-colored scene of human activity in a distinctive and interesting way' (Hook, 1959, p. 1010). Reflection is thus an important part of whole-body learning.

In this study, participants were given opportunities to reflect on their experiences with horses using still and moving images (Wang and Burris, 1994; Harper, 2002; Luttrell and Chalfen, 2010). Methodologically, I considered visual images as an artistic way of knowing (Dewey, 1958, 1994; Armitage, 2003) because pictures can facilitate reflection (Lorenz and Kolb, 2009). Creating, for Dewey, was another element of aesthetics within the experiential learning process and he viewed art and science as forms of creative expression (Dewey, 1938, 1994). Etherington (2004a, p. 19) explains her understanding of reflexivity as what we do with our awareness and experiences. Images were thus a way to raise readers' awareness about the beauty of horses and help participants connect with their experiences (Image 13). Visual research techniques will be explored further in chapter five.

The concept of reflexivity can be extended into the horse world where the phrase, 'horses are mirrors' is common. Horses are incredibly reflexive, expressed through their extreme sensitivity to human emotions and behaviours. 'Horses have the keen ability to detect intention and authenticity in people' (Stock and Kolb, 2016). This concept has been a part of my vocabulary and experiences since I was a teenager. More recently, this concept of mirroring was confirmed by reflective practitioners (Boud et al., 1993; Schön, 2011).

Learning and love and care

Love is an aesthetic element noted in experiential educational theories (Dewey, 1938; Freire, 2000a). First person experiences can fuel a love of learning by helping the individual adapt to new challenges in their environment (Dewey, 1938; Gruenewald, 2002; Louv, 2008; Wolk, 2011). According to Lynch and Baker (2005), opportunities for better futures for the whole person occur when five dimensions are considered: resources, respect/recognition, love, care, and solidarity, power, working and learning.

Freire (2000b) asserts that acts of love create authentic solidarity for both oppressor and oppressed as part of the liberation process. 'True solidarity is found only in the plenitude of this act of love, in its existentiality, in its praxis. To affirm that men and women are persons and as persons should be free, and yet to do nothing tangible to make this affirmation a reality, is a farce' (Freire, 2000b, p. 50). Likewise, committed teachers and learners seeking transformative education necessarily incorporate 'acts of love' to unlock full human potential.

Care, according to Noddings, is relational and part of humans' basic needs (Smith, 2004). An unequal, dominant, teacher-over-learner situation is something to be avoided, and, according to Noddings (2013), nurturing and caring for each learner with respect is an ethical responsibility of instructors. I suggest learners also have an ethical responsibility of care within the learning-teaching relationship because reciprocal learning goes both ways. Another element needed for care to be realised in learning is trust, a recurring theme in this study and within experiential education literature (Dewey, 1938; Allison and Wurdinger, 2005; Prouty *et al.*, 2007; Quay and Seaman, 2013). Mutual trust has the capacity to build relationships and gives confidence for learners and teachers to try out new ways of interacting and take on risks in varying shapes and sizes (Allison and Wurdinger, 2005). In experience-based learning, trust is a necessary component for learners to gain meaning from the learning that is true to their life experiences (Boud et al., 1993).

Trust is also essential in horse-human interactions, paramount to creating positive relationships between species. Horses and humans learn to trust when working towards mutual wellbeing (Maurstad et al., 2013). However, there is a line of thinking which espouses that caring is different between humans and animals (Noddings, 2013). Humans' levels of affection towards animals and opportunities to access multi-species interactions vary greatly across society. Some are unsure if animals are emotionally capable of giving back, caring for humans, or recognising they are being cared for (Noddings, 2013). However, horses have huge scope for caring which can be seen in their social nature and willingness to development partnerships with humans, as discussed previously. For example, the concept of join-up is a term used in the horse world to indicate the moment a horse trusts a human and decides to come to the human, without force (Roberts, 1997). Monty Roberts is a well-known horse trainer referred to by some as the Horse Whisperer. He is not without critics who claim his techniques weren't original or genuine (Farmer-Dougan and Dougan, 1999; Muller et al., 2016). Like these critics, I don't subscribe to all that Roberts does. However, I do agree that his theoretical concept of join-up is an ethical, democratised way of working with horses and effectively illustrates the concepts of care and trust for the purposes of this study.

In sum, continuity, integration, and aesthetics were shown to be key elements of experiential learning theory. Reflection serves as a bridge to connect aesthetics, with reflective doing and knowing. Interactions in nature and with horses are critical to unifying the whole person. For this study, reflective doing and knowing and what is going on emotionally for an individual are integrated to create complete experiences (Dewey, 1994; English and Doddington,

2019). The next section will conceptualise theories discussed in this chapter. The theoretical framework will illustrate how existing theories underpin the study.

Theoretical and conceptual frameworks

As stated, my perspectives of experiential learning are theoretically founded on principles of continuity, interaction, and aesthetics. Combined, they attend to the whole person who can grow through direct, educative experiences (Dewey, 1938). Dewey's theories, along with concepts of learning championed by Freire (2000b; 2014) were seen to have the most potential to engage the whole person in the learning process. Actively and holistically participating in activities while in natural environments were shown to enhance the learning process (Higgins and Nicol, 2002; Armitage, 2003; Louv, 2012; Quay and Seaman, 2013). Thus, theories of experiential learning, ecological learning, and multi-species interactions are woven together to theoretically and procedurally hold this original study together.

To illustrate my theoretical approach, I propose a concentric framework. Figure four shows the layered and interconnected factors investigated in this chapter. The conceptualisation of learning through experiences with horses was imagined like a stone skipped across water, where the impact of every layer has a ripple effect. The drive to learn is innate, it is part of who we are as humans (Bakhurst, 2020). Individuals who are active, both physically, mentally, and emotionally, are better able to unlock and integrate their whole selves in the learning process. This study will examine if and how holistic learning can be enriched through adults' experiences with horses in largely natural environments.

Figure 4: Conceptual Framework (Parce, 2018)

Chapter 3 conclusion

The focus of this chapter was the examination and critique of a few central theories about learning through experience, although there are many more documented (Crosby, 1995; Hunt, Jr., 1995). Scholars across genres of literature I reviewed agreed that meaningful and sustainable experiences involve unification of physical, mental, and emotional actions which

are linked to real world situations (Dewey, 1938; Kolb, 1984; Freire et al., 2014). Investigations into existing knowledge established how this study's theoretical constructs were grounded in experiential learning traits of continuity, integration, and aesthetics. Continuity was discussed as the link learners make between prior knowledge and present educative experiences which inform their capacity to respond to future situations. Integration was shown to be critical to learning through experiences. The chapter investigated the integration of mind and body with emotions, the integration of learner and educator for collaborative learning, the integration of multiple intelligences, and the integration of the learner with horses and nature. From positions presented in this chapter, I contend effective experiential learning includes inquisitive exploration of natural situations integrated through cognitive, physical, and emotional processes and aesthetic aspects like care and joy. Therefore, this study joins in the experiential learning conversation and writes in relation to the field to offer a fresh perspective on learning through experiences with horses.

This study proposes a different way of envisaging experiential learning for adults through their horse-human interactions. Links between experiential learning and horse-human interactions have been made on a limited scale (Maurstad et al., 2013). Thus, the chapter connected adult learning, outdoor learning, and human-animal studies to show how learning through multi-species interactions can enhance a learner's ability to grow holistically, improving their overall wellbeing (Dewey, 1938; Higgins and Nicol, 2002; Maurstad et al., 2013; Quay and Seaman, 2013; Freire et al., 2014). Integrating fields covered in this chapter is a unique way to challenge learning approaches which are dichotomous through a multi-disciplinary approach.

The next chapter is concerned with the theoretical aspects of the study's design which extend from the experiential learning foundation established in this chapter and my biographical perspectives, as discussed in chapter two. The evolution of the study design will be explored to explain how an interpretivist approach to quality methodology was selected as best suited for the study's purpose. Methodologies discussed in the next chapter will be shown to be grounded in pragmatism, social constructivism, and interpretivism, which align with experiential learning theory (Dewey, 1938; Bredo, 1994; Wenger, 1998) and create the foundation for the qualitative methods which follow in chapter five.

Chapter 4 | Methodology | Jumping is 90% flat work

'We have all forgotten how strange a thing it is that so huge and powerful and intelligent an animal as a horse should allow another, and far more feeble animal, to ride upon its back.'
Peter Gray (The Arena Media Group, 2022)

Image 14: Show ring. Photo by Louise Pilgaard on Unsplash.

Introduction

This research examines horse-human interactions to discover what impact these situations have on adults. The study seeks to understand how these experiences might be educative and thus add to experiential learning theory, helping move the learning process beyond educational divisions. Chapter four will take a metaphorical pause. The pause relates to reflexivity, a critical element in the experiential learning process, as explained in chapter three (Dewey, 1938; Schön, 1983; Freire, 1996). Chapter four will build on the biographical background provided in the second chapter and the interwoven theoretical pillars of experiential learning as advanced through reviewed literature. The purpose of this chapter is to establish a sound methodology to support methods and interpretations of findings in subsequent chapters.

As equestrians who jump should know, ‘90% of jumping is flatwork’; flatwork, or ridden work without fences, forms the foundations for successful jumping (Image 14). This chapter will first consider my ontology and epistemology. Next, my researcher positionality as an insider, outsider will be discussed. An examination of ethics and reflexivity will be shown as important undercurrents of the study because they hold longstanding places in experiential learning (Dewey, 1938; Freire, 1996; Schön, 2011). A review of pragmatism, social constructivism, and interpretivism will be included due to their influence on methodological choices (Dewey, 1938; Bredo, 1994). Importantly, methodological choices influenced methods which were a collection of field notes, expanded on in chapter five. A discussion of how I arrived at the methodological framework will appear in the 'Paradigm Wars' section. That section will review what notable shifts were made in my thinking to explain how this research is a qualitative, interpretive study. I purposefully undertook an integrated approach to create triangulation, which will appear both theoretically and practically, in methodology and methods. An integrated approach was most suitable because having multiple perspectives from theoretical knowledge lent itself to more flexible ways of understanding the phenomena of the study (Boeije, 2010). In essence, this study is transdisciplinary, which mirrors the integrative nature of Dewey’s experiential learning theory, the research design, and my researcher philosophy. Therefore, the evolving nature of the study along with the complexities of an integrated, multi-disciplinary, multi-species approach, led me to create two methodology chapters. In addition to a stronger organisational structure, separating the chapters provides space to expand on the theoretical and practical procedures which, in themselves, make a methodological contribution to the field of qualitive, experiential learning research.

The ontology of it all

Early in the research journey I embraced a learning by doing approach and realised my experiences of doing the research would affect my research choices. As discussed, I take a broad view of experiential learning which advocates the whole person is involved in learning through making sense of their reality within their social and cultural milieus (Dewey, 1938). To explain my ontology, I will communicate how I perceive reality and how I view the production of knowledge. This study is put forth to raise awareness about how learning through different experiences, like hands-on learning and book learning, are viewed as integrative and continuous. My view is inclusive; I do not adhere to a type of experiential

learning which elevates hands-on learning at the expense of theoretical knowledge and vice versa (Crosby, 1995; Hunt, Jr., 1995).

Through investigation, I found my ontology had a western bent which made sense given my cultural upbringing. From western traditions, two opposing views exist from writings by ancient Greek scholars Parmenides and his predecessor Heraclitus. Parmenides philosophies had more influence on theory until recently, although only a part of Parmenides' *being* philosophy resonates with me. I can relate to Parmenides' ideas that all species are connected, and that reality is identifiable and stable and from that stability we can represent concepts in terms of symbols and language (Gray, 2014). My alignment with Parmenides stops there because he primarily focuses on outcomes and negates the process of change. Conversely, to me, knowledge is constantly evolving, and human development is a process of growth. A departure from Parmenides' philosophy led me to Heraclitus' naturalistic view of the world as emerging, the ontology of becoming (Gray, 2004). Experiential learning is a journey of becoming which, as mentioned, is focused on the learning process not the learning outcome; thus, an ontology of becoming fits with this study's theoretical design (Winter and Biesta, 2011; Hagström, 2016). Becoming who we are in the world also questions dominant perspectives about learning as reserved for humans and not for other species (Hagström, 2016). When horses and humans interact, a unique form of embodied communication evolves. Interspecies dialogue and its transformative impact on species and the environment, challenges human-centric approaches to learning by widening who learning is for and how learning occurs (Ogden et al., 2013).

How I know what I know and why that influences my philosophical approach to this study will be explained in the following section. My researcher philosophy will integrate how my background, as discussed in chapter two, informed the selection and analysis of literature, as shown in chapter three, how that analysis added new knowledge to my perspectives, and how the study design and interpretation of data were guided.

Epistemology

I was interested in understanding how we create meaning in our lives (Boeije, 2010). I wondered how we come to know what we know, from experiential learning and ecological perspectives. For the purposes of this study, what it means to know is grounded in an argument that knowledge is formed through interactions with the world. Thus, because

horse-human interactions happen in a social subculture, they are important to the creation of knowledge, an approach which aligns with social constructivism (Gray, 2004; Quay, 2003). We express our experiences through the stories we tell and retell ourselves and others which helps to develop knowledge in socio-cultural spheres (Clandinin and Connelly, 2000; Wertz, 2011). Therefore, life experiences of participants, scholars, and myself as a female participant-learner-researcher are valuable in the research conversation. Interpretations of collective experiences create opportunities to add to knowledge about this study's research topics (Ryan and Walsh, 2015).

My perspectives about the world and claims of reality as socially constructed were challenged and reconsidered in my new, Irish context. I had to act to make sense of my research experiences and did so by converging thinking, doing, and reflection with passions for learning, teaching, and horses (Freire, 2000a). My theoretical argument that knowledge is constructed as a collaborative effort was reinforced by relationships made with new people and horses, which expanded the idea of community to include other species who have agency (Pickeral, 2002; Coulter, 2014). Something is always happening when horses and humans interact, and this dynamic environment supported my efforts to stay engaged with the learning process required for this study. For example, on days I lacked motivation, or my thoughts were jumbled, I gained energy and clarity from grooming and riding horses. These were whole-body activities which raised my physical, mental, and emotional energy levels. The experiences helped me solve research puzzles, sort out an awkward section of writing, and manage tensions of being an insider/outsider in the research process. Thus, my ecologically driven ontology was founded on 'socially constructed knowledge claims' and aligned with evidence of the positive impact of learning through nature experiences, as explained in chapter three (Creswell, 2003, p. 8).

In addition, being female influenced my worldview, as discussed in chapter two. I was comfortable working on the borders of my own experiences, and thus was comfortable drawing on new methodological fields (Reinharz and Davidman, 1992). While I didn't approach the study from a feminist perspective per se, nor did I focus on women's voices alone, I found research which challenged gendered perspectives useful (Reinharz and Davidman, 1992; Bell, 2010; Adelman and Knijnik, 2013; Connolly, 2016; Dashper, 2016). My experiences as a female enhanced my sensitivity to gender issues and helped me better understand experiences of others (Ojanen, 2012). My knowledge of gender issues and the role of women in education in Ireland has developed over the course of this study, aided by experiences working in Adult Education. Adult Education aims to extend knowledge on feminist social action, research, and teaching (O'Brien, 2015; Connolly, 2016; Grummell

and Finnegan, 2020; *Adult and Community Education at Maynooth University About Us*, 2021). Tutoring on Equality Studies certificate courses also broadened my views about how Irish employers, employees, and government policies strive to protect people under the nine grounds of discrimination. The importance effectively creating equity across the employment cycle have been considered more deeply from conversations with fellow tutors and students in the course.

This section explored various ways I experience the world and how I perceive the creation of knowledge. My epistemology is shaped by my interests in horses and the natural world, my personal and professional experiences, and my gender. All these factors influence this study's motivation and approach. As shown through interrogation of literature in chapter three, my worldview is underpinned by theoretical concepts of experiential learning. If we want to practice democratic education, we cannot pull apart thinking, doing, and feeling in the learning process. Ideally, learners and teachers, and hopefully horses, in this study's context, bring their whole selves to interactions in shared spaces. We cannot hope to understand how knowledge is being created and learners are being transformed without an integrative view, practiced safely and professionally, as illustrated earlier in Figure 3. The next section will explore how a sense of morality is woven through my philosophy which was ultimately realised in an ethical qualitative design approach, detailed later in this chapter on pages 102-104.

A philosophy of fairness

As stated, one research aim is to improve understanding of experiential learning, enabling practices which move beyond educational polarities. A way to encourage thinking in this area is through the respect of all learners and their experiences. More work can be done to create learning experiences and learning spaces which are equitable and hopeful (Freire, 2000a; Freire et al., 2014). Attending to fairness underpinned my efforts to democratise the study, which I gleaned from reading Dewey and Freire.

The following section will present sound ethical principles based on natural, moral, and metaphysical branches of philosophy to underpin the study. First, natural philosophy pertains to natural or physical sciences and aligns with this study's ecological integration within experiential learning theory. Multi-species encounters between horses and humans have historical, sociological, economic, and political layers (Coulter, 2014). Horses

are recognised as having egalitarian potential (Thompson, 2013) because people of different ages, genders, socio-economic, and cultural backgrounds pour significant passion and resources into the horse world (Adelman and Knijnik, 2013). These layers create multiple connections with learning and the biodiverse environment in which all types of learners are potentially immersed.

Secondly, there is moral philosophy, linked to ethics and natural philosophy. Ethically, my approach is founded on integrity, based on a growth learning model (Henderson, 2012). Being involved in this scholarly effort is a responsibility. My sense of integrity and faith are tied to the ontological positions of this research and so my researcher position is not neutral (Ryan and Walsh, 2015). At a core level it is important to me to be useful (Luttrell, 2000; Connolly, 2016), to use what I have, what I can learn, and what I may be capable of. It is vital to this study's multi-species approach that the capacity of the horse is respected and considered alongside human thought and action (Coulter, 2014; Davis, Maurstad and Dean, 2016).

Thirdly, metaphysical philosophy helps me work through the reasons behind conducting research. Philosophically, I pursued this research to contribute to the body of experiential learning knowledge. Intrinsically, the love of learning motivated me to gain new knowledge. Questioning what I could feasibly do to add to the wealth of existing knowledge, I took a pluralistic view of education whereby theoretical knowledge was integrated with practical knowledge. Education is a part of who we are as humans (Bakhurst, 2020). When I thought, read, wrote, or watched source material (Dewey, 1938; Higgins and Nicol, 2002; Maurstad et al., 2013; Freire et al., 2014; Dashper, 2016), I was struck by the very 'giants' whose shoulders I wanted to stand on. Researching and articulating my educational philosophy was a learning experience where I entered and attempted to add to scholarly conversations, knowing the discourse would continue long after I left 'the parlour' (Burke, 1973).

Consideration of the natural, moral, and metaphysical branches of philosophy helped clarify my ontology and epistemology. When considered collectively, these three branches of philosophy underscore this study's integrated methodological approach. My philosophy was further influenced by the number of diverse people and cultures encountered in many places I've lived. Within these various horse worlds, academic spheres, and everyday cultures, I was, and continue to be, both an insider and outsider. Positionality as an insider/outsider will be discussed in the following section.

Positionality | At once an insider and outsider

Inside the ring

As a lifelong equestrian (spanning almost five decades), I am an insider in my research sphere (Luttrell, 2000). An insider position came with advantages and disadvantages (Bell, 2010; Ellis et al., 2011; Elliott, 2013). On the plus side, I shared a passion and dedication to horses with fellow equestrians. As a result, I had intimate knowledge of the horse world, could better relate to participants, and was more readily accepted and trusted (Bell, 2010; Ellis et al., 2011; Adelman and Knijnik, 2013; Brown, 2016). My insider perspective allowed me to 'speak horse' which complemented other researchers' methods (Coulter, 2014; Brown, 2016; Dashper, 2016). As an insider, I had better access to fellow horse enthusiasts and equestrian venues (Coulter, 2014; Aisher and Damodaran, 2016). An insider position enabled me to ask relevant questions and comfortably engage in meaningful conversations based on shared experiences. My comfort with selecting, reading, and understanding equestrian, and multi-species literature also benefitted. Being an insider boosted my confidence.

A disadvantage for the insider can be a tendency to take one's own knowledge for granted (Bell, 2010; Ellis et al., 2011). I stumbled upon this disadvantage when moving around the world and encountering diverse cultures. Examples of encountering varying equestrian cultures occurred when I was a teenager. My family and I moved from the east coast of the US with its predominately English style of riding back to the west coast with its mix of riding styles including a western, cowboy culture. In Ireland, I found Thoroughbred breeding and racing was the predominant industry, an area in which I don't have much experience. Within certain spheres of the horse world, I have little knowledge. To adjust and overcome this insider drawback, I broadened my horizons by looking to other equestrians as legitimate sources of new knowledge and thus learned from them.

Other potential weaknesses of being an insider include bias, the difficulty of staying objective, and the risk of excluding most people due to an insider's familiarity (Bell, 2010; Ellis et al., 2011; Elliott, 2013). Insiders tend to use language and behave in ways known to their group. A way to overcome challenges of exclusion in this study included the use of Photovoice (Wang and Burris, 1994; Lorenz and Kolb, 2009). By incorporating images alongside text, including a glossary of basic equestrian terms, and using biography as a research tool, I hoped readers could gain insights, seeing what an insider sees (Belon et al., 2016). Inclusion was important to me because I know what it feels like to be different, to be

an outsider. I felt a responsibility to represent the horse world accurately and sympathetically to those outside the ring.

Outside the ring

Simultaneously, I am an outsider to Ireland and the doctoral research process. As an outsider there are opportunities to be uninhibited and offer a fresh perspective. However, my outsider perspective may not always be understood or embraced, thus there are risks to my outsider position. For example, being an outsider in the Irish horse community, I immediately noticed differences in simple everyday language. A saddle pad was a Numnah in Ireland, and a halter was a head collar. Types of competitions also varied between locations which made me very aware of being an outsider. While I grew up jumping cross-country fences, I didn't grow up with hunter trials like the kids in Ireland. This activity added another layer to the experience of interacting horses in Ireland. I noticed the prevalence of unhindered grit developed by young Irish horse riders who appeared to fearlessly navigate big hedges, big drains, and big banks; their confidence often spilled over into their adult attitudes and behaviours. This realisation revealed a gap in my learning which found me at a disadvantage. I entered a steep learning curve and aimed to broaden my understanding of Irish equestrian culture and improve my level of determination, furthering developing my resilience which I transferred into other arenas.

In academic settings, I was also an outsider in many regards. For example, I have been stereotyped as an educator who supports a banking system simply because I am from the US (Freire, 2000b). As established previously, a banking system is at odds with my philosophy because of its top-down teacher-student relationship driven by content heavy, static experiences which are outside of reality (Freire, 2000b, p. 52). As mentioned, the choice of horses in academic research made me an outsider in an adult education context. Finally, I started the PhD with limited academic research experience and the research I had conducted was quantitative and mixed-methods, not qualitative. As a result, I felt uncertain and like an outsider compared to those who appeared well versed in qualitative language and methods. As a result, I fell victim to an imposter syndrome (Connolly, 2016; Vicars, 2016). To work through these disadvantages, I continuously reminded myself that my research and life philosophy are based on hope, driven by the joy that can come from curious experimentation (Dewey, 1938; Louv, 2008; Freire et al., 2014).

Minding the uneven footing

Interestingly, when an insider encounters new knowledge within their sphere, the lines of insider, outsider are blurred. At times, as the examples above showed, I was not fully an insider or an outsider, and conditions surrounding my positionality were uncertain. I could not assume my past experiences and ways of doing things would be accepted in new environments, where I was an outsider. I met obstacles when I first started looking for study volunteers.

Added to the challenge of finding volunteers for the study, was the impact of Ireland's smaller national population. There are over nine million horses in the US with two million people reported as horse owners and over seven million involved with horses as owners, service providers, employees, and volunteers (American Horse Council, 2016). However, for its relatively small size, Ireland's horse sector packs a punch (Jones, 2014). In addition, in the Irish horse racing industry nearly 29,000 people are employed and race attendees number over 1 million annually (Deloitte, 2017). I quickly discovered that within a close-knit Irish horse community, there were little to no degrees of separation.

Although I had established social credentials (Brown, 2016, p. 71) and some level of trust by becoming a part of the Irish horse scene, some in my new network were uncomfortable. I was initially disappointed and surprised that some reacted negatively to a gentle invitation to participate in a research conversation. People who had stated their interest and support of the research expressed hesitancy when I asked them to be directly involved. Perhaps they perceived the invitation as one which might disrupt the mutual relationship by creating an imbalance of power with me as researcher and them as respondent. I reflected on my own experiences with dishonest and untrustworthy people. I was aware that misinterpretation of my intent might lead to a negative reputation which could easily undermine genuine efforts. Being an insider, outsider necessitated a sensitivity to people's concerns. I came to realise that the level of trust a participant has with an interviewer can impact confidence levels and can alter the depth of lived experience someone is willing to share. As a result, I changed strategies, sought advice from Irish contacts and some expats, and modified my plan for data collection. The modification included seeking out participants with whom I didn't have an everyday connection, detailed in the fifth chapter where this chapter's methodological theory will become actionable.

Thus, my situation as an insider/outsider impacted the research, was influenced by my beliefs about reality and views on knowledge production and created friction in my methodology. The tension unfolded and was resolved through a transition from a mixed

methods approach to one founded on qualitative design principles. This shift is discussed next, headlined as ‘paradigm wars’.

Paradigm Wars

Ongoing exploration led to the discovery of ever-widening scholarship which created its own set of challenges. The study needed to rest comfortably along the methodological spectrum, and I needed to work out if the study was going to be quantitative, qualitative, or mixed methods. A methodological struggle required resolution. An evaluation process ensued, which will be explored next.

Swings and roundabouts

As I began to clarify the theorists I aligned with, I realised those theoretical camps in which this study didn’t belong. I initially considered the use of quantitative methodology, but I needed to decide if number data were best suited for what this study was trying to work through. I reviewed the value of gathering data through questionnaires to gain insights about research questions from a large sample of Irish equestrians. Response patterns would have been analysed and interpreted to provide a broader sample of views on research questions (Ryan, 2015c). Quantitative analysis of Likert-scaled questions would give an overview of trends, helping ‘show’ how number stories, when treated with care, tell compelling stories about learning (Creswell, 2003). Using quantitative methods in my master’s research which investigated the ripple effect of secondary agricultural experience projects on the local and national economy, allowed me to capture economic impact data to tell a different story about the impact of experiential learning (Parce, 2014).

Nevertheless, quantitative research is not without its dilemmas. While the physical laws of nature are considered fact, science is theory based. Theories employ rhetoric because people’s ideas are based on tacit and explicit knowledge (Downs, 2020). There are few absolutes in the sciences because theories are derived from experiments which, like investigations in the social sciences, are based on people’s observations and carry bias and subjectivity (Robson, 2011). Although scientists, like statisticians, run tests for bias to maintain validity and reliability in data, subjectivity remains in scientific studies and is also a challenge for qualitative researchers (Gray, 2014). In western society, we’ve been taught that science and maths are models of logic and achievement. Evidence is seen in the overreliance on the IQ test and other standardised tests. For example, quantitative results

from the Leaving Certificate in Ireland determine entrance into higher and further education programmes and can cause tremendous stress. Results determine enrolment opportunities in courses which may or may not be of genuine interest or most suitable (Department of Education and Skills, Ireland, 2012; O'Brien, 2020). These are instances where objective numbers can have higher value at the expense of subjective, qualitative experiences.

Next, I considered if accounts of people's experiences with horses could be accessibly communicated through a mixed-methods approach (Creswell, 2003). Stories of experience and the learning that might result could be told through a combination of interviews and a wider equestrian survey. A combined strategy was one I considered in my proposal submitted as part of the doctoral programme application (Parce, 2016) because I was interested in conducting an analysis comparing experiences of adult learners in the US and Ireland. Similarly, in this study I was initially interested in sampling the study population, using natural observation, and interviewing people to gain both broad and deep insights into research questions (Creswell, 2003). I also considered the context of this research and discovered that, in Ireland, horse impact reports and policy reports are largely quantitative (Irish Thoroughbred Breeders' Association, 2006; Corbally and Fahey, 2017; Harvey, 2017). Speaking their language seemed like a good place to start. Qualitative methods could be used alongside numerical data to produce a more complete picture of the situation by illustrating number stories with people stories (Robson, 2011). The generalisability and perhaps even uptake of the findings might have been wider with equestrian stakeholders if I had used quantitative tools. However, this study didn't start with predetermined factors, and I wasn't after statistical correlations, nor were equestrians my primary audience (Creswell, 2003). My study was experiential in scope and due to my philosophical stance of socially constructed learning, neither purely quantitative nor a mixed-methods approach were deemed best suited for this study.

The next section will explore why qualitative methodologies were deemed most appropriate for the study and which disciplines influenced the decision to conduct the study from an integrated and interpretive approach.

An ethics-based integrated, qualitative study

Moving away from quantitative methodologies towards qualitative approaches, I questioned which philosophies to incorporate to understand social and educational implications which might emerge from participants' interactions with horses. To progress the study, I analysed methodological practises from education, sociology, anthropology, philosophy, and psychology literature. As conveyed, education is viewed as multi-disciplinary and while I

looked to approaches like narrative inquiry and ethnography for inspiration, my study was theoretically and practically different.

The study was designed to be a collaborative effort between myself as a participant/observer researcher and participants. Data were comprised of field notes (Robson, 2011), which included my recorded reflections from observing and participating in equestrian activities and recorded and transcribed conversations with US and Irish equestrians. These decisions facilitated the move from a lifelong biographical interest to an iterative, multi-disciplinary study.

A qualitative approach required acceptance of a messier, yet more flexible process (Bell, 2010), which allowed me to explore how participants learned through their experiences with horses. An open evaluation of people's experiences necessitated sensitivity and adaptability (Robson, 2002). I valued relationships between participants and people's experiences because this empowered multiple perspectives, an application of Boeije's (2010) concept of triangulation and better suited to a qualitative design (Wertz, 2011). I decided to engage in the process of becoming the study because I wasn't satisfied with a one-dimensional research approach just like I'm not satisfied with one dimensional learning. Dewey's (1916) multi-faceted approach 'to becoming a whole learner' accounts for our aesthetic being, reflective doing and knowing, which suited my goal to produce authentic research.

Immersion in a field known to me was purposeful (Gray, 2004). I was immersed in equestrian culture and was literally *in the field* over the course of the study. I recognised people's experiences were complex and become more intricate when horses were involved. Narratives interwoven with multi-species ethnographies get to places beyond learning in the mind, which is why I took part in equestrian activities, and used them to inform my own learning to benefit the study. I was thus in the field and brought my theoretical, socio-cultural, and ontological views to the study which strengthened my ability to share in and re-tell experiences of equestrian participants (Luttrell, 2000; Maurstad et al., 2013).

Furthermore, taking an interpretive approach to understand people's experiences with horses within a qualitative paradigm supported an underlying core principle of this study that learning is socially constructed. Through interviews, I wanted to enter the middle of people's experiences with horses and create new shared experiences through those conversations. Interviews were creative exchanges; we shared photos and videos, expressed our passions and successes, and commiserated about failures and challenges. I then stepped back and reflected to analyse these shared experiences through my philosophical stance. However, I

found it difficult to create much distance from the data. In this way, methodologies in this study utilised aspects of an ethnographic approach because I acknowledged my part in the research process (Luttrell, 2000; Maurstad et al., 2013).

An ethical attitude drove me to consider questions of vulnerability. I was aware that I chose to work with equestrians because I had access as an insider. Even though I wasn't gathering data from an expressly vulnerable population, questions of power were considered, and I recognised nuances in the power relationship between researcher and participants. I had more in common with US participants, we were from the same country and were closer in age and experience. I was older than half of the Irish participants and the differences in age, culture, and occupation were noted. I wanted to reduce potential power imbalances, so I positioned myself as a learner alongside participants (Wertz, 2011, p. 360). I wanted everyone who participated to feel empowered to contribute to the research as they shared their experiences with horses and re-told stories behind self-selected photos and videos (Morton *et al.*, 2020). To create a relaxed atmosphere, I started conversations with a brief explanation of my background, so participants weren't immediately put on the spot. I observed that this opener satisfied people's curiosity, reduced uncertainties, and enabled the group to proceed with the interview.

I was cognisant that I brought myself to the conversations with my upbringing, experiences, ontology, and epistemology. As such, observations I made and words I used were filtered through my worldviews. I tried to avoid the term 'interview' with participants using the word 'conversations' or 'chats'. This subtle shift in language seemed to put people at ease. I strove to conduct conversations in safe and enjoyable atmospheres. Establishing trust helps educators create communities of practice, reduce power inequalities, and socially co-construct knowledge with learners (Burns, 2013). My goal was to build trust to help participants freely share their experiences so data collected, analysed, and interpreted might genuinely respect their contributions to knowledge about experiential learning theory.

I concentrated on what could be understood about learning through experience by focusing on a wider equestrian experience carried out through a reasonable number of exchanges with equestrians. Participants were viewed as collaborators, I valued their knowledge, and realised our experiences were intertwined through a shared equestrian culture. I agreed with West (Merrill and West, 2009), and found the back-and-forth collaborative quality of interviews as imaginative spaces for negotiated meaning between people and, I claim, between species. Because study conversations were held with participants who interacted with other living beings, horses were recognised as influencing the process of knowledge

creation. While humans can't fully interpret and understand what horses are trying to communicate, this study sought to elevate horses as valuable partners in the learning process. The highly attuned communication skills and aesthetics of horses and the natural environments where horse-human interactions took place were perceived as integral parts of the fullness of the multi-species collaboration.

Establishing common ground with my audience who may or may not be familiar with the nuances and possibilities of horse-human interactions was a way to improve the study's accessibility. I also looked to creative methods which linked to a philosophical embrace of aesthetics, as explained in chapter three. Using visual techniques furthered efforts to create synchronisation of the aesthetic across the thesis text and improve reader engagement. However, all accounts were not illustrated with visuals (Hegarty, 2017); they were combined with other approaches to reinforce the concept of integration. The flexibility of qualitative research and application of triangulation once again overcame dilemmas associated with a multi-disciplinary approach (Boeije, 2010; Robson, 2011). I realised my audience might better connect with the research through understanding my personal connections with experiential learning and my passion for horses. This motivated me to reflectively place myself in the research, more than originally intended (Etherington, 2004a).

The decision to incorporate biography was further impacted by the global Covid-19 pandemic which hit early in 2020, at the start of my third year. The pandemic influenced the design and caused a shift in the procedure. However, change is an important aspect of experiential learning philosophy embraced by this study. Learning is a continual and integrated process for the purpose of human development and fulfilment of potential (Dewey, 1938; Freire, 1996). The pandemic restrictions meant horse activities ceased almost continuously from March 2020 and didn't fully open again until the spring of 2022. My ability to engage with the horse world was cut off. The opportunity to observe equestrians and horses, participate in horse activities, and record field notes from experiences virtually ceased. I was left with my own experiences.

Since transformation is possible when we learn from experience, I realised the retelling of my experiences could bring clarity, hope, and reflection to me as a participant researcher (Freire et al., 2014). For example, during lockdown 2.0, I kept a journal of how it felt to care for a horse during the pandemic. As stated, using a qualitative approach meant I could be flexible and tell parts of my own story (Robson, 2011; Boeije, 2013). In doing so, I related to autoethnographic scholars who use stories to help make sense of the self, expressed through a cultural lens (Ellis et al., 2011; Adams et al., 2015). Storytelling can be a rich

medium for capturing the essence of people's experiences with horses (Maurstad et al., 2013; Aisher and Damodaran, 2016). Like ethnographers, I found myself switching points of view (Ellis et al., 2011), at once drawing people into my horse world experiences and, at times, distancing myself to preserve those parts of my history which I wanted to remain private. I was living among participants as a fellow equestrian but wasn't sharing in the day to day with a particular research cohort, like ethnographers do. Considering the impact of Covid in conjunction with my insider, outsider positionality, the use of biography and the achieved level of involvement with participants in the horse world was appropriate for the study.

The study met definitions of qualitative research because I used a transdisciplinary interpretive approach to explore the phenomena of horse-human interactions in nature to try and understand what meanings people brought to their experiences (Denzin and Lincoln, 2017). I used visual methods and drew on philosophies often associated with sociology and anthropology; however, the thesis was not fully autoethnographic, ethnographic, or centred on visual research techniques. Some in the qualitative research community accept that a qualitative researcher uses 'any and all strategies', others argue this approach lacks focus and rigor (Denzin and Lincoln, 2017, Preface). To maintain the quality of this project, an inductive theoretical design was appropriate because it allowed a move from specific experiences to broader themes which culminated in the presentation of findings (Merriam and Grenier, 2019). An integration of methodological theory was suitable because it enabled varying perspectives to be fully appreciated within the cultures of horse-human interactions and experiential learning.

The study achieves cohesion because the data is a collection of experiences which reaches into the past (through reflection on prior experiences, history, and knowledge) and makes connections to the present (via ongoing conversations, observations, and participation). Combined, these elements are linked to a relatable future (through applying theory to help learners flourish across educational spaces). To understand which theoretical strands were drawn on to hold the study together, a review of pragmatism, interpretivism, and social constructivism will be explored next.

Theoretical perspectives, a methodological framework

Tensions around the study's design were resolved through taking a qualitative approach which was theoretically framed by elements of pragmatism, social constructivism, and interpretivism (Dewey, 1938; Bredo, 1994; Armitage, 2003; Merriam and Grenier, 2019). Once again, the concept of theoretical triangulation was used because it avoids a singular outlook and builds on the explanations from several theories to explain the methodological approach (Boeije, 2010). A discussion on relevant philosophical theories which underpinned my qualitative approach will ensue.

Pragmatism

The integration of theory and practice are put forth in this study as an important element of experiential learning (Freire, 2000a). Theory and practice cannot be separated for holistic learning to take place. Integration is a concept closely tied with constructivism which formed the basis for Dewey's pragmatic experiential learning theory (Dewey, 1938; Hunt, Jr., 1995).

Pragmatism is considered central to conversations about how evolving qualitative approaches may change practice, politics, and habits (Denzin and Lincoln, 2017). Much of Dewey's pragmatic theory sits well with experiential learning practices which underpin this study (Armitage, 2003; Dewey, 1938; Wertz, 2011). Seeking understandings of a range of elements in an equitable and sensible way is a trait of pragmatic design. Dewey's and Freire's concepts of action and reflection also supported a pragmatic approach because I see humans and horses as active and thinking agents in their experiences (Armitage, 2003; Wertz, 2011).

In contrast, I strayed from some pragmatic ideas which stop questioning and seek to change study subjects (Creswell, 2003, p. 12). Strict pragmatists, some from a deconstructed perspective, appear to value practice and method over reflection (Denzin and Lincoln, 2017). To counter their deconstructivism argument, I submit reflection can increase understanding, which can lead to learning and habit modification. Thus, I see practice, method, and reflection as interwoven elements of experiential learning (Dewey, 1938, 1974) (Etherington, 2004a; Seaman, 2008; Schön, 2011).

Since data came from people's experiences, it was important to be aware of social and culture contexts to facilitate contribution to knowledge (Bredo, 1994; Armitage, 2003; Wertz, 2011). My approach was pragmatic because direct observation was linked to interpretations of experiences where I watched for the effect of social-cultural contexts. To

help me look at the pluralistic aspect of human experiences, I looked for connections between the individual and their social influences, the informal and the formal (Bredo, 1994). For example, over several years of volunteering at Tattersalls International Horse Trials, I learned about the history and prestige of the event. I recorded personal reflections based on interactions with people involved in varying capacities with the event from competitors, grooms, volunteers, and judges. Through this pragmatic approach, I sought to become a reflective practitioner (Schön, 1983; Etherington, 2004a). Taking time to reflect meant I could grow. Finally, I considered how and where to best carry out research (Carragher and Golding, 2016, p. 65). With the practical in mind, conducting in-situ research in horse world cultures and natural settings made sense.

Social constructivism

It was constructivists like Piaget and Dewey who influenced the formulation of constructionism as a particular educational theory, seen as a progression from more traditional educational methods (Armitage, 2003). I sided with constructivists who looked to the benefits of both traditional and progressive education and sought to create a co-mingled theory, not forsaking one for the other (Dewey, 1938). Each educational environment was viewed as an important space for individuals to learn (Piaget, 1971). Early constructivists such as Piaget focused mainly on the individual's creation of knowledge as contained within themselves. A critique of constructivism arose from this singular emphasis on the individual without attention to the social and cultural (Armitage, 2003). I hence turned to social constructivism as a philosophy which better aligned with this study's perspectives.

As discussed earlier, my views on knowledge creation are grounded in social constructivism because new knowledge is scaffolded, a combined result of our prior experiences and how we respond to our social and environmental situations (Bredo, 1994; Wenger, 1998). Dewey (1938) believed our interests, another hallmark of his experiential learning theory, include our desire to discuss, which reinforces social constructivism as being closely tied with experiential learning. Amalgamated with our ongoing and persistent *bumping into* other people's ways of thinking and doing and feeling, we also interact with other species, like horses, who have their ways of being in the world. Through these interactions, both species' learning evolves, evoking my ontological position which supports the process of change.

As a result, this study was not singular as it integrated the individual with the socio-cultural milieu of the horse world. Many experiences during the study enabled me to get a behind-the-scenes perspective where I learned from observing others and from direct participation. I looked for trends to emerge from various modes of collected data and constructed links to

tell an *us* story (Gray, 2004, pp. 14–15). Research techniques like these are based on knowledge derived from shared interactions (Lave and Wenger, 1991; Coulter, 2014). Integrated experiences mirrored my epistemology which seeks truth from direct interactions with the world. Freire believed educating curiosity was enveloped by and developed through the 'very exercise of knowing' (2000a, p. 31). I agree and submit that knowing refers to embodied, social learning. Learning is not a division between mind, body, and emotions, and we can't be separated from our surroundings. My researcher philosophy rejects polarities and embraces holistic education and thus extends ideas of social constructivism to multi-species interactions.

Interpretivism and reflexivity, realities of the human element

I suggest meaning is brought to experiences when we try to make sense of our interactions with others (Dewey, 1963; Gray, 2004). One of my roles as researcher was to offer an understanding of people's experiences (Luttrell, 2000; Merrill and West, 2009). Our experiences create social meaning and context from which learning can occur. We all share a set of conscious and unconscious experiences. My experience is 'my' experience and yours is 'yours'. My contribution through this study was an interrogation of experiences from my worldview and thus was never intended to be generalisable. I was motivated to hear and document how peoples' experiences with horses impacted their learning. I did this from a social learning perspective (Bandura and Walters, 1977; Lave and Wenger, 1991; Robson, 2002). Nonetheless, I understood my personal bias would influence data interpretation (Robson, 2002; Bell, 2010). Additionally, I recognised different participants would respond differently to me and others in a small group dialogical situation. I counted on each person bringing their own worldviews and biases to conversations which added to the richness of the data. Some participants, I anticipated, would feel comfortable with more casual conversations while others would have been more comfortable answering a scaled questionnaire. Reflective practice helped me remain sensitive to participants and aligned with the transparency and reflexivity I valued in the research process (Wertz, 2011; Adams et al., 2015), as discussed in chapter three.

However, including reflexive writings through the biographical approach undertaken in chapter two and incorporated throughout, caused initial discomfort. Scientific enquiry holds appeal and has since youth where favourite subjects were science and math. Perhaps the reduction of guesswork in science also reduces pressure to contend with social messiness. Logic is used as a coping mechanism which creates safety. However, I embraced the multi-faceted nature of people-research (Robson, 2002, p. 34) and realised the very differences

which comprise the human element sit with my understanding that people express their learning in wonderfully unique ways. In that spirit, I decided to 'learn to do research by actually doing it' (Bell, 2010, p. 1). Drawing on philosophies of pragmatism, social constructivism, and interpretivism added credibility to the study and are associated with inductive, qualitative research (Gray, 2004, p. 36).

Chapter 4 conclusion

A key take-away from working through methodological tensions, as discussed in the Paradigm Wars section, was the fullness of potential an integrated research philosophy allowed. An integrated philosophy supported my position that concepts about reality are socially constructed forms of learning within the culture of equestrianism. Pragmatic, social constructivist, and interpretative approaches were shown to be tied to my ontological and epistemological positions and effectively framed the methodological design.

Taking time to reflect on overall wellbeing and valuing interpersonal and interspecies connections have gained traction amidst global tragedies like the invasion of Ukraine and the Covid-19 pandemic (Ipsos MRBI, 2020; *TheHorse.Com*, 2020). The challenges of the past several years have shifted many people's thinking, priorities, and behaviours. More are realising the mental, physical, and emotional benefits of ecological engagements, both active and reflective. How to navigate the research journey often became clearest when I was out being active with horses. The continuously revolving door of reflection played an important role in the research design. As suggested in chapter three, reflection is an integral part of the experiential learning process (Dewey, 1938; Kolb, 1984; Boud et al., 1993; Sibthorp, 2009; Quay and Seaman, 2013). The next chapter flows from this reflective practice where ideas are put into action (Freire, 1996).

The pragmatic application of methodology in the next chapter brings my ontological and epistemological views to life. Discussed philosophies provide the rationale for the selection and application of methods. The next chapter will discuss how data were collected, interpreted, and analysed from field notes to unite the analysis and interpretations, deemed appropriate for the study's qualitative design (Bloomberg and Volpe, 2008c; Denzin and Lincoln, 2017; Merriam and Grenier, 2019). Chapter five's practical discussions about methods deserve its own space. Like this chapter, the process and detailed write-up of the multi-strategy approach adds a methodological contribution to implementing qualitative

design through an integrated style. The fifth chapter will conclude with a learning reflection as a segue to the findings and discussions which will appear in chapter six.

Chapter 5 – Methodology to Methods | Jumping

'Horses give us the wings we lack.'

Pam Brown (The Stands4 Network, n.d.)

Image 15: Grey horse with rider, in flight stages over a fence (Keara, n.d.)

Introduction

As indicated, I was concerned about And/Or polarities in education and the impact of these divisions on learner engagement and enjoyment. I wondered what kind of meaningful knowledge and skills people were developing through their interactions with horses.

The purpose of this chapter is to discuss how methodologies presented in chapter four were operationalised to practically carry out the study using a combination of methods, helping the thesis take off over a fence (Image 15). The flight stage of jumping with a horse over a fence doesn't occur in isolation. A horse and riders' success at navigating the obstacle depends on training, communication, and harmony. This authentic research (Robson, 2002) uses an integrated approach (Dewey, 1938; Bredo, 1994; Armitage, 2003; Quay and Seaman, 2013). Research design choices were value driven, based on perspectives about learning outlined in previous chapters (Dewey, 1938; Kolb, 1984; Schön, 2011). Selected methods aimed to address research questions by interpreting accounts of the impact horse-human interactions had on adult equestrians' learning and life (Ellis et al., 2011; Maurstad et al., 2013).

The chapter's structure corresponds to a qualitative interpretive design (Merriam and Grenier, 2019). The chapter will outline the elements of the qualitative design and will explain what I did and how I did it. Information about participant involvement, risk, consent, and ethical considerations will follow. Twenty-four people were interviewed in seven groups using focused interviewing techniques. Interview data were added to material from an experiences journal and reflective recordings to collectively form field notes (Creswell, 2003; Etherington, 2004a; Ryan, 2015b). The use of visual methods – photo elicitation (Harper, 2002) and Photovoice (Lorenz and Kolb, 2009; Morton et al., 2020) – will be explored. Procedures for analysis and interpretation will be described. Rationale for analytical methods used to develop interpretation criteria will explain how data were collected, studied, organised, interpreted, analysed (through a bespoke thematic coding process) and then synthesised in a *presentation approach* suitable for an interpretive study (Bloomberg and Volpe, 2008b). The chapter thus forms an arch over the research fence between take-off, critique of existing literature, and landing, findings presented in chapter six.

Research design

The study was carried out over four years from 2017 and 2021. I employed integrated strategies to understand and communicate the research which aligned with the research philosophy stated in chapter four, pages 107-109 (Bloomberg and Volpe, 2008c; Denzin and Lincoln, 2017). I then focused on creating a plan, which was influenced by qualitative, interpretive design research. My curiosity helped me to create a problem statement which led to research questions, as established in chapter one. My background and analysis of literature in three key scholarly fields of experiential learning, learning and nature, and human-animal studies established the foundation, as seen in chapters two and three. The pragmatic, social constructivist researcher philosophy discussed in chapter four was the foundation for the selection and application of methods, explained in this chapter. Interpretations of participants' stories, which will appear in chapter six, helped me make sense of what learning may be going on when people interact with horses. Using Merriam and Grenier's (2019) qualitative framework, the study examines horse-human interactions and seeks to understand how these whole-body experiences might add to experiential learning theory. Consequently, learners and educators may be better equipped to help shift attitudes and actions further, beyond educational polarities, towards experiences which create fulfilment in learning and life.

Figure 5 illustrates how the study utilised a variety of methods to meet the research aims and shows the source of each type of data. I purposefully collected data in a variety of ways to form the field notes because the process extended my efforts to gain insights into the complexities of participants' experiences.

As explained, this study took a triangulated approach to its theoretical framework. For similar reasons, I used methods triangulation where different methods helped me examine the intricate aspects of horse-human interactions to reveal a more accurate, layered interpretation of study phenomena (Boeije, 2010).

Figure 5: Research methods, complete data set (Parce, 2020)

Farms, barns, equestrian educational organisations, and people's homes were the settings for study experiences. Participants were based in the US and Ireland. Many had affiliations with US and Irish Pony Club (PC) and the Racing Academy and Centre for Education (RACE). PC and RACE are organisations which use experiential learning in a social learning milieu upon which the epistemological stance of this research is founded (Wenger, 1998).

This study diverged from other qualitative research as interviews were not the sole type of data (Wertz, 2011). I wanted to examine different perspectives of the phenomena of horse-human experiences and thus the collection of field notes met goals of methodological triangulation (Boeije, 2010). The advantage of using multiple data sources meant the complexity of horse-human interactions and experiential learning could be worked through more accurately and, since I was aware of the potentials for inconsistencies, the study embraced differences in people's experiences as a positive, opening additional ways of knowing (Boeije, 2010).

The largest portion of triangulated data within the field notes arose from focused interviews. Focused interviews were most suitable for the study because I wanted to investigate the phenomenon of horse-human interactions. I wasn't drawn to fully structured or unstructured interview styles. Focused interviews gave participants and me the freedom to elaborate and overcame limitations of fully structured interviews (Bell, 2010). Because focused interviews enabled me to use pre-planned prompts to guide conversations (Robson, 2011), I was better able to keep conversations loosely centred around research topics and respect the time participants agreed to volunteer, about an hour. Open-ended inquiry was facilitated by open-ended questions which helped me uncover deeper insights into participants' experiences with horses (Patton, 2015). Through a focused interview technique, I combined aspects of the shared-understanding model (interviews used to gain insights into others' experiences) and discourse models (participatory approach to interviews as collaborative dialogue) of collecting data (Ryan, 2015b). Before conducting focused interviews, I performed a situational analysis through investigating relevant organisations' codes of ethics (pages 117-118) and other organisational documents, as further described on pages 130-131 in the organisational background section. Situational analyses of relevant equestrian organisations helped me discover aspects of the circumstances and organisations with which participants were involved, widening my understanding of their experiences (Robson, 2011). This knowledge provided deeper context when engaging participants in conversations within the focused interviews.

Data collected from interviews was supplemented by field notes based on observations, participation, and casual conversations. Casual conversations about shared interests in horses with non-participant equestrians regularly occurred at equestrian facilities and were a familiar part of my experiences from a young age. To increase knowledge, I participated in a variety of equestrian activities and visited different equestrian sites. For example, I participated in familiar – horse riding, training, and volunteering - and new equestrian activities like trekking (Image 16). To understand the Irish context, I visited and interacted with people at Kildalton College, RACE, the Irish National Stud (INS), and Teagasc's Grange Animal and Grassland Research Centre. Conversations with former Irish Army Equitation School members, and equestrian competitors, judges, and volunteers added to my knowledge about the Irish horse world.

Image 16: Lisa on Connemara pony, Errislannan, Co Galway (Erhart, 2017)

Taking a participatory approach as a researcher, I favoured a collaborative system, as described in the previous chapter on page 108. To disrupt a one-way power system of knowledge creation, I aspired to co-create knowledge with participants. Reflections from those experiences were recorded in an experiences journal. Other reflective recordings included audio notes verbalised while with horses, going to be with horses, or talking about how horses helped me through particularly difficult days. Like Coulter (2013), immersion, and naturalistic observation were important elements which could deepen insights into the horse world (Wertz, 2011, p. 90).

For the purposes of staying up to date about relevant topics and to develop knowledge in a European context, I extensively explored popular sources including anecdotal, journalistic, and scientific material related to horse-human interactions and experiential learning. Media included relevant equestrian, agricultural and environmental films, TV programmes, radio interviews, journals, newspapers, and magazine articles (Hallett and Barber, 2014). The

inclusion of carefully selected equestrian statistical data added significance to the topic and drew on my past experiences conducting economic impact research (Parce, 2014). The methods I used enriched my understanding of the historical, agricultural, and social links humans have with horses and broadened my knowledge in the areas of neuroscience research about the brain and learning, outdoor education, and the impact of nature and animal connections on learning.

Through the process of data collection, an adherence to ethics was paramount due to the subjective nature of multiple researcher roles (observer, participant, and interpreter) I undertook (Robson, 2011). Attention to ethics was a moral choice, as explained in chapter four. Being attuned to morality is a foundational part of experiential learning philosophies held by scholars whose values I emulated (Thoreau, 1854; Freire, 2000a; Gruenewald, 2002; Dewey, 2015).

The development of a code of ethics for the study will be discussed next.

A code of ethics for horse-human interactions

Persons involved with the study were expected to show respect for all species they encountered with an understanding of their own and others' rights, safety, welfare, and equity. Horses were not viewed as research subjects but rather as agents who formed part of the horse-human dyad, as discussed in the third chapter. Like Elliott (2013), I couldn't locate research which discussed ethics of working with horses in the context of observing horses in a field or observing and participating in horse-human activities. I also couldn't find research which discussed ethics when interpreting conversations by participants about horses. Since horses were observed but not expressly studied, a code of ethics was developed to fit this study.

Equestrian organisations have codes of ethics. Before holding interviews, a variety of equestrian organisations' codes of ethics were closely examined as part of the situational analysis conducted for the focused interviews mentioned on page 115 and described further on pages 137-138. Codes of ethics were discovered for the USPC (2019), the IPC (2021) and RACE (2022). Horse Sport Ireland (2014), the overarching governing body for the sport horse sector in Ireland, has a 'Code of Ethics & Good Practice' which was adopted by the Association of Irish Riding Clubs (AIRC) in 2016. Equine education programmes like Kildalton College run courses in Horsemanship and Equine Breeding which are overseen by

Teagasc who is ethically guided by their Code of Business Conduct (Teagasc Authority, 2011). The British Horse Society (BHS) runs numerous certification courses in Ireland and has a code of ethics in the form of The Code of Practice for the Welfare of Horses and Ponies at Events (The British Horse Society, 2020). Finally, since 1971 the Irish National Stud has operated a well-respected and internationally known Thoroughbred Breeding Course. The INS has two sets of ethical codes, one for employees and one for management. Since both groups oversee and thus influence the actions of students on the six-month residential course (Irish National Stud, 2021), they were ethical policies worth reviewing. All participants I conversed with during the study and many equestrians I observed or had casual conversations with had ties with one or more of the above organisations. Once organisational codes of ethics were examined, they were used to inspire a relevant professional code of ethics for this study.

> *The researcher and participants have an important responsibility to maintain a high standard of ethical behaviour when carrying out and participating in this study. Persons should show respect for all humans and horses they encounter with an understanding of their own and others' rights, safety, welfare, and equity.*

Unfortunately, I had a few first-hand experiences where I witnessed breaches of ethics and sub-standard horse welfare practices by equestrians at livery yards during the research period (Elliott, 2013). Since these people choose not to adhere to the ethical standards of the study and ethics expressed by veterinarians, direct contact and all study related observations ceased. Thankfully, all study participants and others I conversed with behaved ethically so none were asked to disengage from the research.

The sections which follow will discuss the ethical approval process, and how participants were informed and cared for to manage potential risks.

Ethical approval

I received Tier 2 ethical approval early in the thesis process. The act of writing up the ethical approval application shaped how I thought about and subsequently designed the study. The ethical review process encouraged me to analyse potential vulnerabilities for participants and the types of questions I would ask (Tierney and Bartley, 2017). To increase my credibility as a researcher and to further establish trust with participants, I obtained Ireland’s Garda clearance and undertook Child Safety training through HSI. As explained in chapters two through four, it was important for me to conduct the study ethically.

How study addressed risks

Information handling

Careful thought was given to ethical procedures to ensure participants and the information they shared would be handled properly. Conversations were held with adults who were involved in some aspect of the horse industry in the US and Ireland. Participant involvement was entirely voluntary and with adults who were not considered vulnerable. The subject matter was not deemed sensitive which was thought to minimise risks for participants. It was anticipated that study participants would express willingness to engage in the study because of a shared interest in horses. I assured participants they had options for confidentiality and anonymity. All data were managed with adherence to Maynooth University's Research Integrity Policy (Academic Council, 2016).

Participant consent

Consent was obtained during the recruiting stage and secured prior to the start of conversations. Participants were informed upfront of the research purpose and how their contributions were valued. Participant Information and Consent forms, Appendices A and B, were provided and contained study details in plain language. Research participants signed and received a hard or electronic copy of the written consent form. Consent was then re-verified at the start and finish of each interview. Consent for secondary use of processing was obtained on the Participant Consent Form to avoid undertaking the process of returning to participants when further publication beyond the thesis was desired.

Questions of concern

Conversations about working with horses might bring up issues of access and other potential barriers of class, gender, power, and identity. I teased out questions which were ethically appropriate and did not introduce these potentially sensitive subjects directly. My aim was to provide room for relevant topics to emerge as the participants saw fit to get to the heart of people's experiences with horses. To ensure participants finished their involvement without incidence, a period of debrief occurred after each conversation. To follow-up with participants, a thank you email was sent soon after conversations took place, and a research update was sent towards the end of the study.

Physical risk

As stated, a way to avoid ethical pitfalls included weighing benefits and risks of participation (Tierney and Bartley, 2017). Equestrians who regularly engage in self-selected activities with horses should be aware of inherent risks. Since data collected from observations and participation occurred on Irish equestrian facilities, general liability concerns were undertaken by facility management and engagement was at participants' own risk, per national and legal guidelines for equestrian establishments. Liability signs such as, 'Riding is a risk sport' are required to be posted at equestrian establishments in alliance with the Association of Irish Riding Establishments (AIRE, 2014). Therefore, no outside risks related to the study were determined to exist.

Questions of risk, vulnerability, and ethical choices are parts of human development which involve emotions. Emotions are part of aesthetics and make up who we are, as examined in chapter three. Although they have different characteristics, aesthetic experiences are not separate from practical experiences, they bind them together (Dewey, 1958). Aesthetics address ideas of art, beauty, and our emotional responses, for example, and its importance in relation to experiential learning was established in chapter three. Because this study utilised aesthetics through visual methods and was founded on experiential learning theories which included the affective element of learners and learning, attention will next turn to that topic.

Visual methods

Visual methods arose from a participatory research framework within the field of health (Wang and Burris, 1994). Visual methods enable participants to share their stories through images and help researchers interpret stories with greater depth (Belon et al., 2016). Photovoice and photo elicitation, types of visual methods, are now used across social science research including sociology, anthropology, health research, and ethnography (Oliffe and Bottorff, 2007; Lorenz and Kolb, 2009; Morton et al., 2020). Photovoice has recently been found in human-animal and human-nature studies as a means of rebalancing power relations and assisting with a better understanding of the affective aspects of multi-species interactions (Margulies, 2019; Morton et al., 2020). While visual methods are slowly growing across academic disciplines (Wang and Burris, 1994; Harper, 2002; Luttrell and Chalfen,

2010), I found no studies using photo elicitation or Photovoice techniques in horse-human or experiential learning research.

Visual methods had potential for this study because images could shed light on people's stories and add humanness to this academic work. Photovoice and photo elicitation became opportunities to manifest aesthetics as part of experiential learning theory, designed to prompt meaningful participation with study volunteers, as introduced in chapter three. The richness of horse-human experiences invited the aesthetic and a well-known adage - a picture tells a thousand words – was applied. Images can be art and a communication tool. Images were purposefully used as rhetorical devices to elicit responses from participants and readers (Cohn, 2020). I endeavoured to draw the audience in to show the beauty of horses (Image 17) and the colourful world of horse-human interactions (Hallett and Barber, 2014). Using visual methods also drew on playful discovery in the learning process, as discussed in chapters two and three.

Image 17: Three colts at Clorane Lodge (Parce, 2021)

My decision to incorporate the aesthetic through visual methods was further supported by the increasing use of multi-modal learning techniques in education. There has reportedly been a rise in undergraduate students identifying themselves as visual learners (Hannafin and Land, 2000; Gardner, 2002; *A vision of student's today*, 2007). Twenty-first century learners have grown up in a digital era, used to 30 second clips, fast-paced visual messaging, and other rapid-fire forms of communication (Wesch, 2012). As an educator involved with undergraduates in universities, I perceived shifts in students' learning preferences. Like myself, instructors are increasingly adapting the use of visual methods to keep students engaged through techniques that appeal to their interests, such as the

inclusion of multi-media projects like creating a webpage or podcast to communicate scientific findings to a wider audience.

From photo elicitation to Photovoice

I opted for visual genres of photo elicitation (Harper, 2002) and Photovoice (Wang and Burris, 1994). Photo elicitation is a type of visual, participatory research where the researcher inserts photos into a conversation to enhance exchanges. The images can elicit deeper responses where written or spoken words may be barriers to dialogue (Harper, 2002; Lorenz and Kolb, 2009).

For initial interviews, I designed a presentation with images, an organic decision I had made countless times before. At the time, I didn't realise I was using a visual research method. I used Prezi, a visually based software presentation tool. Prezi's design purposefully attends to facts about how we learn, remember, and relate to images and stories at higher levels than text alone (Harper, 2002; Duffy et al., 2015; 'Prezi', n.d.). Including photographic and digitally generated images (Images 18-20) in the initial interview presentation met the definition of photo elicitation (Harper, 2002; Lorenz and Kolb, 2009).

A decision to shift from photo elicitation to Photovoice for main study chats was deliberate to help participants feel more involved in the research process. Photovoice is another visual method where participants are asked to take or select their own photos and bring them to interviews (Lorenz and Kolb, 2009; Belon *et al.*, 2016). Photovoice emerged from a Freirean philosophy of liberation which aims to shift positions of power in the research process (Wang and Burris, 1994). This visual method can help researchers gain powerful buy-in of participants (Rose, 2012; Hegarty, 2016), and supports this study's democratic, experiential approach.

Image 18: 4-H logo, pledge (OSU, n.d.)

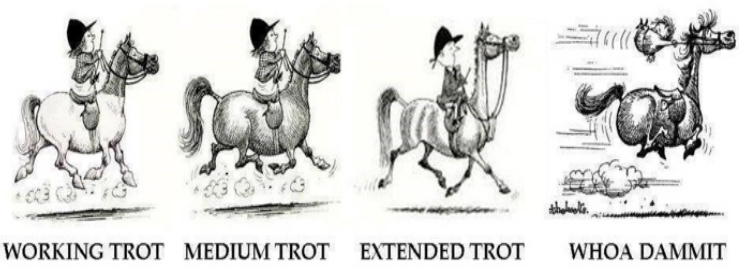


Image 19: Trot progression (Thelwell, n.d.)

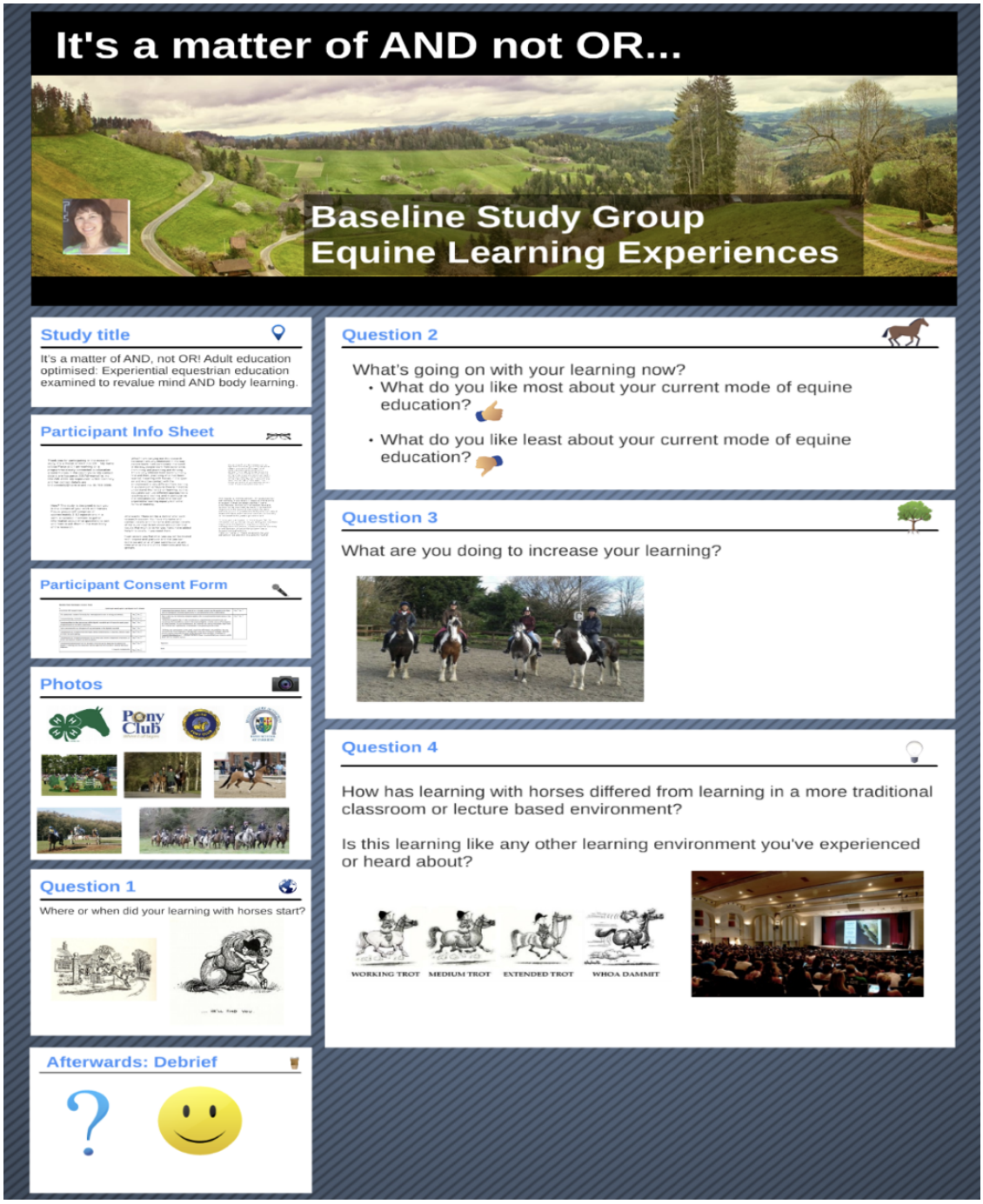


Image 20: Initial focused interview presentation using photo elicitation (Parce, 2017)

Photovoice was used as a method of data collection so that equestrian participants could tell stories about a lived experience (Lorenz and Kolb, 2009). Space was given during conversations so participants could recap what was happening in their photos (Lorenz and Kolb, 2009; Morton *et al.*, 2020). Retelling accounts using self-selected photographs gave participants a more powerful voice, encouraging them to go beyond what may have retold from a memory without a visual prompt (Wang and Burris, 1994; Belon *et al.*, 2016). Participant-provided photos also created agency for participants, helping them integrate into the research process more effectively (Wang and Burris, 1994; Harper, 2002; Luttrell and

Chalfen, 2010; Hegarty, 2017). Thus, the use of Photovoice meant participants were potentially more engaged with their own experiences and with each other in an experiential way (Wang and Burris, 1994; Hegarty, 2016).

Although I wanted to employ visual methods to create a balance of power, I diverged from Rose's (2012) use of photo-elicitation where images centred around power dynamics between the researcher and those being researched. Philosophically, I didn't view participants as being researched. Instead, I looked to fellow equestrians as part of a shared culture from which I could better understand social learning dynamics. I didn't employ visual methods of photo-elicitation or Photovoice over a long period as study interviews were single exchanges with invitations to send additional images and input via email. The upside of my approach was that photo-elicitation and Photovoice techniques were used openly to address the study's multi-species, experiential learning queries. How participants became involved in interviews where visual methods were utilised will be outlined next.

Sampling for focused interviews

After careful consideration of my insider/outsider positionality, I reached out to US and Irish based equestrians through purposive sampling. Purposive sampling is generalisable to the group sampled and not to a wider population (Boeije, 2010; Ryan, 2015c), which was acceptable to my research philosophy and design. I decided not to use representative sampling as it was more appropriate for statistical mixed-methods or quantitative forms of research and less effective for the experiential nature of this study (Ryan, 2015c).
I intentionally selected people and horse organisations known to me, based on knowledge of the field, and because participants met criteria I had set out for the study, described below (Boeije, 2010). From these initial contacts snowball sampling (Boeije, 2010) was used because horse contacts referred me to others in their sphere who might be willing to participate.

Participants | Overview

The criteria established for participation were volunteers, adults, 18 years of age and older, had been involved with horses for a minimum of five years, and were currently involved with equestrianism in some way. Of the twenty-four people, twelve were part of four initial groups and twelve formed three main study groups. Participants involved with the USPC, IPC, and RACE were recruited after express approval of their organisations and in adherence to

organisation's ethical guidelines. The equestrian organisations served as gatekeepers who released names and contact details for approved participants. All referred participants became participants by self-selecting into the study. I then took over management of participant information and communication from gatekeepers. Group conversations were forms of focused interviews, as described earlier in this chapter. Pseudonyms were created for participants to respect confidentiality. Table 1 illustrates the structure of case study groups, participant profiles, and where and how conversations were carried out.

Conceptualisation of study groups

Study Group	Participant profiles	Interview Methods	Setting	Additional comments
Group 1	3 US based adults; 2 actively involved with horse riding/caring; 1 involved with horse caretaking to support spouse (also a participant). All known to me.	Focused; Photo elicitation	In person conversation, held in Tucson, AZ; 1 ½ hours; recorded audio using computer; Prezi questions/images (photo elicitation).	Sent two follow up emails. Responses informed interview questions for groups 5-7.
Group 2	4 US based adults; all actively involved with horse riding, training, or teaching. 1 had job with horse magazine. All PC alumni, referred to me through USPC National office. None were known to me.	Focused; Photo elicitation	Skype conversation; 1 hour; recorded audio using Skype; Prezi questions/images (photo elicitation).	Sent two follow up emails; 1 response to first email which provided additional comments. Responses informed interview questions for groups 5-7.
Group 3	2 US based adults; actively involved with horses; 1 PC alumna, 1 4-H alumna with job in national horse organisation. One was known to me; one was not known.	Focused; Photo elicitation	Skype conversation; 1 hour; recorded audio using Skype; Prezi questions/images (photo elicitation).	Sent two follow up emails. Responses informed interview questions for groups 5-7.
Group 4	3 US based adults; all actively involved with horses; 1 was horse friend who had job as vet assistant; my friend referred other two participants who were not known to me.	Focused; Photo elicitation	Skype conversation; 1 hour; recorded audio using Skype; Prezi questions/images (photo elicitation).	Sent two follow up emails; 1 response to first email; 1 response to second email; both provided additional comments. Responses informed interview questions for groups 5-7.
Group 5	4 Irish based adults; 2 PC alumna, 1 active PC member, 1 PC volunteer, mother of another participant. All actively involved with horse riding and caring; 2 competing; 2 riding for leisure; My contact referred 3 participants who were not known to me.	Focused; Photovoice	In person conversation at RACE, Co Kildare; 1 1/2 hours; recorded audio. Participants brought photos (Photovoice).	Sent two follow up emails; 1 response to first email, provided additional comments, photos, videos; 1 response to second email about Coping with Covid question.
Group 6	4 Irish based adults; all RACE students in final stage of programme. All actively involved with racehorse riding and care through RACE. None were known to me.	Focused; Photovoice	In person conversation, held in Co Kildare; 1 hour; recorded audio. Participants brought photos (Photovoice).	Sent two follow up emails.
Group 7	4 Irish based adults; all RACE students in final stage of programme. All actively involved with racehorse riding and care through RACE. None were known to me.	Focused; Photovoice	In person conversation, held in Co Kildare; 1 hour; recorded audio. Participants brought photos (Photovoice).	Sent two follow up emails.

Table 1: Conceptualisation of Methodology to Methods

Interview settings

Participants based in the United States

Four initial research conversations were conducted from July to October 2017. The original purpose of these small-scale, one-off research interviews was for information gathering and to test questions. I felt it was important to practice interviewing skills because I was new to qualitative interviewing. To find volunteers, I started with equestrian friends in Arizona and asked them if they would help me rehearse. Remaining study participants who were based in the US were referred from a long-time friend in Ohio and from the national education coordinator with the USPC, headquartered in Kentucky. There were twelve participants in four initial interview groups.

The first chat was held face-to-face while the three remaining chats were held over Skype. Apart from two people, initial volunteers had affiliation with the USPC, and all were involved with equestrian disciplines including dressage, eventing, show jumping, and showing. Participants were involved at amateur and professional levels and had been involved with horses for decades. Some were riding instructors, and others worked in the industry in diverse capacities like education, journalism, and horse show judging. They shared experiences related to their early exposure and background with horses, how they were learning now, what they liked and disliked about their current equine education trajectory, and how their experiential learning with horses compared with formalised learning. Participants gave liberally of their time. The section which follows will describe experiences of data collection with initial interview groups.

Initial interviews | Experiences of data collection

Each hour-long interview was guided by four open-ended questions as visualised in Image 20 on page 123. The images were contained in a digital presentation which met the criteria of photo elicitation, as described earlier (Harper, 2002; Lorenz and Kolb, 2009). The audio from sessions was recorded. The four general questions decided on in advance were: 1) Where or when did your learning with horses start? 2) What's going on with your learning now? (What do you like most about your current mode of equine education? What do you like least about your current mode of equine education?) 3) What are you doing to increase your learning? 4) How has learning with horses differed from learning in a more traditional classroom or lecture-based environment? (Is this learning like any other learning environment you've experience or heard about?). The questions were intended to facilitate conversations so that sessions flowed more naturally. Participants were encouraged to

express their experiences and feelings. Having a few prepared questions meant there was some structure which helped me keep conversations moving. I felt an unstructured approach to interviews might be harder to time manage as equestrians generally can talk about horses and their interests almost endlessly.

The first study chat took place around the dining room table in a home in Arizona. The conversation was recorded using a laptop and I took written notes. Initial conversations taught me something about interviewing. As a result, I became more flexible, asking questions in a less structured style with subsequent groups. The three remaining group conversations were held over Skype and some calls went smoother than others. During the call with Group 3 we encountered technical difficulties due to internet connectivity and the participants had to share use of one phone to keep communication going. In the Group 2 interview, made up of people not known to me, it was interesting how freely they discussed benefits of learning experiences around horses when compared with classroom learning, whereas people I knew weren't as forthcoming. However, people I knew were eager to share their background stories of how they got involved with horses, whereas participants I didn't know weren't as candid. One of the predominant themes which emerged from initial chats was the desire for participants to elaborate on how learning around horses differed from traditional learning. Consequently, I allowed more space in future interviews for people to expand on their different educational experiences.

Early conversations with US based participants were critical to the study and remain a body of work in themselves. Because I grew up in the US as a stereotypical horse girl (Ojanen, 2012; Dashper, 2013), it was important to be informed by other US based equestrians to learn about similarities and differences in our experiences. The twelve US based volunteers, each with their own areas of expertise and history with horses and the horse world, helped determine reliability and validity of my questions.

Transition from initial to main study conversations

Interview questions were modified after I reflected on experiences with initial groups, listened back to transcripts, and piloted different questions with a knowledgeable equestrian. Alternative prompts were tested with Martin Nolan, a credible sounding board. He was someone well qualified to *talk horse* (Dashper, 2013; Brown, 2016) because of his accomplishments and lifetime of experiences in Pony Club, the Irish Army Equitation School, as a national and international competitor, and racehorse trainer. Through testing, I was able to hear what someone else thought of the questions and listen to a variety of potential responses (Appendix C).

Upon reflection (Schön, 2011), I felt some of my initial questions (as stated on page 126) were either too narrow or over prescribed. For example, responses to question 1 ('where or when did your learning with horses start?') tended to remain at a more superficial level about the 'where' and 'when' of horse involvement. I concluded my first question limited participants. I was really after a more general, freer conversation about 'Why horses?'. An example of questions which were over prescribed were supplemental prompts within question two ('what do you like most about your current mode of equine education? What do you like least …?') followed on by a repetitive ask in question 3 – 'What are you doing to increase your learning?'. I realised rephrasing and consolidating questions two and three might help me understand participants' experiences around learning through their interactions with horses. Hence, I simply asked, 'Why horses?' in the second set of interviews. After piloting two sets of questions, I landed on what I thought was a final version (Appendix C). However, I realised asking about gender and 'years involved with horses' wasn't necessary because I wasn't after demographic information or gathering numerical data for statistical analysis. As a result of reflection, listening, and testing, I modified the set of questions again, omitting questions about gender and supplemental prompts to the 3rd and 4th questions shown in Appendix C. I decided on four guiding prompts (Appendix D):

1. Why horses? Use of an image of video (Photovoice) to communicate an experience
2. What do you learn (get) from your interactions with horses?
3. How do your interactions, learning with horses, compare with traditional schooling?
4. What is going on in your mind and body while you are working with horses, on the ground or in the saddle?

I decided to begin main study interviews by asking participants to share self-provided images and speak about their experiences behind the photos, described on pages 120-124, the Photovoice method (Morton et al., 2020). Employing Photovoice could prompt different insights into what participants might deem everyday interactions with horses (Rose, 2012). In this second set of focused interviews, I wasn't as concerned about adhering to a particular order or ensuring each question was given similar time. Questions were viewed as prompts to guide conversations which aligned with focused interviewing methods (Robson, 2011). For example, conversations about photo experiences appeared to naturally flow into the Why Horses? question. Reducing my input by condensing interview question verbiage and increasing opportunities for participants to freely share stories helped interviews become more socially interactive, reinforcing this study's lean into social constructivism (Dewey,

1938; Bredo, 1994; Quay, 2003). Time spent on each question varied across groups as participants jointly controlled the flow of conversation.

The processes of piloting questions and reflecting gave me confidence that interview questions and their eventual interpretations described what I intended and fit with research aims. Thus, the process of data collection for both initial and main study groups was deemed reliable and valid because of the attention I gave to critical assessment (Bell, 2010; Creswell, 2013).

Main study groups

Participants based in Ireland

Main study volunteers were passionate about horses, like their US counterparts from initial interviews. Three main study conversations were held face-to-face with twelve Irish based equestrians during the spring of 2018. The first group had four participants with IPC affiliation while eight people with RACE affiliation formed two remaining groups.

Like the process of finding US volunteers, I utilised snowball sampling, using my connections to contact Irish equestrian organisations where there was immediate interest from people in IPC and RACE. For IPC participants, I relied on the kindness of a PC alumna whom I met volunteering. She generously got involved and recruited others from her area. US and IPC mottos include statements about promoting sportsmanship and citizenship. I feel these mottos were exemplified in PC members who gave freely of their time for this study. In the PC group, three original volunteers turned into four when the mother of one volunteer stayed behind and agreed to take part. She was welcomed, fit study criteria, and signed a consent form on the spot to follow study ethics. All participants were female, had been involved with horses at least five years, most involved for decades, and were currently involved with horses. Participants came from various backgrounds including nutrition science and adult and community education. One younger participant was preparing to sit Leaving Certificate exams. Horse sport activities of this group included eventing, show jumping, dressage, Pony Club, and leisure.

Remaining participants were recruited by reaching out to RACE, made possible by a close friend. I was grateful for RACE staff's immediate enthusiasm for the project. Managers and students liberally donated their time and expertise. In contrast to the PC group, RACE students were a 50/50 mix of males and females, in their late teens and early twenties. They

were in the final stages of the RACE programme and were about to embark on their nine-week work placement. Some were from farming families or had a background riding horses from a young age. Of those with equestrian backgrounds, a few grew up riding in the Pony Club. Two raced ponies, others rode more casually or were around the hunting or racing scene, taking an interest in horses from family members. Several had participated in different sports, having an interest in horses but not direct exposure to regular horse riding. A few hailed from urban environments and had longstanding interest in horses but no direct experiences. They were all now totally immersed in the Thoroughbred industry preparing for careers and getting ready to work in flat, steeplechase, and National Hunt yards as exercise riders, jockeys, trainers, and breeders.

Main study | Organisational backgrounds

As analysed in chapters one and two, Ireland is known by some as the Land of the Horse, boasting tremendous success in horse breeding, racing, and exporting horses for sport and leisure. For example, Ireland enjoyed success qualifying teams in all three Olympic equestrian disciplines (FEI, 2020). Before deciding how to recruit main study volunteers, I made a list of Irish equestrian organisations falling in each type of learning category – formal, nonformal and informal. I then examined each organisation's structure and mission statement to employ the technique of situational analysis which met focused interview criteria, as introduced on page 115, and detailed below.

For example, IPC activities include formal learning due to their focus on progression through national curriculum with an associated rating system. Formal learning opportunities also exist through Horse Sport Ireland's coaching programme, and in college and university programmes across the State. Nonformal and informal learning takes place in Ireland within moderately structured groups such as the Association of Irish Riding Clubs (AIRC) who hold clinics and information nights throughout the year. Informal, social learning can occur anywhere at any time and may occur on treks, cross country ride outs, and through recreational horse activities on farms around the country.

Both the IPC and RACE are organisations which epitomise whole-body experiential learning, combining theoretical book learning with first hand, practical approaches (Crowe, 2013; RACE, 2021). Investigating Irish equestrian organisations and interacting with Irish equestrians gave me some knowledge of where Irish based participants were coming from and boosted my comfort level as an outsider. Given my ties with the US branch of PC, I had more of an understanding of where PC participants were coming from compared with RACE participants.

For background, the IPC has been in existence since 1933 and now serves people up to the age of 23. The IPC does a fantastic job of educating young people about all aspects of horse management, horse riding, and life skill development (Irish Pony Club, 2021). The IPC 'endeavours to promote and encourage horsemanship, sportsmanship, citizenship and loyalty in a safe and fun atmosphere, for all its members and volunteers' (Irish Pony Club, 2021). The IPC mission is akin to the USPC.

> 'The cornerstones of our foundation are education, safety, sportsmanship, stewardship, and FUN. Members learn riding and the care of horses through mounted sports. The skills, habits and values instilled through horsemanship will apply to every part of a member's life' (The United States Pony Clubs Inc., 2021).

Established in 1973, RACE's mission has always been to further the racing industry by preparing young racing hopefuls through a hands-on apprenticeship programme (Crowe, 2013). Now with their own racing academy campus between The Curragh and Kildare town, RACE (2021) offers a variety of courses for the Irish horseracing industry. It has expanded its offerings to prepare young people to become jockeys, work and exercise riders, and stable staff for immediate work in the industry through course placement. RACE is a non-profit organisation and offers continuing education courses for breeders, trainers, jockeys, and horse transportation drivers.

The history and mission of education within the IPC and RACE justifies my selection of these two credible and industry-respected Irish equestrian organisations for main study case studies.

Main study | Experiences of data collection

Because Photovoice was to be used, it was important to notify participants in advance. This gave participants time to consider what photograph or short video recordings of themselves interacting with horses they might bring and share during interviews. The first group was affiliated with the IPC and the interview was held around a kitchen table at the house of one of the participants. The host and I provided snacks, and she served tea and coffee which created a more congenial atmosphere and encouraged a longer session of over an hour and a half.

The two RACE conversations were held on their campus in a comfortable, light-filled, first floor room and each lasted about an hour. The use of a round table was happenstance but was very appropriate for the situation. The table helped reduce potential power imbalances,

especially important as I was of their parents' generation and from a university. I didn't want to hinder conversations and was pleased participants made me feel so welcome.

Over the course of data collection, I learned to relax, let conversations flow, and increasingly felt more like a participant researcher than an interviewer. This shift was significant. I wanted to be seen to be part of the Irish horse community and accepted as an insider into main study groups. The following segments of the chapter will describe how I went about main study data analysis.

Data interpretation and analysis

It was important I critically assessed my process of coding, data interpretation, and analysis (Bell, 2010). I decided to use manual methods of data analysis, as distinct from computer data analysis options (as detailed on pages 134-135). Manual methods of data analysis were appropriate because I aimed to better understand people's multi-species experiences and wasn't concerned about complex statistical testing. Issues about reliability were dealt with by utilising, then testing and retesting initial interview data to create questions with enough flexibility to attune to the experiential nature of horse-human interactions (Bell, 2010). Being new to qualitative research, I learned to manage validity by creating questions which, if asked again by others, would elicit responses which were thematically similar to this study but able to reflect future participants' socio-cultural and lived experiences. Therefore, the questions used in focused interviews and my interpretations and analyses were deemed credible because they did what I intended (Bell, 2010).

To understand raw data, I first organised the collection of field notes, Figure 5 on page 114, into primary and secondary data. Primary data was material generated from focused interviews with 24 equestrians in the US and Ireland. This primary data was in the form recordings, transcripts, summaries of conversations, and notes and would undergo more detailed analysis than other field notes. Thus, remaining field notes were considered secondary data and consisted of written and auditory notes from observations and participation with others. They also included biographical reflections created through experience journal entries, historical photos and videos, historical equestrian involvement, and my embodied participation in the study. Secondary data were used to inform how I interpreted primary data, helping me check participant responses with others, including my own. Constantly reviewing secondary data alongside primary data also provided wider

context for emerging themes (Bell, 2010). Secondary data appeared in text as quotes and paraphrases and was drawn on when it could augment data generated by primary data from the twenty-four participants.

Analysis of study conversations moved beyond descriptive to interpretive because I decided to listen to participant stories yet did not pretend to predict participants future behaviour (Black, 1999). Before the coding process is explained, I will detail the transcription process because it further illustrates the experiential nature of the study. I attained additional research skills through the trial-and-error process of transcribing primary interview data, described below.

Transcription

The first main study interview was transcribed after saving the audio onto a secure server. I started the listening process and typed conversations word by word. I found this phase tedious as a new qualitative researcher. The group dynamic of the interviews complicated the process as I tried to sort out who was talking amongst the five participants. Listening and relistening to interview playbacks was critical during this stage. At first, I was focused on content from direct responses versus the interactions between participants. Once transcribing commenced, I began to also pay attention to behaviour, noting similarities between respondents' language and sounds uttered in agreement by others in a group (Bell, 2010).

After hand transcribing a one hour and twelve-minute recording, I realised a different process was needed. From the impact of health issues, I experience brain fog, not far removed from what is being described by Long Covid sufferers. This condition is severely amplified when I sit for any extended period. I discovered Express Scribe and used a foot pedal which went some way in helping me complete accurate transcriptions. Perhaps this technique made a difference given my background playing piano which also involves coordinated efforts between fingers on the keyboard and feet working pedals. Another example of learning by doing.

Image 21: Happy Scribe language selection screenshot (Parce, 2020)

Because transcribing remained tedious, I looked for another transcription tool and discovered Happy Scribe, a Dublin tech start-up (Happy Scribe Ltd, 2021). The quality of transcriptions was average. Before uploading an audio file, the software asked a few clarifying questions and allowed me to select language options. I chose English (Multiple Accents) to accommodate the mixed accents of my participants (Image 21). I found the software struggled with certain Irish accents, ironic given it is Irish based. Interestingly, the software seemed to transcribe my American accent, an English accent, and an Eastern-European accent more accurately. I used the software to transcribe the remaining two interviews but needed to conduct line-by-line, sometimes word-by-word editing for accuracy.

Despite frustrations with the transcription process, the extra time I took to unravel this part of the research process, the more time I spent familiarising myself with the data. After the initial hurdle of transcription was jumped, I turned to coding. Creating a system of coding was essential to present the findings accurately and offer sensible interpretations, analyses, and syntheses (Bell, 2010; Saldaña, 2016). Coding criteria will be explained next.

Coding approach

New to qualitative data analysis, I wrestled with the process of coding for this study. At first, I examined computerised coding tools designed for qualitative data analysis, like NVivo, Precision, and MAXQDA. I conversed with my Critical Friends group about their recommended choices and what difficulties they experienced. I held on to two main ideas from a particular conversation: 1) examine initial group responses and realise main study questions might change as a result; 2) be open to learning as there are pros and cons of using or not using computer programmes to conduct coding. Using NVivo, for example, would require development of validation criteria where major themes were delineated in advance of data collection, following a deductive coding philosophy (Saldaña, 2016). A benefit to computerised coding is its ability to manage large data sets while a downside is its lack of nuance (Creswell, 2013). My data set was relatively small, and I wanted to interact with the data more deeply. Since data stories arose from experiences, I knew manual coding better allowed for the flexibility afforded by human analysis (Saldaña, 2016).

Some coding approaches seek nomothetic themes for 'research that attempts to establish general, universal, abstract principles or laws' (Vogt, 2005, p. 207). Other approaches to coding are derived from singular or idiographic themes (Vogt, 2005). Horse-human experiences from this study's data stories were anything but universal, singular, or concrete. Each horse-human account was meaningful, unique yet part of a larger, interconnected socio-cultural web. Just as I valued participant knowledge and accounts of experience, I valued my own history and trusted I had some ability to pick out themes from field notes. Therefore, an inductive manual coding approach best suited the interpretive methodology and aligned with the inductive, qualitative research design, as mentioned on page 110. An inductive approach helped me make sense of participants' stories and sustain an ethic of care towards people and horses, a value I emphasised in chapter four. I concluded that my interpretations of others' experiences alongside my own, would become 'good enough research' if a system of making sense of the data were created (Luttrell, 2000).

How codes and themes emerged

Like many qualitative researchers before me, I created my own system of categories to make sense of hundreds of points of raw data (Bell, 2010). Ultimately, I aimed to create between five and ten central categories through coding which would become sections in the Findings text in chapter six. I made sense of the research through detailed analysis which allowed me to discover emergent themes (Luttrell, 2000; Bell, 2010). The process of coding primary data was emergent because it arose from the process of transcribing, summarising, and making notes from conversations. Blending elements of inductive, open coding through line-by-line analysis, and axial coding resulted in an organisational system whereby I developed and named categories.

My coding system was inductive because I moved from participants' individual experiences to gain a broader understanding of emergent themes to tell a relatable data story. I became familiar with the data, a hallmark of inductive coding, through a fluid cycle of scanning, listening, reading, reflecting, and transcribing. An iterative process helped me respect collective voices yet not gloss over details provided by participants or insert my assumptions (Bloomberg and Volpe, 2008a; *Why does narrative need rescuing from qualitative research?* [Interview], 2011; Denzin and Lincoln, 2017). I had no defined categories in advance of data collection and didn't have pre-conceived ideas about categories which may arise (Saldaña, 2016). I anticipated responses would generally align with the content of questions asked but I remained open to the emergence of other, unforeseen, or delineated topics (Bell, 2010).

To proceed, raw primary data from over eight hours of interview audio recordings was amalgamated. As described, all main study and one initial interview group recording were fully transcribed yielding over two hundred single-spaced pages of word-for-word transcripts. The remaining three initial study group interview data were summarised in note form, which counted as part of field data. In sum, field notes, as illustrated and described on pages 114-117, included over two hundred pages of primary data transcripts, plus three A5, 120 sheet notebooks full of secondary data in the form of handwritten text, about thirty minutes of recorded voice memos, and 14 typed pages with over 8,000 words in an experiences journal.

First, I needed to chunk the large amounts of raw primary data into manageable parts or nodes. This was accomplished through open coding because I broke data into discrete parts (Bell, 2010). As a new researcher trying out different ways to code, I consulted a colleague who shared her practical process of creating a table in a .doc to organise information. I adopted her sensible ideas and created my own simple system (Figure 6). Immediately, this bit of order was reassuring and better ensured consistency.

Q# | P#	(Q)Question or (P)Participant transcript	Categories	Themes	Comments

Figure 6: Script column headings (Parce, 2019)

Open coding was carried out by repeatedly scanning interview transcripts and conducting line-by-line analyses (Creswell, 2013). Transcripts were read chronologically by speaker within each interview group transcript. After several iterations of reading, listening, fixing transcription errors, and re-reading texts, I started hearing similar words, phrases, and ideas. For example, participants expressed they experienced many modes of learning through their interactions with horses and equestrian activities. Repeated concepts began to emerge which included continuous learning, learning from coaches, trial-and-error, learning by doing, learning through mistakes, learning with horses involves all your senses, learning adaptability and coping. I entered these various nodes in the ‘Comments’ column for each interview transcript (an example appears in Appendix E). As more data was analysed, more codes were created as reoccurring themes became clearer (Bell, 2010). Sixty-two key elements were extracted from this process and translated manually in a notebook (a sample page appears in Appendix F). When I was satisfied that enough codes were created to capture individual experiences, I began to iteratively group them into broader themes.

This meant I next leaned on axial coding to help me decide which of the sixty-two codes were most important (Saldaña, 2016). In subsequent reviews, I concentrated on finding stronger patterns from the sixty-two nodes. The nodes resonated with what I heard from initial interview participants. To help validate emergent themes, I compared data across initial and main study group transcripts and notes. Filtered themes shared a common essence, language, character, or experience. Drawing connections between related ideas and bringing them together into categories became more and more refined in each iterative review. As themes emerged, they were manually labeled and numbered in a notebook which helped me to stay organised (see Appendix G for sample pages).

Thirteen broader themes surfaced through this process of constantly shifting through transcripts to discover overlaps and commonalities, a benefit derived from deeply engaging in the process of inductive coding (Saldaña, 2016). These thirteen themes were entered into the 'Themes' column to the left of 'Comments' (Appendix E). During this phase, I revisited the full data set checking primary and secondary data to ensure groupings of like information were contextualised and to clarify my understanding of participant accounts (Duffey, 2010). In this way, I triangulated the data, adding rigour and trustworthiness to the process of analysis (Patton, 2015; Saldaña, 2016).

Finally, each transcript was attended to again, handwritten notes were taken, and my brain was stretched to distill and extract larger categories. I asked myself, what sounded familiar among the 13 themes? What ideas supported or challenged literature I had read? Which themes supported or challenged my research questions? Engaging in a continuous cycle of data analysis helped me uncover six high-level concepts which were recorded in hand-written notes (Appendix H), further analysed, then entered in the 'Categories' column of the transcript table (Appendix E).

An example of how transcript comments were analysed will help illustrate the above process of coding for one of the conceptual themes, 'Relationship with horses' (a section appears in Appendix E). During the open coding phase, I quickly noticed a common pattern. Participants across groups spoke frequently about a lifelong interest in horses, their love of horses, feeling connected to horses, and how they communicated nonverbally with horses. These ideas were mainly in response to 'Why Horses?' or 'Tell me about the experience behind the photo you provided?'. A strong draw to the tactile and affective nature of horse-human interactions was also voiced in other areas of the interview, such as in responses to, 'What do you learn from your interactions with horses?'. I began to realise these reoccurring ideas formed a large category. As a result, I was curious how often the initial nodes or

‘Comments’ occurred within the existing six main themes. I tabulated the ‘comments’ for each of the Irish held interviews, a type of coding borrowed from documentary analysis (Duffey, 2010). Ideas around ‘relationship with horses’ were by far the most frequently discussed (as seen in Appendix I). This was a large category which encompassed comments relating to lifelong involvement with horses, multi-species communication, and trust. By relying on my created form of inductive coding, I carefully filtered this large data category by finding redundant codes, moving ideas into other categories, and eventually reordering thematic concepts, described next.

It is important to note that towards the end of the research process, I took another dive into the whole data set to seek deeper themes and check the reliability of what had been drafted in the Findings chapter. In this later process, I conducted cross-case analyses within the primary data set which meant I examined responses to each question between speakers and between interview groups (a sample page appears in Appendix J). As a result, the six categorical themes (Appendix H) were reduced to five (listed below). Through this later-stage contextual analysis, I discovered the ‘personally rewarding’ category was strongly related to ideas within the ‘overcoming’ category and the two themes were better together than apart. Therefore, the coding criteria and process I created resulted in five conceptual/thematic descriptions. The five thematic findings which will be presented and analysed in chapter six are:

1) Relationships with horses are built over time; they form the foundation for meaningful horse-human interactions, according to all participants.
2) There are numerous ways people learn when interacting with horses, according to all participants.
3) Different ways of educating exist within the horse world which appear to be meaningful and connected to real world experiences, and often differ from traditional schooling, according to all participants.
4) Horse-human interactions help develop transferable life skills. The transferability can occur from one horse experience to another and from horse-human interactions to other aspects of life, according to the majority of participants.
5) Personal rewards arose from horse-human interactions which gave all participants a sense of satisfaction.

Chunking the large amounts of text-based data into broad ideas and then central themes allowed flexibility. Findings moved beyond description ‘toward interpretively integrating parts of the data’ (Boeije, 2010, p. 153). This process was vital to understanding the data from an

interpretive, inductive coding process and helped make material more accessible, a recommended approach (Bloomberg and Volpe, 2008a). This chapter discussed how an integrated methodological research approach was adopted as participants were engaged, data were collected, analysed, interpreted, and presented. Methods were inductively selected, underpinned by ethical concerns. Data interpretation and analysis were embraced as a layered procedure which aimed to help insiders and outsiders better understand the impact of horse-human experiences on experiential learning (Ellis et al., 2011). Through these experiences I had ongoing conversations with myself (Berg, 2004). A lot of learning was going on while I was interacting with horses, cleaning stalls, riding out, or simply walking around fields. Reflections on the data collection stage follows.

A reflective critique

This *Jumping the fence* chapter explained how theoretical perspectives discussed in chapter four were put into flight so raw data were translated into thematic findings considering the research questions. In real life, qualitative methodology seemed haphazard at times. I learned to appreciate the flexibility and creatively this allowed, although it differed from the more linear, quantitative approach undertaken during my masters research. I utilised various techniques to understand how to implement the research design including trial and error, self-directed learning, reflection, scholarly conversations with authors, peers, and mentors, and rhetorical dialogue with horses. A reflection about methods in action follows.

Amidst learning how to do research in real life, a personal transcription error comes to mind. As stated, using Happy Scribe to create initial transcripts had its pluses and minuses. After one of the group interviews was transcribed, I began the task of listening, finding and righting automatic transcription errors, listening, fixing ... I listened to a participant in one section with my transcription on the screen and had difficulties understanding his accent. Happy Scribe had translated a few of his statements with several errors. On my first ‘fix’ I corrected the errors, or so I thought. On subsequent listen and fix sessions, I stopped the audio, rewound, read the transcript, listened hard, and rewound again to ensure the transcription was accurate. Analysing my word-for-word coding, I realised I had omitted words he said or inserted words he didn’t say. Eventually I caught my mistakes. The meaning of those few lines became clear and they were almost the opposite of what I had first ‘corrected’. The experience reminded me how fast the brain fills in letters or words during reading, listening, and learning which occur without our conscious awareness (Sprenger, 2013). The process

of learning through doing the research had positive impact. As a result, I listened more attentively while transcribing, aware that I might fill in words or omit words during transcription based on experiences, perspectives, or my brain switching syntax due to fatigue.

Complementary to these experiences were reconnections to kinetic learning techniques, as described in chapter two. Experiences during the data management and analysis phase were evidence I made sense of the data by creating mind maps, using tables, reflecting-acting-reflecting, and producing a creative yet practical data analysis video for a workshop literally 'in the field'. A reflection from that video appears at the end of chapter seven. Embodied learning was a cornerstone of who I was. From multiple attempts at transforming methodological theory into actionable methods, I interpret that many learners are like me. Learners yearn for a socio-culture integration of mind, body, and emotions and thus this study's methodological chapters can be used to further how we understand holistic ways of learning from experiences.

Chapter 5 conclusion

An approach to living the research confirms this study's deliberate incorporation of experiential learning as both methodology and method. Being a reflective, experience based Curiositor drove the study design. As underscored, an interpretive qualitative study design was appropriate for this study (Merriam and Grenier, 2019).

In the sixth chapter, findings will appear in an organised presentation approach with thematic findings purposefully labelled with subheadings to assist with accessibility (Bloomberg and Volpe, 2008b). Findings will be presented through a mixed style of writing and will include first person quotes from participants, personal observations and reflections, and photographs (Merriam and Grenier, 2019). A *presentation approach* (Bloomberg and Volpe, 2008a) helped me develop and communicate a deeper understanding of the data and best addressed research questions.

It is critical to remember that experiences with horses are inherently multi-faceted and interconnected. As a result, it would be uncharacteristic to view study findings in isolation. Although thematic findings will be discussed in five sections, there are overlaps between ideas as expressed through participant quotes and my interpretive analysis. Findings will be

synthesised to create a modest body of evidence that horse-human interactions impact individuals during everyday learning and living in horse world communities.

Chapter 6 – Findings and Analysis | Landing

'Riding a horse is not a gentle hobby, to be picked up and laid down like a game of solitaire. It is a grand passion.'

Ralph Waldo Emerson (The Arena Media Group, 2022)

Image 22: Bay horse with rider, Dublin Horse Show. Photo by Mitch Hodge on Unsplash

Introduction

This research examines horse-human interactions to discover what impact whole-body experiential learning has on adult learners. The study seeks to understand how these experiences might add to experiential learning knowledge to encourage movement in education beyond the And/Or divide and towards fulfilment for learning and life. The purpose of this chapter is to discover what was unearthed through the data. Data were field notes gathered from focused interviews with twenty-four participants, and included an experiences journal and audio notes, as illustrated in Figure 5 on page 114. Gaining insights into these phenomena may help learners and educators understand the impact of holistic and integrated horse-human interactions on the experiential learning process. The contribution of this study to experiential learning knowledge is built on the presentation, interpretation, and analysis of its findings. The purpose of the chapter is likened to *Landing*, the jumping phase which brings horse and rider back to earth after the in-flight stage of going over a fence (Image 22). Significantly, it is envisioned that data will uncover fresh perspectives on

experiential learning, shown through a presentation approach (Bloomberg and Volpe, 2008a).

The following sections present the findings in five thematic concepts. Each theme contains many individual experiences. Individual participants' comments on their own would have very little meaning to the reader unless they were grouped into relatable pieces, known as chunks (Bell, 2010). From participants' re-telling of interactions with horses, a collection of experiences was formed. Integrative and collective approaches were concepts vital to this study's foundation on experiential learning theories, summarised on page 88-89, and social constructivism theories, mentioned on pages 108-109. Data were collected, systematically organised, transcribed, read, listened to, and revisited multiple times to ensure accuracy and deeper reflection, as detailed in chapter fives, pages 132-133. Through this process, raw materials were translated into digestible information (Berg, 2004).

Conceptual/thematic findings will illustrate aspects of the social, interactive, and interdependent learning environments that exist within the horse world. Crucially, to understand the five themes, one needs to understand their combination. An integrative approach to analysing themes parallels the theoretical premise of this study that experiential learning integrates the whole person (Dewey, 1938). Joining who the person and horse are as individuals (aesthetics) is integrated with reflective doing and knowing (Quay and Seaman, 2013). Most participants, as the data will reveal, kept relating their learning experiences and learning situations, skill transferability, and personal satisfaction to aspects of relationships they formed with horses. Thus, while most quotes appear only once, a few cross thematic sections because the same quote highlights different aspects of an experience. For example, Gary's quote on page 146 relates to his learning and finding two, and also appears on page 163, because his experience reinforces concepts of confidence which falls under finding five. Inserting quotes in this way is purposeful and highlights the integrative nature of horse-human interactions and explains the cross-case analysis design. Five conceptual themes discovered in this study are connected to what research question(s) each addressed, shown below in Table 2.

Conceptual/Thematic Finding	Research question(s) addressed
1) Relationships with horses are built over time; they form the foundation for meaningful horse-human interactions, according to all participants.	Q1. Why are adults involved with horses? Q2. How do horse-human interactions relate to experiential learning?
2) There are numerous ways people learn when interacting with horses, according to all participants.	Q2. How do horse-human interactions relate to experiential learning? Q3. How might any educative experiences which arise from horse-human interactions impact adults?
3) Different ways of educating exist within the horse world which appear to be meaningful and connected to real world experiences, and often differ from traditional schooling, according to all participants.	Q2. How do horse-human interactions relate to experiential learning? Q3. How might any educative experiences which arise from horse-human interactions impact adults?
4) Horse-human interactions help develop transferable life skills. The transferability can occur from one horse experience to another and from horse-human interactions to other aspects of life, according to the majority of participants.	Q2. How do horse-human interactions relate to experiential learning? Q3. How might any educative experiences which arise from horse-human interactions impact adults?
5) Personal rewards arose from horse-human interactions which gave all participants a sense of satisfaction.	Q1. Why are adults involved with horses? Q2. How do horse-human interactions relate to experiential learning? Q3. How might any educative experiences which arise from horse-human interactions impact adults?

Table 2: Five conceptual/thematic findings paired with research questions addressed

From an organisational standpoint, interpretations and analyses are presented at the conclusion of each theme. Finding 1 interpretation and analysis appears on pages 156-157; finding two on pages 180-182; finding three on pages 195-196; finding four on pages 213-216; and finding five on pages 225-226. Interpretations of the five central themes will be linked to study's central scholarly pillars of experiential learning, learning out-of-doors, and multi-species interactions, detailed in chapter three. The purpose of this interpretive approach was to make sense of the data, which was worthwhile because it enabled me to make sense of the unknown (Ryan, 2015a). Data gathered from conversations was filtered through my lens of horse-human experiences and socio-cultural background. I compared my interpretations of the data through internal cross-case analysis amongst study groups, discussed on pages 138-139, 143. I also compared my analyses with other studies, as will appear in each findings' interpretation and analysis sections referenced above. These processes were important to confirm, contradict, and allow space for surprises through reflection and questioning (Bloomberg and Volpe, 2008b). I attempted to comprise what was reasonably warranted from participants' experiences and, as such, the findings are not

meant to be generalisable. Instead, I hope readers will appreciate the relatability of this study's findings.

Finding 1 | Theme: Relationships with horses are built over time; they form the foundation for meaningful horse-human interactions, according to all participants.

> *'My middle child, she has always had a strong connection with animals so if I couldn't catch a pony, if the pony was running off [away] from adults, she would have the pony in no time. Since she was little she was helping me train ponies, she was just amazing with the ponies.'* (Maya) (Image 23)

Image 23: Maya's daughter with Kerry Bog filly (Fortune, n.d.)

This finding is purposefully presented first because building relationships with horses emerged as a central theme confirmed by all participants and was viewed as foundational to a multi-layered experiential learning process. The first finding primarily addresses the first research question, 'Why are adults involved with horses?'. The finding also provides insights into the second research question, 'Do horse-human interactions relate to experiential learning?', as seen in Table 2. Topics covered under this theme include passion for horses and an early love of horses, as beautifully seen in Image 23. Other ideas which surfaced included the affection of horses and their sensitivity to humans, the responsibility of caring, the importance of trust, and multi-species communication.

The significance of placing this finding first will become evident from discussions which follow. All participants confirmed that a passion for horses helped them form bonds with horses which motivated continued involvement. This passion (Theme 1) flowed into opportunities which converge with other themes: learning through experiences with horses

(Theme 2), learning in different types of equestrian organisations (Theme 3), developing transferable skills like social competency (Theme 4), and feeling personally satisfied (Theme 5). These ripple effects are further evidence of the interwoven nature of horse-human interactions, adding clarity to how findings are presented in a similar, integrated manner. Relationships with horses took on different meanings for different people and were accounted for in different ways. Subsequent subsections contain examples which will show how relationships with horses were experienced.

Image 24: Lisa hugging Peda, Bandalero Ranch, AZ (Parce, 2015)

Passion for horses is central

'Horses are great!' (Lisa) (Image 24)

All initial participants and the majority of main study participants became involved with horses from a young age. Some expressed their early passion for horses by sharing the following.

'I grew up in London and horses were not very easy in London at all. But my sister was very keen to ride, so we both started taking riding lessons, once a week … My sister actually got a pony which was a bit difficult for me because I didn't get a pony and she did. [Involvement with ponies] was very good for my soul, I think, looking back… When I had [my daughter] we actually got a horse and I got back into it then.' (Joan)

'We're all doing it because we love it.' (Gary)

'I started riding when I was four, my granddad put me up [on a pony].' (Katie)

'I grew up on a farm where my mum runs a livery yard. I've always been around horses. My mum would be brilliant with horses … I just love being around horses and more and more I find that I'm kind of listening more to the horse.' (Maya)

'*I started riding when I was five, probably because my brothers and sisters were riding … horses were always at home*.' (Sofia)

'I came from a horse mad family. Been horse riding since I was in diapers on a stuffed pony and got my first pony when I was two years old.' (Kai)

'Horses have been in the family for generations.' (James)

'Around horses since childhood … on ranches then I got a quarter horse when we had a 10-acre ranch.' (Damien)

Having a passion for horses was deemed essential, and most participants talked about the high level of dedication necessary to sustain equestrian involvement. Concepts of passion and dedication will appear across thematic findings. The majority of participants conversed about the time required for bonding with horses, as reflected below.

'It does take time, to get used to every single horse … no horse is the same.' (Ellen)

'When you kind of get to know some horses.' (Ellen)

Katie expressed her experience forming bonds with horses:

'I started about eight and I was doing Camogie as well. And then my riding lessons starting clashing with the hurling. And I just preferred the horses, you know, the hurling was just boring to me. With the horses you just learn, and they just seemed better fun. And, you know, if you talk to them [the horses] like, you know, talk to them. And I had a good bit of experience riding ponies now before I came here … you kind of, I know this sounds a bit like sappy and so forth, you get these bonds with the horses … some horses you just click like, it's just about fun and the kind of in between, like the balance.' (Katie)

Sofia credited 'good ponies' (considered trustworthy and well behaved), as they made it easier to form connections. In the following reflection, she talks about the impact good ponies had on her interest to stay involved.

'I think 'cause I was quite fortunate that I had quite good ponies every time; they were quite good … I kept having new aims. I'm quite competitive, so I kept doing that. All the ponies I've had have been so good, so they kept inspiring me to do it more and more.' (Sofia)

Other participants described their interest in horses as being part of who they were:

> *'I'm horse mad… I wouldn't be a super rider, but I'd be very good with gaining their trust…'* (Maya)

> *'Horses are a way of life because you are constantly thinking about horses because they are alive, part of the family as living beings.'* (Finbar)

Other participants stated they loved horses and horse activities for the thrill and enjoyment:

> *'I love it [racing]. I like the speed of it. I really enjoyed it, so I like the thrill of it, the ponies just go for it. It's like putting a big engine into a really small car and then there's a lot of go on the gas, and they like, go.'* (Hannah)

> *'I get pleasure, adrenaline, love … and they communicate affection.'* (Mary)

> *'Going fast … when you're going full clip, which is unreal, there is no better feeling, really than going at that speed.'* (Matthew)

When things go well with a horse, your mood improves, you can deal with a challenge, like cold weather, as Matthew stated:

> *'In the winter when it's cold, then you ride a horse and everything goes well, you feel a bit better about the cold.'* (Matthew)

Some participants expressed their strong interest in horses influenced decisions to pursue a career in horses and differed from how they felt about school.

> *'I actually finished school, I have my Leaving Cert and all. I wasn't into school, but I done it just because, not that I was forced but it was the better thing to do. And then soon as I finished school, I came across this [RACE] and obviously lovin' horses and light enough to go riding horses so I just decided to come here on trial and got through and now we're nearly at the end of the course which is amazing…'* (Matthew)

Another participant also had a strong interest in horses but a contrasting school experience:

> *'I did well in school, but I just had no interest in it. Horses were all I had interest in really.'* (Gary)

Several female participants claimed the reason they stayed involved with horses through their teenage years was because they chose horses over cars or relationships. As one participant remembered:

> *'When I was 16, I went out car shopping and came home with a horse. My parents are not horse people and were hoping I would outgrow this phase. Once it's in your blood … a lot of people outgrow it, but I never did. I got through the phase of when girls get into boys and stayed with horses.'* (Riley)

Even if participants weren't directly exposed to taking care of and riding horses while growing up, they had an early interest and their fascination with horses was often influenced by family members. Although these early relationships were more distant, these participants created connections with horses by attending races and hunt meets.

> *'Before I came here [to RACE], I would have been around horses, but I wouldn't have been riding. My cousins would have been big into hunting I would always follow the hunt around. Actually, not hunt myself. Even watching racing at home with my father. Like horse racing would have always been in the house. No one in the house actually rode before. I just always like, I loved horses.'* (Colm)

> *'I always wanted to be a jockey.'* (Daniel)

Some became involved with horses in their teens through educational organisations like Pony Club or RACE. Others encouraged their own children to be active PC members and volunteered at PC events while two participants were impacted by a friend's parent who was involved with horses for therapy. The following excerpts reinforce these ideas.

> *'My mom had been in PC, then I went to the same PC, I loved it.'* (Maya)

> *'You have to put the horse first. With PC, first you have to take care of the horse. So you don't just throw the reins at somebody else. Parents row in too.'* (Joan).

> *'And my other children as well, they would have done everything [in PC], particularly they did tetrathlon. Tetrathlon is very competitive, sporty, horsey. They didn't even realise it … they were going so fast. But they love it, you know.'* (Hallie)

> *'I grew up with a horse crazy mother who didn't have access to horses as a kid. When she got a horse, she didn't force him upon us. I happened to spend the weekend with our veterinarian's granddaughter and did horse riding and that was the*

beginning of the end. At that point my mom got me a working student position at a lesson barn, and I've been riding horses since then, since I was 10 or 11 is my guess.' (Michelle)

'My best friend in kindergarten, her mom has always been in a wheelchair, she was paralysed when my friend was a year old and has not walked since. She used horses as therapy. My friend and I went out to watch a therapy session, her mom was a very driven person. We went out and watched the lesson and after, when they were cooling the horses out, they let us sit on the horse's bareback when they were walking around the arena and that sold me. I wanted riding lessons after that. For my sixth birthday, my parents got me 10 riding lessons.' (Riley)

The next subsection will provide examples of another aspect of building horse-human relationships, the affectionate nature of horses and their sensitivity to humans, referred to as mirroring in chapters one through three.

Horses are affectionate, sensitive, and highly communicative

Image 25: Maya with dun pony (Fortune, n.d.)

Participants reported their horse-human interactions were more meaningful because an affinity was created between species. Maya shared a photo which showed the special connection between her and a dun-coloured pony (Image 25).

Horse sports are different than most sports as they are uniquely experienced with an animal, one who shows affection, has a mind of its own, and is incredibly sensitive to humans. In the discipline of dressage, described as ballot on horseback, a great deal of sensitivity is needed because the goal is to perform a series of unified movements through subtle, almost unseen communication queues. Highly nuanced levels of communication require trust and sensitivity only developed through the process of bonding over a period. Horse and rider come to sense what each other is thinking, as illustrated in the next story.

'The longer you have a horse the more you realise what they're thinking. Like Harry, he's quite nervous and he gets very fresh if he thinks, if I try a new Dressage move and he doesn't think he's doing it right, he will start to freak out. It's just a matter of knowing him, the more I know him the more I tune in to what he's thinking and then if I do something, I have to stop, give him five minutes, let him think it through. I think it's important, sometimes I keep doing and keep doing and that just wouldn't work; he'd get more and more frustrated, I'd get more anxious because he wouldn't do it. It took a while to get to know him … I just have to step back in that situation, and he just does too because he gets so concentrated what he's trying to do that he gets frustrated.' (Sofia)

Daniel's account provides insight into one reason he wanted to be a jockey. He grew up on a farm and shared his thoughts about the difference between horses and cows:

'I wanted to be a jockey. There was such a difference between horses and cows. I grew up with cows all my life. You just really don't have the same bond, you know, and the horse kind of shows you a bit of affection… like they really know you're looking after 'em, compared to the cows.' (Daniel)

Another example of the affection and sensitivity of horses was in an experience retold by Mary:

'I used to ride this chestnut filly, she's like a redhead woman. Some days the filly would communicate, 'I really don't wanna go near you today'. I know she's gonna try and drop me like, danger. They're so aware of how you're feeling. Look if you're in great form, I find your riding goes up better … If something's bothering you, [she] would pick up on it. So [she's] real affectionate as well… to have a friend, you have to be a friend as well … so they can be great friends as well … I get great satisfaction out of interacting with them … you're looking after something else; you're minding somebody else.' (Mary)

However, participants noted that horses can have different reactions to different people as illustrated in the following statements:

'It's amazing that this huge animal lets us work with them.' (Lisa)

'Yeah, they could toss you off at any time they wanted.' (Daniel)

'They can sense when you're nervous, very very fast. On very tense days, it's worse [referring to how a horse might behave]. If you go into the gallops tensed like that, they're going to not take any notice of the reins.' (Colm)

'Some people don't realise; they have a mind of their own. If they want to do something, they do it.' (Ellen)

Similarly, participants shared the following in a conversation about the sensitivity of horses and how that impacted interactions.

'It's only a game [talking about being involved with racehorses] if you love it.' (Katie)

'If you're afraid then there's no point in doing it.' (Matthew)

'Because horses can feel, the horses know, and they know when they can take the mickey out of a person. One person could get up on a horse and they take the absolute mickey out of them because they know they're nervous. And the next day someone who's confident on the horse, the horse wouldn't do anything because it knows that it wouldn't get away with it. So, you just need to be strong.' (Ellen)

Participants shared that horses may protect their riders in dangerous situations out of self-preservation or may want to ditch their riders and flee when unsettled. Likewise, some related that horses were incredibly aware when interacting with children and people with lower levels of physical mobility or mental abilities, seeming to protect the more vulnerable. Other participants reported that the same horse who may perform angelically for a therapeutic riding session may modify their behaviour with a more seasoned rider, testing the knowledgeable and physically capable rider. The following accounts illustrate these points.

'They do respond to you. If you put somebody on a horse who is not a good rider, even my horrible white horse – I love him dearly. You put somebody on him who is less able, he will behave impeccably he won't try anything.' (Joan)

Maya re-told a lovely story about a 'little boy with autism who was doing therapeutic riding'.

'…and we had the best therapeutic riding Connemara ever, she was just amazing, but she was really grumpy on the ground. But she loved him. I wouldn't let kids brush her in case she'd lift the leg, putting ears out. But when he'd go to feed her, he'd stand there, she'd share the food with him, he'd have his little hand, tiny little hand in

the bucket, she'd let him by everywhere around her. Because he was autistic, one day he just grabbed her and squeezed her hind leg, he was ready to get on. And not a bother on her, ears forward, she absolutely loved the little boy.' (Maya)

To form a bond with these sensitive animals, a form of empathy is required:

'They are nice animals. You kind of forget how intelligent they are, like so delicate they are too.' (Katie)

'It's not like you are driving a wheelbarrow. I mean you're sitting on that horse that's having thoughts and everything, and you need to just understand what they're thinking. Actually, you need to put yourself in their position and sometimes to think, oh, what does that horse want from me, because not every horse is the same.' (Mary)

Communication within horse-human relationships was discussed regularly by participants. Horses have highly sophisticated communication abilities due to their social structure as herd animals, and their status as prey animals. For example, equestrians need to learn how to use techniques, known as the use of natural aids (e.g., seat, legs, hands, voice) and artificial aids (e.g., crop, spurs), to successfully communicate with a horse while under saddle. Likewise, horses adjust to the various ways people behave. Participants reported that learning to read horses' queues was like learning a different language, which took time. Eventually, the two species could understand each other, although sometimes, as humorously illustrated in Image 26, mutual understanding occurred after an incident. The process of cross-species literacy was assisted by the horses themselves because horses give constant feedback. This concept was brought to life by Joan's retelling of an incident with a grey horse who had his own way of communicating.

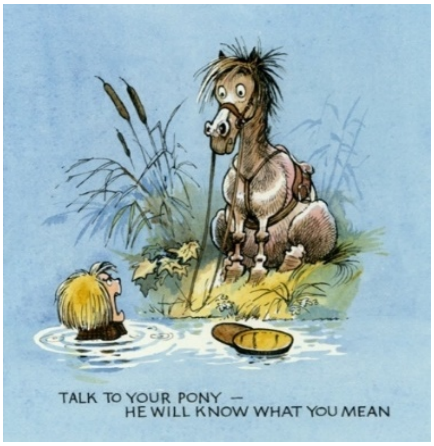


Image 26: Talk to your pony (Thelwell, n.d.)

'They pick up the vibe … the horse has to; it obviously can't speak although the grey comes pretty close. I mean they have their way of communicating and you have to do your best to listen … I remember one time when he was in the trailer, he was pawing the ground a lot. I couldn't work out why he was pawing the ground and then I thought, okay, what's happened is that he's eaten hay out of his hay net and a lot of it has fallen on the ground and he

couldn't reach it because he was tied. What he was telling me was, 'you silly cow, would you ever pick up that hay and put it back in the hay net so I can eat it?' So that's what I did, and he was fine. I was being a bit thick there and he was becoming quite irritated with me, but I finally got the message.' (Joan)

Ideally, both species work together to achieve mutual understanding, a critical factor shown within this first finding about building relationships with horses. All participants who talked about bonding were convinced that it isn't possible without trust. An overview of trust as it relates to relationship building with horses is discussed next.

Trust is massive

Participants explained that a process of bonding with horses included the process of developing mutual trust. Trust as a concept is repeated across themes as it is a part of relationship building, learning, educational situations, life skill development, and personal reward.

'Trust is massive.' (Hallie and Joan)

Trust could be developed through patience and proper training. Long-term trust building was required to undo a horse's baggage, often created because of negative experiences with humans. The following account explains this idea.

'I've had several ponies. She was in the field for several years because we couldn't get near her. I worked with a small pony pen, and she was so terrified. I could touch her on her bum but couldn't get a hand near her. Once I started working with her, things started happening quite quickly. She can be a bit nervy, but she is so relaxed with traffic. It's more people, hands, getting on sometimes … she wasn't handled. I don't know what

Image 27: Multi-species enjoyment, Maya with goats and pony (Anonymous, n.d.)

happened as a baby, something had happened there. When I went to get her, the guy had amazing horses down the country, but he had to chase her into a cattle crush to get a headcollar on her. The box had to be reversed up to an archway in a yard and she had to be driven into the box because he never gone near her. I don't know how he picked her up. He hadn't bred her himself. All his other horses were walking up to him and in lovely condition, but she was just different. I've fallen in love with her. Then I have this one, one of the Kerry Bog pony's babies and he's such a dote with the goats.' (Maya) (Image 27)

An account of Daniel's experience with a racehorse illustrates the challenge of rebuilding lost trust. A horse who had no previous issue being bridled, came back from being under someone else's care with a new, bad habit.

> *'Before they left, they might have stood there and did nothing where now … he's trying to bite you or he's biting the reins. You go to put the bridle on and he's throwing his head up … he won't let you near him … I can remember riding that horse and he would put his head up in the stable and he wouldn't let you near his ears and now he'll just stand there and do it for you. In the space of about three to four weeks. It's really cool. It's like you just have to draw on something … so you feel like he trusts you. You're not going to hurt them, then you can feel a connection going … You need that, a horse's trust.'* (Daniel)

Maya described her love for a pony who came to her with trust issues which were resolved:

> *'Chocolate couldn't be touched … she took several months to be captured in the field. This is when Chocolate suddenly decided to trust me, I got the saddle on, the bridle on … Thinking of doing a bit of dressage with her. This is her in Kilruddery, not so long after. And she's so calm, so lovely. She's my girl … I've fallen in love with her.'* (Maya)

Another example of the importance of trust is explained below. Joan's experience illustrates the process of trust building and the importance of paying attention to how a horse is reacting.

> *'I was interested in what Maya was saying about listening to the horse because that is something I'd like to try and do as well … the coloured one is really obliging; he's really really obliging but he was really, really nervous. He used to huddle at the back of his stable, now he follows me like you would with your Connemara. He just you know, to get that trust from him now is a really lovely thing to have. So that's*

something, you feel pleasure as a person when you have the trust of an animal.' (Joan)

Finding 1: Theme interpretation and analysis

This finding was purposefully discussed first because, through data analysis, it became clear that all participants valued the relational aspects of interacting with horses. Relationship building was linked to passion, affection, communication, and trust. All participants related that forming positive relationships was motivated by a strong and usually early passion for horses. Hester claimed that as an ageing female equestrian, the importance is on the 'relationship with the horse' and Eve shared, 'I can't imagine life without a horse' (Davis et al., 2016, p. 347). Overwhelmingly, all participants expressed the process of developing relationships with horses was meaningful.

Relationships with other living things are integral to who we are as social beings. Learning how to create mutual trust with horses was seen as an enjoyable opportunity to bond with another living being, reinforcing the general concept of biophilia, put forth earlier in the thesis. Being inclined towards someone or something means that person, animal, plant, or thing matters. Relating to others in our everyday lives can be a source of joy (Smith, 2004; Noddings, 2013).

Learning is part of who we are. Interpreting participants' accounts, I inferred relational aspects within horse-human interactions strongly contributed to overall enjoyment with horses which, in turn, motivated learning (discussed more in theme 2); improved the environment when learning from others (which will be seen in theme 3); increased responsibility (a life skill, which will be further discussed in theme four); and enhanced personal satisfaction (discussed more robustly in theme five). For some equestrians, relationships with horses empower learning and help enhance functioning (Bass et al., 2009).

Data analysis revealed forming relationships with horses was likened to the process of experiential learning. Relationship bonding involved observing, trying, making mistakes, reflecting, trying again (Kolb, 1984). Significantly, patterns of data which emerged about the impact of having passion for horses was linked to aesthetics, part of an experiential learning triad explained in chapter three (Dewey, 1938; Quay and Seaman, 2013). Thus, participant experiences of forming bonds with horses are indicative of what other studies have revealed, developing relationships within the learning process is important (Dewey, 1938, 1958; Higgins and Nicol, 2002; Allison and Wurdinger, 2005; Hausberger et al., 2008; Maurstad et

al., 2013; Noddings, 2013). Participants across several groups echoed a need for thinking things through and described a type of reflection practiced by horses and humans. As shown in chapter three, reflection is critical to a holistic process of learning through experience. If horse-human experiences are to become educative, we must consider the impact on the whole person and take the horse into account as an equal partner.

Relationships with horses happen in communal settings, they are not isolated endeavours. The concept that repeated sharing of experiences within communities increases action and momentum in the learning process resonated with participant accounts (Freire et al., 2014). This small action may be significant to extend experiential learning and build up the layers of experience through relationship-based connections. The impact of social-environmental communities (Share et al., 2012) and the influence of others' experiences on our own experiences (Boud et al., 1993) are examples of the importance of relationship building. Data revealed interacting with horses could be informal, loosely defined, and highly personal, and can thus be linked to 'everyday learning spaces' and 'interest-based spaces' (Illeris, 2009). Participants' accounts of relational experiences help move this study's contribution beyond my individual experiences, as discussed in the second chapter, becoming part of a wider perspective about the social and relationship aspects of horse-human interactions.

Finding 1 conclusion

From analysing participant accounts alongside literature, I uncovered evidence that the development of horse-human relationships is dynamic, meaningful, and motivational. The process of developing bonds with horses creates a collection of holistic experiences for equestrians and was shown to be akin to the experiential learning process. Concepts related to relationships building with horses are closely linked with the dimensions of social learning with its critical components of bonding, communication, and mutual trust. It appears much can be learned about the experiential learning process from the passion humans have for horses. Knowledge can be gained about learning through experiences when relationship building ensues from a passion for horses. During horse-human interactions, humans can also learn from horses who demonstrate sensitivity and finely tuned communication abilities. Thus, it is appropriate that the next theme examines different ways of learning.

Finding 2 | Theme: There are numerous ways people learn when interacting with horses, according to all participants.

> *'I think as well, riding out, it's just the best way ever to clear your head.'* (Ellen) (Image 28)

Image 28: Early morning exercise, Ellen on bay horse (Anonymous, n.d.)

The second thematic category is concerned with the numerous ways people learn while interacting with horses. Significantly, all participants experienced various modes of learning during horse-human interactions. Examples will be organised into subheadings which include first-hand or direct ways of learning by doing, how learning with horses differed from conventional schooling, motivation, and the value of learning in the outdoors, among others. Consideration will be given to the effects on learning through interactions with horses which are complex, risky, and unpredictable. Surprises about the impact of digital learning round out discussions within finding two.

First-hand experiences

Interacting with horses was expressed as a form of direct-learning, learning-by-doing, all first-hand experiences, according to participants. Some participants used these same words to describe their experiences, as seen below.

> *'Learning by doing.'* (Becky, Damien, Michelle)

> *'Learning with horses is doing.'* (Sabrina)

Some described their interactions as a type of learning process:

'As a process … a partnership…' (Siobhan)

'A learning journey.' (Becky)

'A journey of learning.' (Siobhan)

'Practical application is a must.' (Damien)

'Theory and practice.' (Becky)

Still others emphasised the physical aspects of horse-human interactions:

'Tactile.' (Sabrina)

'Use all five senses.' (Siobhan)

Finally, a comment about the experience of interacting with horses was interesting because she linked the physical 'doing' with a mental state, saying it was:

'A state of mind.' (Becky)

When participants had first-hand experiences with horses, they expressed they learned by 'actually doing it'. Most participants spoke about how learning new skills involved lots of trial and error, took coordination, and involved reflection, as described in the following accounts.

'I find I never stop learning and I've learnt so much from doing incorrectly.' (Maya)

'You're learning from getting run away with.' (Colm)

'I learn from mistakes.' (Sabrina)

'Learn by failing.' (Michelle)

'Horses, there's not like an exact method so I think in a class you'll be told to learn a certain thing but with horses it's trial and error and the more like something won't work, something else will. It's just a matter of you figuring it out yourself.' (Sofia)

'Just even thinking of teaching kids how to put a bridle on. You can't actually tell them or say, watch a video, and they learn how to do it. As you say, the role, all the ponies are different. They've got to get out there and try it, they've gotta try to coordinate their arms, grasp the pony's head, and watch what the pony's doing, too far down

and too far up and how are they going to control that, it's got to be, as Sofia said, trial and error.' (Maya)

'Oh yeah, my legs … used to be like water ... because … down in the barn you'd learn, the instructors teach how to literally get into that position. And you know, I suppose I used to put too much weight on my toes, let's say. You put your heel down as well, you might know. I used to not put my heel down too much and I was gonna get a bad fall; kinda have your heel out in front of you to stop you. I learned, eventually, a long time, too long.' (Daniel)

Learning with horses seen as different than learning in conventional ways

Several participants contrasted their experiences of equestrian learning to traditional schooling. Some stated that conventional learning seemed to involve being told what to do. Instead, they preferred to learn through direct experiences as evidenced below.

'Yeah, and sure they could tell you that in class, ah this is how you ride a horse or, you know, you're not going to know until you sit on it or you're never going to know until you sit on a horse. Like Ellen said, throwing the saddle on. Unless you do, unless you do it, it's as simple as that.' (Matthew)

'Because if you're in a classroom when you're sitting there and they're going, this is how you put a saddle on, they're kind of lookin'. But then if you're in a yard and you go, this is how you put a saddle onside, you just learn quicker. And you're going to learn to do it better.' (Ellen)

'Problem-solving, critical thinking skills, and hands-on learning is ongoing in barn experiences. That barn time equals hands-on time, constant opportunities to tweak but you don't have 100% control or influence because you're dealing with the horse. Learn by doing is my mode of learning and learn by failing. So handling learning in the classroom wasn't all that difficult in the traditional public school system. I made the traditional public school system work for me. I was a good student and able to handle learning in the classroom even though I preferred learning by doing out in the horse environment.' (Michelle)

'Experience with horses is very much hands on combined with theory. The classroom, in the majority of cases, is theory only. Horses are more like an apprenticeship. My personality is more content with hands-on learning.' (Finbar)

Early on Maya learned to work with horses using more traditional training techniques, later, she re-learned via natural horsemanship methods. She explains how the shift in techniques impacted her.

> *'What I've learned, I don't do it anymore. If I was in a bad mood and I went out to try and train the young pony, things were going to go terribly. Now I know when I'm in a terrible mood I'm not even gonna go out there because coincidentally, not that I'd be shouting or roaring at them, but they'd pick up on your intentions and your emotions and… I've really, I suppose, growing up with them and in livery yards, I would have learnt in a certain way how to do things, more traditional way, and then I learnt different stuff from natural horsemanship that does help me. We all know more about their psychology. I've learnt by so many mistakes, I've done things the wrong way and that's the long way around, on your own doing the work, trying to undo what you've done wrong. Now it's much easier.'* (Maya)

Learning from others

Complementing the preference for direct learning, several participants brought up the importance of learning from experienced horses and riders. Learning from others also appeared to be a technique which enhanced their ability to develop new knowledge and skills.

> *'You learn from experienced people who have done it all. The great jockeys make it look easy.'* (Colm)

> *'He [Ruby Walsh, Irish jockey] never looks like he's struggling on a horse or anything.'* (Daniel).

> *'I was riding in a racing yard for a few months … I didn't like school at all, so I was looking at coming here [RACE]. Then, I did my trial and I got in. And yeah, I feel, I improved a lot, I learned a lot here. Well, even position and stuff. You know, talking to all the other trainees and talking about position and what way you ride this horse and what way you ride this horse, you know, you kind of learn.'* (Katie)

Mary shared an experience about riding a horse in the yard after a woman, 'with golden hands' worked with the horse:

> *'In my yard, there is a woman, I don't know, I think she has golden hands. I have no idea what she's doing. But every time when I sit on a horse after her … I can ride it*

on Monday, and she will sit on it for three days and then I will ride it again, let's say Friday, [it] will be completely different horse. I don't know, what is she doing? but the horse is fixed. The horse is nice, the horse is good. No bad habits. I still, I'm trying to learn every single day from that person. But I don't know, I probably need years and years of experience, but I really admire her like what she can do. And she's riding very long [the reins are left looser or long, giving the horse more freedom]. Like the horse that I'm struggling holding, she's riding long. And she, you can't see anything. You can't see any problem with her at all like, how, how … just give me a bit of what [she's] doing.' (Mary)

One participant stated he got involved in learning while watching his wife's riding lessons.

'I enjoy watching her lessons and trying to figure out what the instructor is teaching. I like not knowing.' (Damien)

Motivation and interest in horses impacted learning

'I have no special talent. I am only passionately curious.' Albert Einstein (Einstein, 1936)

All participants spoke about differences in motivation that emerged from time spent working with horses compared with time spent in a traditional classroom. They felt learning experienced during horse-human interactions created stronger connections to real life and thus gave them stronger motivation to keep learning, all linked to their deep interest in horses. Learning was viewed as enjoyable and important, as evidenced by Hannah's smile (Image 29) and statements by Hannah and Siobhan.

Image 29: Hannah smiling while riding chestnut horse (Anonymous, 2018)

'You're interested and you want to know everything that you can do to be as good as

you can'. (Hannah) (Image 29)

'I enjoy starting from scratch or starting with a new, young horse.' (Siobhan)

The following thoughts are further evidence of a link between personal interest and motivation in learning.

'You'd want to be ['doing it because we love it' – from earlier quote, repeated here to provide context]. When you have a challenging horse, you want to be able to kind of settle it so that you can settle the horse and he'll [racehorse trainer] trust you more to ride the hotter horses… He can put you up on the good horses as well, if he thinks you can ride.' (Gary)

'You love the horses, so you're happy out there [repeated from earlier quote to add context] … You're sitting in the classroom, and you're not really interested in maths or whatever. Like even the horse related tasks, you kind of pay a bit more attention.' (Colm)

'Yeah. I mean, I would have been doing say Pony Clubs since I was five. And then two years before RACE I went to work for a trainer, and I was riding there, and I knew I need to improve. But I didn't know what I had to do to improve. So, I came up here and they were telling me in the barn I've been improvin'. And that keeps you motivated to learn more and do more things … done well in school but I just had no interest in it. Horses was all I had interest in really.' (Gary)

'I really, really want to do well in horses … So I stuck it out, like mucking out every day because I know that it's not all about just riding horses. They have to be mucked out, they have to be fed and stuff like that. Whereas another person that doesn't want it as bad as me, would have given up really, would have left the course [RACE] and stuff like that. But I just know that it's all [I] want. So ... you have to kind of get on with.' (Katie)

One participant seemed to have a different motivation, one based on her competitive nature from being a professional rider for years. Riley had a desire to take riding lessons from a particular instructor who focused a lot on theory. When Riley taught others as part of her job, she tried to help her clients focus on what they could do to improve in the present. Her reflections appear below:

‘I’m a very competitive rider, I don’t do it for fun, I don’t trail ride, and don’t use it as a stress reliever or for relaxation. I was a professional for years, so I think it gave me a good idea of what I don’t know and don’t like about instruction and the learning process. I get it has made me very loyal to certain types of instruction, so I don’t want to go out and take lessons from 20 different people and get 20 different opinions. I want to find someone I’m comfortable with, who focuses a lot on theory, that I can totally commit to what they’re asking me to do. Not that I’m not a professional [rider]. Even when I give lessons to others, I’m focused on … making sure that the end goal is not as important as what they’re doing right now.’ (Riley)

Several participants shared the opinion that non-horse people lacked understanding about the challenges of working with horses. The reflection below emphasises the strong motivation needed to stick with something that perhaps isn’t readily understood by others.

‘Well I do live up here but I'm from a different county. And you'd be telling lads at home, it's not just hopping up on a horse and, 'go on there', it's like you have to set paces, position, and all that craic, and [you have to hold them]. A lot of people think that, 'I am sure, that can't be, can't be that hard', or whatever.’ (Matthew)

‘You know, I remember last year, so I'm working with horses six years. Last year, my sisters were always like, "why all horses things, that's disgusting. Why are you doing that?" So I was like, “OK, just try to sit on a horse. Just try”. She sat on a horse and she was trotting for like 20 minutes without stirrups, of course, she couldn't walk after she rode. And then she was like, “OK, [Mary], I'm sorry, I'm not going to slag anymore because it is actually hard work and it takes a bit of strength and everything”. So I think sometimes people are saying, oh, you're just sitting on a horse, like you said, you're sitting on a sofa. It's not like that. You need to be always careful and paying attention.’ (Mary)

A motivation to stay involved with horses, as expressed by several participants, included the natural environment, the backdrop of their horse-human interactions. Values placed on learning in natural environments through horse interactions will be discussed next.

Learning in the out-of-doors

Learning with horses largely takes place in the out-of-doors. We share the natural environment with horses, as discussed in chapter three. The impact of interacting in such immediate ways with the environment unfolded in conversations. For example, taking care of

and training horses continues in all kinds of weather; it is an ongoing responsibility. Several more accounts support these concepts.

Ellen shared her experiences of going out early to feed and care for horses, even when she didn't want to get out of bed early in the morning.

> *'Some mornings you just don't want to get up out of bed, it's true. But once you're up and out, you're flying. Once you get to the yard [where the horses live] ... well it's grand like. You feel awake. Even if you're so tired, you just feel awake when you're outside and it's bright.'* (Ellen)

Three more statements explain how participants were impacted by the natural environment of horse-human interactions. The first experience also appeared in finding one and is repeated because it reinforces the impact of nature on this horse-human interaction.

> *'You ride a horse that you like, everything goes well, you kinda feel a bit better about the cold…'* (Matthew)

> *'You love the horses so you're happy out there in their environment.'* (Colm)

> *'You're actually doing it. You're not sitting there getting' bored, you're out[doors]'.* (Ellen)

Participants appeared to be more motivated to learn in natural environments than sitting still in a classroom. They were happy being active with horses in nature. The movement and being outside were important.

> *'Being outside in nature is something I enjoy from being with horses.'* (Becky)

> *'I learn attentiveness from being outside with horses versus inside.'* (Damien)

These are values I share. My reflections about movement and learning in nature were recorded in a voice memo after reading *In Praise of Walking* (O'Mara, 2020).

> *'…I haven't been able to get as much movement and exercise, certainly at the yard [where the horses are], even walking around, with back issues. It's been difficult. I think this is impacting how my brain feels and functions … I want to connect the importance of exercise and learning with another species, in this case horses, to how we structure learning in the classroom … the actual act of movement … can help me*

make more creative connections … It's so important, the outdoors, being around nature, the stimulation it gives our brain, the oxygen from the trees, the clean air, really for me is part of clearing the head … the act of walking outside … has correlation to benefits of physical and mental and brain health even more than walking in an enclosed corridor. Bring the nature in stronger, the natural landscape and interaction with animals.' (Parce, 2019)

Another participant added a similar sentiment by sharing an experience when she goes out on the gallops.

Image 30: Katie on bay horse (Anonymous, 2019)

'Go out on to the gallop, you're on your own. Like I know there's a string of people, but you're there, with the horse. It's just the best thing. You're just going around and there's no one at you. There's nothing. It's just the fresh air. Like it's the best thing ever to clear your head.' (Katie) (Image 30)

Image 31 beautifully shows Maya connecting with her Kerry Bog Ponies in the forest. After the interview, I received the following comments in an email which were connected to the forest experience:

Image 31: Forest connections, Maya and her ponies (Fortune, n.d.)

'I think they're so entertaining - they make me laugh, their love is unconditional, they enjoy my company as much as I enjoy theirs - the feeling is the direct opposite of spending time with my (very) challenging teenagers! I could be feeling stressed/ lost/ lonely/ disconnected/ anxious, all that goes, and it's as if everything is just right - just perfect. The more I learn about them the less I direct them - I wait to see what they offer - and the more amazed I am.' (Maya)

Learning to adapt

Experiences shared by participants illustrated the intricacies of interacting with horses who have individual personalities and who were also learning themselves. Like humans, horses need time to learn what we are asking of them; they need processing time. Being sensitive to different learning needs of horses and to one's own learning needs could reduce frustration for both species and positively impact interactions. Adaptability was needed by both species.

> *'Well, the horse is learning as well. That's another difference. You are schooling the horse and you get a great sense when you can bring a horse on, and it can do things it couldn't do before. Like my little coloured pony, he looks very ordinary. Yet, he can do canter pirouettes, he can do stuff. He enjoys doing what I want him to do 'cause*

he's the obliging one of the pair. And that way, the two of you are learning and that's different when it's just you ['yeses' heard from group']." (Joan)

Maya reflected on how two of her children interacted with horses in different ways.

'My middle child, she has always had a strong connection with animals so if I couldn't catch a pony, if the pony was running off from adults, she would have the pony in no time. Since she was little, she was helping me train ponies, she was just amazing with the ponies. My oldest has autism, high-functioning autism. She was a very talented rider. Unfortunately, she's just given up. She did a year and a half of PC and got on great. She got one of the outstanding achievement awards, she went to the championships, mounted games and things and she's a talented little rider, she helps me break the ponies. She's capable, so capable, a much better rider than I ever was. It's very frustrating because she's not into competition, she's kinda deciding, she's a straight A student but not sure if school is for her at the minute. She's 14, it's a bit of a nightmare, very opinionated. I think with the autism, a traditional learning background is challenging for her.' (Maya)

Joan shared an experience which illustrated how horses learn to cope with new situations. Joan and her horse Armani participated in Thea's Challenge (Image 32). The videoed demonstration used horse-rider pairs to help tell the story of how Alison McNamara's horse Thea helped her recover and manage seizures from a neurological disorder (*Thea's Challenge*, 2018). When Joan's horse Armani was exposed to new situations and asked to participate in different tasks, he remained calm and behaved beautifully (Image 33). Interacting with horses while re-learning due to health challenges can be transformative.

Image 33: Joan on Armani during Thea's Challenge (Anonymous, 2018)

Image 32: Joan opening a door with Armani (Anonymous, 2018)

Building on prior knowledge

Participants noted that understanding horses was also part of the learning process and it meant drawing on prior knowledge to practically solve problems and anticipate upcoming puzzles. Some of my experiences learning by doing and accessing prior knowledge when working with horses parallels these stories. As a PC alumna, I continue to give back to the organisation because I gained so much from the holistic approach to horse management as a youth member. A reflection from one experience, recorded in my experiences journal, follows:

> *I hadn't volunteered with Pony Club for several years as my last locale didn't have any active clubs. Arizona isn't the most horsey state. One of the draws to Ireland was all the horses and opportunities for horse culture immersion. Within the first month of being in Ireland, I engaged with the IPC, being invited to attend several events during an international hunt exchange week between PC members representing Ireland, the UK, and US. From those experiences, including tromping across farmland in Co Kildare going foot beagling (who even knew that was a thing…), connections were created, and I expressed my willingness to volunteer. Not long after, I was invited to volunteer at the PC Eventing Championships at Annaharvey Farm. Returning to the land of PC volunteering meant I had to tap into know-how I hadn't accessed or applied for quite some time. Upon landing at the farm early in the morning, I searched and finally found who to check in with and learned where help was needed. I was to help with tack inspections for the morning and then fence steward on a cross-country fence in the afternoon. After a quick cup of coffee, two of us were facing a line-up of Pony Clubbers ready to embark on their cross-country round. Our job was to accurately reinforce guidelines for tack safety including checking -- was the girth tight enough, the leather secure and not missing stitching, the bit appropriate and not pinching the horse's mouth, the child's helmet and back protector met current safety standards, and long hair wasn't covering the number bib for identification out on course. I was nervous at first, wanting to make sure I was checking everything carefully and recalling PC standards and training. Thankfully, there was an experienced volunteer with me, so I quickly got back into the mind frame and was able to carry out physical inspections. Part of the joy of volunteering for PC is the chance to offer encouragement and be a part of big deal moments in members' lives with horses. Several safety issues were caught in time which involved some frantic parents running back to the horse box to fetch a new set of horse boots*

or girth or hair band. The day was delightful, energising yet tiring, and went off without any major disasters. (Lisa)

Being around different types of horses and participating in different types of horse activities, like Pony Club rallies, pony racing, and jockey training meant different types of learning challenges arose for participants. Learning basics about horsemanship, such as parts of the horse, knowing the normal temperature range for a horse, and learning the steps needed to ride a dressage test, involve memorisation, or learning through repeated practice. Memorising, an essential type of learning, like reading, writing, and arithmetic, was a challenge that arose for two participants. Another aspect of learning was expressed by participants and related to memory. People and the horses they interacted with didn't appear to forget mutual experiences. Unlike short-term learning, like cramming for an exam which is easily forgotten, learning was built up over time to create more sustainable retention as illustrated by the following:

'Like Maya was saying, you learn stuff for an exam and then you might forget it again. I think with horses you don't actually [forget] and the horse doesn't either [Group agrees in background]. You build up the learning, something makes it sticks when you're doing it with the horse but if it's in the classroom, it's short term. You forget easily.' (Joan)

Sometimes, however, memory in the learning process wanes and causes frustration, expressed in the following account.

'I haven't done very much in the last couple years because he's 25. He's still, he can still go but he's not as good as he was …I want to keep him going, if I can. The other one is nearly as old … he's more like he was, if you see what I mean. He is more able to do what he was able to do before and he jumps as well. He's a different kettle of fish ... This is him, that's the one, probably the highest jump I've jumped on him in a long time [passing Image 34 around]. He's athletic. I fell off shortly after. [Hallie asked, 'Did you fall off the same round?']. Yes, but I had gone wrong though so it was useless anyway. I jumped the wrong course, bad memory. I can remember dressage tests, but I can't remember show jumping courses. I had jumped the wrong way or in the wrong order.' (Joan) (Image 34)

Image 34: Joan jumping Armani in competition (Anonymous, n.d.)

I experienced something similar when returning to horse riding after recovering from neurosurgery. One extremely frustrating lesson went something like this:

I was leasing a lovely horse, Peda, and taking lessons from a successful Grand Prix jumper. I hadn't been able to take weekly lessons in many years and one morning before work (you had to ride very early in the Sonoran Desert), I was caught off guard. We had progressed enough to start jumping full courses of fences. My coach yelled out (she was a yeller) instructions which sounded something like, 'cross-rail to vertical, turn left to oxer, five strides to the flower box and down the long side over the double combination'. Great, I thought, here we go. To my dismay, I started over the cross-rail, had a nice jump over the oxer, and got turned around. It was like the

arena became twisted, left became right, her instructions were lost, I pulled up Peda in a daze. What went wrong? (Lisa)

Upon reflection, I realised health issues must have affected my spatial memory and, even though I was several years post-surgery, I hadn't been in that jumping situation for a while. I used to be able to learn a course quickly, as jumping competitors must do. On competition day, you must memorise a course drawn on a piece of paper which is hung on the rail of an arena. I found it difficult now to listen to a jump sequence with the expectation of immediate and accurate performance. I really struggled with course memory and had to retrain my whole-body. A task which was frustrating, like Joan expressed, and humbling; a struggle which has lessened but remains.

A different kind of strength

Horse riding was reported as an equalizer between genders as people of varying sizes and strengths were seen as being capable of horse riding. Several participants pointed out that learning to ride horses took a different kind of strength and went beyond working out in a gym. This puzzled some participants.

A few male participants couldn't figure out how lighter girls were able to hold the horses and then realised it was a different kind of strength, an understanding of the technique, and a lot of hard work.

'I would have been like, I would have been strong enough. But it's a completely different type of strength holding a horse than just like actual strength.' (Colm)

'It used to annoy me because like myself and Colm, and some of the girls, we play a lot of sports. Then, some of the girls here didn't do any sports and they could hold onto the horses for as long as they wanted. [They were two-stone lighter (Colm)]. How, how are you [the girls] doing this? … It was very hard. I couldn't get my head around [the skill] for a long time … I was sticking with it though … and go through the pain and heartache and disappointment and everything.' (Daniel)

Having a sports or athletic background may help in riding racehorses but didn't necessarily equate to the ability to properly gallop.

'So at the end of the day, seriously, I'm not really going to gym. To be honest, I'm probably the laziest person here. But then at the end of the day, I am able to hold

them … I think all of us are strong enough to hold the horse. But just the mind is the part that is holding you back.' (Mary)

Risky learning

Participants said learning in a risky environment with horses in the outdoors took a combined mental, physical, and emotional effort. Unpredictable encounters happen all the time when interacting with horses. A horse can spook at any time which always heightens the risk of the situation, an idea reinforced in the next accounts.

'Learning with horses involves risk, falls, and unknowns ... It is all new and uncertain because I knew nothing when I started learning riding in my teens.' (Becky)

'Handling a 1200-pound horse requires theory and practice, there's not any one answer.' (Riley)

An example which underscores the risk associated with everyday horse-human interactions occurred when a puppy ran around a corner into an arena where I was training and spooked my horse, Silver. I banged my hand on his withers, a bony part of the horse's spine between the shoulder blades and broke my wrist.

Another precarious situation happened when a group of exercise riders took young horses out to the gallops on the Curragh Plains (Image 35). The group is known as a string. All sorts of things can happen in that string as Ellen shared.

Image 35: String of riders exercising on The Curragh Plains (Anonymous, 2019)

'My horse just wouldn't stop [messing around] … once I kicked him, he just started reversing, he wouldn't walk forward, he wouldn't walk with the string, he … wasn't good … he was messin' with my quarter sheet [a shorter sheet put on to protect the horse's hindquarters]. [It] actually fell over to the side and I had to get down and take my quarter sheet off, it was a bit of a mess but … oh well, we got back to the yard. You see, we were out on the Curragh, riding work. And he was a bit hyper after it, so he just wouldn't relax, whatever way the quarter sheet just slipped. But I was lucky it happened just outside the yard, So I got down from him and I could get into the yard. It's just, it was horrible. You feel so out of control.' (Ellen)

'Like they're half a ton like.' (Matthew)

Immediately following, Ellen and Kate shared similar experiences although their statements were shorter.

Katie: *'Especially on The Curragh, like, it's so open.'*

Ellen: *'You see as well there's cars and all going by you. And if your horse doesn't walk and you're just terrified, you're gonna head into the car. Like it was, it's great but in a way you're still like …'*

Katie: *'The Curragh is well but there's no management.'*

Ellen: *'No, they don't care.'*

Katie: *'They [vehicles] nearly speed up going past you. Lorries as well. Where I go to ride [a racehorse yard during work placement] I have to cross the road all the time. Lorries and everything pass and … they pass right in front and you're just about to cross the road and it's grand when you're facing them. But when you're going away from them, that when the horses spook … it's not fun.'*

Participants from all groups emphasised ongoing learning occurred when they interacted with horses within unpredictable environments. Some instances follow:

'… a learning curve … no horse is the same … you have to get used to every single horse'. (Ellen)

‘You can't just sit up on a horse and ride. Right. Like, keep riding it the same and it's not going well for you, it's running away and, you know, I have to keep trying different things.’ (Katie)

‘You probably will never know everything, and you have every single day something to learn.’ (Mary)

Joan shared another example of a risky situation when interacting with a challenging horse.

‘I think that if you can allow the horse to express its personality… the grey horse would absolutely go bullocks and he would try anything on anyone. He’d try to scrap people on doorways, he’d lunge at hay barrels, he’s constantly trying to out sit you, he’s a real intellectual challenge because he’s an intelligent animal’. (Joan)

Participants in two groups concluded that the outcome of risky situations may be positive, a bit of a spook then everyone continued along the gallops safely. Or, the outcome was negative, the spook of one horse caused others to spook, the effort to gallop as a unified group was disrupted, and a rider fell off her horse. Upon reflection, participants considered that a rider might realise they were thrown from their horse because mental and physical concentration lapsed. One participant recalled they stayed on during an unpredictable moment when their horse baulked at a sheep because they were relaxed and chatting with the lads. This participant said being relaxed enabled him to physically follow his horse’s movement, veering left and right to avoid the sheep, but then they got on with their business.

In another conversation about the risks of working with horses, Joan stated:

‘You can’t let a horse get away with stuff because it’s too risky.’ (Joan)

Matthew talked about the combination of risk and enjoyment. In the early days of Matthew’s work placement, he was thrown into the new environment straight away. The trainer said:

‘It’s dangerous, have fun, there’s no other way’. (Matthew)

The idea of immediate consequences arose in different ways across interview groups. In considering the risk of immediate consequences, Maya shared the following and distinguished between equestrian and classroom situations.

‘I suppose the consequences are quite immediate [with horses]. If you get it wrong or get it right, you know if you get it wrong, you don’t want to go through that stress

again so I'm going to learn from it. Where if you get it wrong in the classroom, there's no instant consequence to doing it right. And there's huge safety [issues with horses]. I'm just thinking like even in terms of, you can go up and take down four ponies at once and have no issues from the top field or whatever, if you know what you're doing. Or, if you bring someone with you if you know there's going to be one [horse] that barges the gate. You just couldn't send someone up [who doesn't know horses]. It's always a worry that one of, say the mums, or we'll send one of the kids, a brother, even the mum themselves will go up … something will happen, will go wrong. They don't know what they're doing so they [the ponies] are waiting for the opportunity, they'll all barge through [the gate], they've escaped … 'Horses are massive. It's an amazing thing to be involved in but there is a massive safety issue around it.' (Maya)

Several participants said horses can be like children. Horses test situations, they can be opportunistic, and often benefit when boundaries are set. The notion of safety and awareness resulting from horse-human learning arose again.

'Particularly a horse though … it's a safety issue with horses. You have to have a regime of watching all the time and being very aware because the consequences are far too serious if it goes wrong.' (Hallie)

Despite the unknowns permeating horse-human interactions, working with and around horses was viewed as positive. Physical movement, mental and emotional challenges were seen as being good for whole-body wellbeing. Learning through the inherent precarity of horse-human interactions is an embodied experience, one that relies on instinct, awareness, and an integration of physical and mental knowledge and skills. The role of instincts when managing risky situations with horses will be explored next.

Whole-body awareness while learning with horses

Joan felt whole person awareness training became instinctual after being around horses for a long time.

'Also, I think a lot of it becomes instinctive. When you've been around horses for years and years and years, you know instinctively how to move around and how to deal with them. I was just thinking when you were speaking, it's when you're with somebody who doesn't have that, you've got to explain everything in ridiculous details [group agrees in the background] … You realise what you've been doing for

years completely instinctively. You've been thinking about it, but you're not thinking about it anymore.' (Joan)

Participants from another group also reflected on the instinctual nature of working with horses. At times, they needed to learn to develop a different set of instincts because natural instincts might be the opposite to what works with certain horses.

'I think it [learning to ride a racehorse] is a lot of against your instinct … it took me a long time as well to catch the horse up again. You can't do it, you know, just like if a horse was getting faster and faster with me, usually I grab the reins again and I grab them tighter, and it just makes things worse. And you're kind of fighting with your head then and you know it.' (Daniel)

The concept of muscle memory and the whole-body experience of interacting with horses is illustrated in the following statements.

'Everyone knows that every single muscle unknowingly works in your body when you're riding a horse. It's like body work on your face because you're smiling or … gritting the teeth...' (Mary)

'You have muscle memory for some of your riding skills but are constantly getting feedback from the horses and constantly monitoring and reassessing the physical and mental response from our hose when you are riding, which may or may not change your actions.' (Finbar)

Maya related a story about ponies who spooked uncharacteristically because a lamb entered the arena. The PC kids dealt with the situation better than others around them because of the training they had received.

'I'm just thinking of the other day about a couple of kids in PC, who keep them [their ponies] with my mom. We were up with the ponies and there was a lamb in the area and the ponies were quietly tied up at the arena, no bother. I'd ask one of the girls would she chase the lamb out. So I saw just the little prick of the ears (the pony sensed the lamb was moving) and one of the mum's of one of the girls (she'd not a horsey person but she had come back from a hack), she was near the ponies so I said, 'quick, move'. The minute I said it, panic had set in from one of the ponies, next thing the three of them had broken where they were tied, and she panicked and broke the rope. The other two panicked and broke theirs and galloping down the

lane. It's a very rare thing to happen but I think that you are always watching, you're always watching for the [unpredictable]… I've seen it with the horsey kids, they're so aware, the ones who have gone through PC, not necessarily the riding school ones. They [PC kid] are so aware of what could happen. Because even if you have the quietest horse in the world, someone else around you might not, so you're always watching for it. Maybe that's part of it too that your awareness level is really heightened.' (Maya) [Members of Maya's group nodded in agreement.]

Fun while learning

Earlier in this chapter, there were numerous statements which illustrated the enjoyment participants experienced with horses. These were related to having an early passion for horses, the process of bonding with horses, being with horses in nature, and getting a thrill out of galloping at speed. In this section, other examples will be included to extend the concept of enjoyment and the impact fun has in the learning process.

'I'm enjoying the fact that spending time with the horse and riding and doing things is definitely a stress relief to everything else going on in life. I do think I am able to appreciate the time spent in the barn, spent with the horses, taking care of things.' (Michelle)

'The enjoyment and satisfaction of interacting with thinking animals versus inert products (equipment, like balls or tennis racket). There's a lot of responsibility but pleasure is so much higher when you ride out, compete. And the level of loyalty and patience horses have is a great eye-opener for adding to your life experience. As a sports person, it's not just your ability alone that is on display but it's your combination with the horse.' (Finbar)

'Love taking lessons and having goals, I really listen to what the instructor advises.' (Terese)

Participants narratives were similar to respondents who participated in an IPC survey where the best thing about PC involvement, at 41.3%, was enjoyment/friendship and the biggest reason reported for taking part in PC activities was enjoyment (Harvey, 2017).

Having fun and being relaxed in the moment had other positive impacts. Laughing was a technique which helped participants cope with and learn from difficult situations.

'If I really don't want to ride this horse [because it misbehaves] like I try to talk to someone next to me and have the craic with them because then you relax, you're grabbing an old laugh or whatever, your time, takes my mind off it and don't think about it too much. I just think about the basics on the day.' (Hannah)

'You get a fall but like you want to get back on because there's just like some buzz off it. You know, you're just not like, 'oh, Jesus, no, look, I'm not getting up again'. There's some buzz off it like, so you're going to want to get up again. I know people in the yard they laugh and joke about it. You're trying to get up [back on the horse after a fall]. Whereas if people are like, oh, she's after falling, there's no chance. When someone falls, it's just a massive, big laugh and it kind of helps you to get back up easier.' (Katie)

Digital learning and other sources

There was an acknowledgement that increasing access to technology meant there were more ways to learn about horses, from magazine articles, digital forums, and YouTube videos. Some participants described positive and negative impacts technology had on their learning habits while others indicated they were neutral about digital learning modes. The neutral comments included:

'I'm not far from where I take lessons but find it hard with two horses. Sometimes it is hard to justify paying for lessons. I mix it up with groundwork and riding bareback and watching YouTube. I like taking lessons too and find it motivating to get reinforcement and feedback from instructors.' (Sachi)

'I watch clinics which increases my confidence. Teaching also provides educational content. So being able to teach others definitely increases my own learning. I try to get access to people both digitally and in print, we need to make learning with horses more palatable.' (Riley)

'I continue to read articles; I subscribe to 'The Horse' magazine and other electronic news and some hardcopy magazines and continue to learn with horses … I'm currently taking lessons from my farrier who used to be a Grand Prix Show Jumper. I do appreciate it all.' (Michelle)

'I read topical books, watch videos about exercises. But I'm looking forward to finding a new horse in the next six months.' (Becky)

Comments which expressed positive learning outcomes from digital learning or other forms of media included:

> *'Videos are also fabulous ways to enjoy ongoing learning in a different mode'.* (Michele)
>
> *'I find learning easy to do virtually, more accessible now but it is hands-off.'* (Sabrina)
>
> *'I read scholarly research and learn from horse friends getting together – talking, learning, chatting.'* (Kai)
>
> *'I learn by taking lessons and listening to lectures from vets, along with being a member of a Dressage Club.'* (Siobhan)
>
> *'But, you know, even looking at a picture of the hoof or the leg or something, it's kind of easier to see it [in the picture] than when you're actually looking at the leg because, you know pictures …* (Ellen)*; '…there's no dirt on them.'* (Gary)

However, when considering the difference between learning from digital media and learning during first-hand interactions, some participants were in favour of learning through direct experiences:

> *'They've got to get out there and try it, you can't actually … say, watch a video'*. (Maya)
>
> *'I take lessons, read, and watch clinics. However, my confidence is increased when I'm in the situation, I learn more.'* (Michelle)
>
> *'It's easier actually to do it [wrap a horse's leg] on the horse than on a model because the horse is moving the leg, whereas the model will just stand …You need to know how ... Let's just say a two-year-old colt, they're not gonna like getting bandages on. They're not. Like no horse is gonna like it. So you kind of have to get used to them throwing their leg and like know where you need to stand. And it's easier to do it on a horse than just be told, shown.'* (Katie)

Finding 2: Theme interpretation and analysis

From the accounts presented within theme two, it can be reasoned that examining horse-human interactions adds to our understanding of experiential learning. Participants reported

they learned with and from horses through inherently active, risky, and challenging interactions. These conditions, along with the passion for horses described under finding one, appeared to increase the meaning of the interaction and heighten motivation to keep learning. This finding supports other direct learning research. ‘Hands-on learning’ was a need which motivated men’s involvement in Men’s Sheds where ‘learning in classroom situations was rated significantly lower at 29%’ (Carragher and Golding, 2016, p. 66).

Participants were motivated to learn more because of their passion for horses and were willing to persevere in their learning despite the imbalance of bad days over good. Data showed participants reported higher levels of motivation because they took on risk and overcame challenges experienced during horse-human interactions. In a sense, the constant thinking, doing, and feeling expressed by participants appeared as a form of liberation from the franticness of highly prescribed systems of learning. This idea reinforces discussions in chapter three about the importance of liberation and democracy possible through experiential learning (Dewey, 1916, 1938; Freire, 1996; Freire et al., 2014).

The impact of being in the outdoors while interacting with horses arose during all interviews. This makes sense through a biophilia outlook which insists that humans long to ‘affiliate with other forms of life’ and have an ‘innate affinity for the natural world’ (Louv, 2008, p. 43). Participants repeatedly talked about how their enthusiasm to interact with horses was increased because horses were other living being. However, I was surprised there wasn’t as much talk about connecting with nature during these multi-species encounters. Perhaps participants in this study viewed their connections with nature as being obvious which then led to fewer verbalisations. Or, maybe the topic didn’t emerge because conversations were other equestrians whom they assumed held similar perspectives. Maybe the topic of nature connections wasn’t as prevalent as I expected. Alternatively, I wondered if the indoor interview setting influenced the level of nature talk. In contrast, I’ve been a part of countless casual conversations with equestrians where chat often turned to observations about nature. Observed and casual conversations have often included talk about the beautiful landscape, the lovely or miserable weather, and the determination to continue no matter what the conditions. Equestrians I’ve interacted with over decades often talk about the beauty and power of horses, the vibrancy of a field in bloom, the allure of the smell of fresh cut hay, and the enjoyment of watching hawks soar overhead while on a gallop.

From the literature, we know that learning with and around horses in natural landscapes boosts tactile, emotional, social, and aesthetic thinking and doing which deserves recognition as being as vital as book learning (Dewey, 1938; Howden, 2012). Whole-body

learning experiences in nature are positive ways to preserve our health. Nature landscapes are restorative spaces, understood by the gardener who digs in the dirt and the Chinese who have turned to nature in this way for over 2,000 years (Louv, 2008, p. 45). The Covid pandemic has reminded people that society and nature can cope and thrive (Ipsos MRBI, 2020) when we begin to take time out to learn through outdoor experiences (Higgins and Nicol, 2002). In horse-human interactions, equestrians, like others, embrace the precarity of learning in natural spaces (Dewey, 1994; Harrison, 2010; Higgins and Nicol, 2002; Howden, 2012; Quay and Seaman, 2013).

There is accepted uncertainty when we interact with horses who are living, thinking beings (Maurstad et al., 2013; Ogden et al., 2013; Aisher and Damodaran, 2016). In thinking about risky learning, I was reminded of a fellow student who shared his research concepts as the 'theatre of surprise' and 'acts of oblivion'. He appeared to wonder, like I do, about what is going on when we enter a space seeking to learn from the unexpected. There are opportunities in precarious spaces to learn by surprises or learn from surprises. Heightened awareness and instinctual learning were shown to be part of horse-human interactions. Participants indicated the mind and body became synched so that embodied learning became a part of how they experienced interactions with horses. Findings extend literature about multi-species relationships by furthering understanding about how humans learn how to appropriately manage risk during inherently precarious interactions with horses (Roberts, 1997; Hawson et al., 2010; Coulter, 2014; Davis et al., 2016; Hagström, 2016; Hartmann et al., 2017).

In addition, participants stressed the importance of fun in the learning process. Fun in learning increased enjoyment (Wolk, 2011; Louv, 2012), and improved knowledge retention (Dewey, 1916; Alheit, 2018). Self-directed and social learning were also shown to positively impact learners (Boud et al., 1993; Wenger, 1998; Hannafin and Land, 2000; Share et al., 2012). Participants expressed their experiences with horses impacted them because of the constant integration of thinking, doing, and feeling (Dewey, 1974; Quay and Seaman, 2013; Freire et al., 2014). This integration happened through complex, lived experiences (Quilty et al., 2016), and multi-species experiences (Maurstad et al., 2013; Coulter, 2014; Dashper and Brymer, 2019).

I was surprised by the popularity of learning from print and digital media as expressed by participants. Several participants noted the volume of content available now. Technological advances like the internet have improved accessibility to large volumes of equestrian learning materials. However, participants raised concerns about the 'hands-off' nature of

digital learning. This form of learning was contrasted to learning in situ. Being in a shared space with a horse was overwhelming described as positive, meaningful, motivational, and challenging, and 'hands-on'. The digital learning aspect of horse-human interactions can be linked with Illeris' fifth type of learning space, the net-based learning space (Illeris, 2009). There is a need in our fast-paced, team-oriented, and ever shrinking global community for learners to be flexible and adaptable, as reported in chapters one through three. Therefore, the emergence of digital learning in the horse world is perhaps a new way to appeal to more people across society. The variety of learning modes is a positive shift in the equestrian world which can increase the awareness of horses, the beauty of these wonderful animals, and the many possibilities for learning through horse-human experiences.

Finding 2 conclusion

Interacting with horses meant there was ongoing opportunities to learn. Evidenced from the accounts presented in finding two, learning with horses was enhanced through an integrated direct learning approach. Learning continued to occur while mistakes were made, and interactions with horses were embraced as inherently risky. Having fun while learning was seen as a benefit and a way to cope with challenging horses. Different kinds of mental, physical, and emotional strength were found to be required. Learning situations with horses were shown to be holistic and highlighted the importance of reflection and being in the moment.

Participants consistently drew conclusions about how their learning with horses could be distinguished from classroom learning. The majority, despite their perceived degree of success in school, were quick to point out that they were more motivated to learn through horse-human interactions. Participants concluded learning with horses offered them more varied, active, interesting, and practical ways of learning which suited them better than conventional learning methods. Learning with horses was 'tied to motivation and passion' and was 'practical learning'(Jane). As a 'hands-on learner, motivation [to learn] has to do with interest' (Sachi).

Education is a word laden with meaning, consternation, theoretical and practical division, and takes endless forms in our society. At the end of the day, organisational decisions about education impact learners, whether they be horses, humans, or other species. Therefore, this discussion about learning is logically followed by the next finding, which will examine different ways of educating found in the horse world.

Finding 3 | Theme: Different ways of educating exist within the horse world which appear to be meaningful and connected to real world experiences, and often differ from traditional schooling, according to all participants.

'And I think that's what it is here [RACE] as well. You're encouraged to do better all the time, keep improving I think.' (Gary) (Image 36)

Image 36: Gary on RACE simulator (Anonymous, 2019)

The third category will discuss ways of educating which emerged from conversations about participants' experiences in traditional schooling and equestrian educational programmes. The environments where people learned shaped their attitudes and behaviours. Participants made comparisons between equestrian environments and traditional classrooms. Concepts within the finding will be discussed in two sections, Pony Club and RACE. Most participants had direct exposure to one of these two educational settings. Those who didn't, had experiences in 4-H, a US youth organisation, or were being educated through lessons and competitive experiences. Within the following PC and RACE sections, characteristics of education which occurred in each environment will be considered.

We will begin with Pony Club.

Pony Club as a different type of education

The mission of Pony Club is 'to promote and encourage horsemanship, sportsmanship, citizenship and loyalty in a safe and fun atmosphere, for all its members and volunteers'

(Irish Pony Club, 2021). PC is a form of informal education which offers opportunities for continuous learning, like the ongoing learning during non-formal horse interactions discussed in the second finding. While PC doesn't have a minimum age, members should be able to ride unassisted and there are members from about five years of age through age twenty-three (Irish Pony Club, 2021). Competitions like rallies, mounted games, and tetrathlon can be availed of with the primary emphasis on social and equestrian development through educational building blocks called ratings. Moving up the rating levels encourages members to steadily progress from beginner to more advanced stages and learn increasingly difficult knowledge and skills. This ongoing assessment creates continuity in the educational space.

Comments from participants support the benefits of PC:

> *'PC answered 'why?'* (Sabrina)

> *'PC teaches you about animal welfare, teaching you about taking care of a horse – responsibility. Contributing to a team is a valuable skill.'* (Finbar)

> *'PC has common methods, strategies which create safety and enjoyability.'* (James)

> *'PC offers unmounted and mounted learning.'* (Laura)

> **PC is fun and social**

Several participants brought up the fun and social aspects of PC.

> *'All my friends were doing PC, so I still wanted to do PC, and rallies and everything.'* (Sofia)

> *'PC is a training organisation but it's training through fun and socialisation … The friends you have now would be friends that you had when you were like seven. And my other children as well, they would have done everything. Tetrathlon is very competitive, sporty, horsey. It takes up a huge amount of time in the summertime. They didn't even realise … it was sneaky, maybe on my part. They were going so fast, but they loved it, you know.'* (Hallie)

Unique aspects of Pony Club

One participant, a third generation PCer, observed a difference between riding school education and PC education. Riding schools are typically for-profit businesses which, ideally, have quiet and well-trained horses and ponies and a qualified instructor to help children learn to ride. There are minimal standards for instructor qualifications which results in a wide range of environments and levels of professionalism in riding schools. Conversely, PC is a non-profit organisation with professional standards and an international qualification system which typically creates transparent levels of expectations for instructors, volunteers, and members.

> *'I think that PC is brilliant in terms of - if you see kids and they've come from a riding school and there's so much they don't know and they look lovely going along, thinking they're great riders on the riding school pony … The difference in the PC kids is that they can actually ride, can deal with problems ... We love being, it's really nice being around PC as well … So I think PC is fantastic … I think it's been huge for [daughter's] confidence.'* (Maya)

Participants expressed some similarities between traditional schooling and equestrian education such as goal setting and progressing through different levels of knowing and doing. However, there were notable differences. With academic goals, Maya shared her experiences and contrasted goal setting in university with goal setting when working with horses.

> *'Thinking about my own learning and going to university, the goal is always something out there, to get a good job, to do well, and get a good grade. If the teacher thinks I'm great, everyone would be happy; it was linked to my esteem, but it wasn't really, in the moment … I liked learning, most of it I wasn't that interested in, but was studying for this goal, ultimately, rather than for the experience itself … It's like a personal reward - overcoming fear, anxiety, and jumping [with horses] - the learning, rather than studying for something else. I really notice the difference.'* (Maya)

Participants had differing opinions regarding competition in school compared with PC competitions as evidenced by the following exchange between two participants.

> *'Although it's competitive in the PC, it's a different kind of competitive. In school if you're competitive, you're going to get rewarded, say if you get the top marks. There*

is a recognition amongst people with horses that the child struggling with the tricky pony is riding them really well, better than the child who's given the pony who is doing the work. I think that's because there is less negative competition amongst the groups [in PC]. Kids [in PC], they tend to not be maybe as judgemental of each other and there's not as much of a hierarchy.' (Maya)

'I don't know about that. I would actually think the PC, because some of the kids, that's all they do. And I think that perhaps, say in our particular group because a lot of them are suburban kids, they're fiercely competitive. And because they are not experiencing horses something too much outside PC, that all their fixation is on PC and then it can be fiercely competitive … I actually think, in a way, if they could broaden, not even their competitiveness, if they can do things outside PC as well, they see the bigger picture … to compete healthily … you need a broad spectrum. Do you know what, it's not the end of the world when something … doesn't go right.' (Joan)

In the second account, learning in smaller, more tight-knit PC groups appeared to negatively impact members within that club.

In contrast, Sofia enjoyed competitions within PC because they helped her develop confidence and progress quickly to national and international competitions.

'We got a fun little pony just to compete with. All my friends were doing PC so I still wanted to do PC, and rallies, and everything. We got a little, like a cheap enough pony ['very cheap', Hallie, her mom, chimed in] and brought him to rallies and everything and he ended up being amazing and he started doing internationals too. Started off novice, he is sold to the UK.' (Sofia) (Image 37)

Image 37: Sofia and pony celebrating a win and rosette (Boyd, n.d.)

RACE as a different kind of education

Positive benefits of being enrolled in an equine education programme like RACE seemed to parallel some of the positive accounts of learning shared by PC members. Within this section, whole-body education, access to education, practical training, and the impact of caring educators will be discussed. Having fun while practically preparing for the future was combined with the importance of communication and maturity in RACE. Being in an educational environment surrounded by experts, in a renowned setting, became part of conversations which will comprise discussions within the fourth theme.

Whole-body education

Common knowledge among equestrians is that horse riding and working with horses is physically demanding. Several participants said that the education they experienced at RACE was more holistic than expected. The education process went beyond teaching physical techniques and strength training and encompassed training which supported them as a whole person.

'Every muscle works. And it's good that you, actually, you're not just learning that part. You have all the facilities in a simulator or a gym [at RACE] and you're allowed

to use them any time of day. So basically, every opportunity to learn and you have always someone to ask. I suppose it's not about [the gym] anymore, about that strength you need to have it for pushing … but it's about the technique that you get with the time. And then eventually progress will just come with the time you need to get that experience that you actually get in the end, in the yard that they send you [for work placement].' (Mary)

'I really like this type of education because I'm a little bit hyperactive person who really needs to be moving, in nature … This [RACE] is actually a perfect thing for me. This kind of education we don't have back home … We have knowledge [at RACE] about literally everything. You come here, with something completely different, it's a completely different mindset, everything. We actually enjoy being in school, we don't have that pressure anymore. And it's what I like to then enjoy.' (Mary)

Access to education

The admission process into RACE was viewed positively because it was seen as a process which levelled the playing field. The RACE admission process includes a horse riding trial. Participants discussed some of their experiences.

'[During the trial] they set your paces and all that craic. Just fitness and everything. And then when we arrived, we were kind of spilt into groups on your ability of riding. And I just learned from there, really literally from rock bottom. They just kind of treat everyone the same.' (Matthew)

'We all started at the bottom.' (Ellen)

'We all started at the bottom. They [instructors] weren't biased. So we got rid of every habit. So I say, bad habit, good habit, whatever, just started you fresh ...' (Matthew)

Practical learning opportunities

Discussions around the practical aspects of RACE training continued. Participants spoke about how the presentation of curriculum altered their educational experiences. A participant with six years riding and racing experience related she never learned as much as she had during her time at RACE.

'I have six years of experience [horse riding]. I rode in races [back home], but never learned that much, like I learned here. It's not even just about the riding, it's about

everything else … you get the package here. It's that you have opportunity to not just learn from books, that's the easiest angle, on the internet, read the book, whatever. But it's just that practical part that you actually need. Because back home I would ride one horse, two horses in the day. Now I have to ride five to seven.' (Mary)

When asked about how they found the style of education in the RACE classroom compared with a conventional classroom, participants shared:

'It [RACE] focuses more on accounts and cash books that will be helpful to us as we go on in our career to be able to manage our money and have the business skills … it's related to the things that you could be doing. Instead of in school, how does this relate to real life?' (Matthew)

'As well here [RACE], you know, the assignments like you would do bills and stuff like that. You know, stuff that you kind of need and when you go out in the big world, I suppose you know.' (Ellen)

Another student furthered these ideas by stating that the educational environment at RACE reinforced his learning. When a RACE coach or work placement boss told him a horse he was riding was going well and that he could keep riding it, he felt he must be doing something right. He said he was learning along the way and progressing because the boss allowed him to keep riding the same horse.

'And the thing is what you're learning in school [classes at RACE] are basically preparing us for something later because they know that for most of us, it's the end, like we won't get back to school, so they are going to prepare us. Yesterday we had interviews, like job interviews. We need to make a CV, we need to know how to do Word, PowerPoint … everyone is going to use it. We were downloading the applications for being a jockey or trainer or whatever.' (Mary)

Several participants articulated the mix of classroom and practical learning was integral to piquing their interest level, cementing retention, and increasing accountability.

'You've got an interest in it, don't you?... I suppose with the reality that we're out in the yards and we're being taught say to put on a bandage in the classroom … and the fact that we're out and we're told, put on a bandage [on a real horse in the yard], you kind of listen a bit more because you're actually going to have to do it. And I better listen now so that tomorrow when I go, my trainer says, put a bandage on him,

I know exactly how to do it properly. And then even though I've learned how to do it in school [RACE classroom], I'm doing it myself.' (Daniel)

The learning structure was different at RACE because classroom time was condensed while practical learning was extended. More than that, there was a constant interplay between class material and learning by doing in the yard, as Daniel expressed above. This concept is further exemplified in Gary's re-telling of his experiences:

'You see here [RACE] we do a lot. So obviously we have classes, five classes on Wednesday. So when everyone else is in school then we're riding out and you learn. You come up then [to the classrooms at RACE] and you might learn about the horse … you learn about the hoof and like we've done different conformation scores. A lot about horses, that type of thing. And then when you're down with the horses you can see, and you're looking at the hoof, you know what you're talking about. School does help but I still think that if you're talking about riding or tacking up a horse or anything, you have to do it.' (Gary)

A participant's statement provides an appropriate summary of the importance of practical learning within equestrian education and its link to the future.

'What we've learned here, you know, it's stood to us.' (Daniel)

Caring educators

A contributing factor to the positive impact of an education at RACE was the level of care provided by instructors, as voiced by all participants. There were several reasons for this growth as expressed by participants.

'What's working in the [RACE] classroom, the class sizes are small and that's really kind of like, she [the teacher] knows me. You're looking at the table and she's talking and she's looking at you and you're like, she knows now, I wasn't listening. So you're going to listen now I think.' (Daniel)

'It's more personal [at RACE]. When I was in school, I'd be like chatting away with my friend next to me. Your teacher wouldn't necessarily care if you passed or failed or whatever … because, sure they are still getting paid at the end of the day. So it's up to you … But here, I know they're still getting paid … but the teachers want you to do well for yourself. And, you know, they're pushing you and saying, 'you can do it'. I think a lot of me last year in school, in the Leaving Cert, I didn't really bother. I know

when you have teachers like they believe in you here, they want you to do better, they'll get you extra help, so that really helps me learn.' (Mary)

'Teachers care too, they really care.' (Hannah)

'I think that's what it is here [at RACE] as well, you're encouraged to do better all the time, keep improving I think.' (Gary)

'And they're willing to listen. If you have an idea how to improve school or do something else, they're actually going to listen to you. If you want to see a jockey come here, maybe it will be good that we see that person here and maybe in three days that person will actually show up here, like you never know.' (Mary)

Emphasis on holistic education appeared to be a trait of RACE staff. Students felt staff expressed concern about their whole person by teaching them responsibility for themselves. This is evidenced through the following accounts.

'It's all your responsibility … we are all doing the same, they'll still wake you up for supper, someone's got your back [at RACE], that's good … I mean the instructors or someone like that know you need to get up like but it's your obligation to get up, to go to work. It's basically preparing you for life.' (Hannah)

'They even teach you how to eat here and teach you nutrition. Basically, every part of your life is covered here.' (Mary)

'It really seems they [RACE teachers, staff] take care of the whole person, just like we're expected to take care of the whole horse.' (Lisa)

To support these accounts, I will share an experience I had at RACE. I met with RACE staff prior to conversations with students. Getting a tour of the campus gave me time to get a feel for the space. In the canteen it was clear from signage I saw that staff cared about teaching nutrition. There were information boards showing how to choose a balanced diet and healthy eating options. The room was bright. Communal spaces for sitting at round tables and chatting were provided. The relational aspect of educational experiences made an impact which supports the deep need for humans to be cared for (Noddings, 2013). Evidence of this impact was conveyed by a participant who was impressed with a teacher.

'I was speaking to [a teacher] and she'd tell a person who came here [attended RACE] ten years ago, she'd still be able to tell you what computer they sat at [other students were heard verbally agreeing].' (Colm)

Students also expressed they were more motivated to learn in an educational environment where teachers were either horse riders themselves or involved in the industry. Learning from someone who understood where they were coming from and what they were doing was valued.

'When they [RACE teachers] talk to you, they're really like, 'you're going to need this'. That's the way they kind of put it to you. I think that you are kind of tuned in a bit more. If she is saying I'm going to need it, she knows …' (Daniel)

'… and also, you listen to them because they were not more or less riding the horses but they're involved in this industry in some kind of way. So, we will always listen what they're saying because they probably have it right. They're explaining something like that, then we want to hear it … They understand where we're coming from as well. They know what we're doing. They appreciate we're up at half stupid o'clock in the morning, every day … For example, if they see that you're very tired, they will tell you, 'OK, just go to a toilet, wash your face, and get it together. [The teacher may say,] come here, everything's going to be all right, it's a long day here' … Then, 'we all came through ups and downs and ups and downs'. And then in the end of the day, we're going to start crying because of something that's completely stupid. And they [teachers] will be like sitting here listening to you and then will be, 'well, we all came through that, why are you surprised?' Then that's when someone is totally relaxed about that thing. Then you're like, all right, and why am I crying? And they even gave you a sports psychologist at the beginning. And everything is like amazing because it actually prepares you for what's coming.' (Mary)

Enjoyment in learning while preparing for the future

A dynamic, caring, and fun educational programme at RACE was effectively mixed with practical training, according to RACE participants. Three of four participants in the first group mentioned having fun. Having a laugh with teachers was a different experience from traditional schooling experiences.

'I think if you have a bit of a laugh with them as well. It was all sound like, you're not going to get in trouble straight away to a certain extent. You can have a laugh.' (Colm)

'You have craic with all of them, really like you would. Even Ms., she's a legend like she is, you have craic with all of them.' (Mary)

Participants in one group said they had more confidence, knowing what to do in a real-world situation because they had experienced it in the RACE setting. They realised these skills were going to be needed to make a career in horses, as indicated by Katie's statement.

'So, when you come here the communications [a class at RACE] is like, it's about you in the workplace and how you're communicating with the boss. And that kind of thing … and if you're going to do office work [e.g., stud manager, office manager for a sales company], maybe later, it'll help you on.' (Katie)

Other dialogue from participants indicated that being interested in what was being learned made a difference. Linked to this concept was the difference of having autonomy in education; getting to have choices in the learning process was contrasted with being told what to do.

'I think the fact that in school you're told to do something and you're not really interested in it. But whereas here, you're interested in it. And you want to learn about it. So you really want to pick up on everything you can to learn to be better, to learn as much as you can while you're here. The fact that you're interested and you want to know every everything that you can do to be as good as you can.' (Gary)

Communication

Gaining practical communication skills was a common point of discussion among RACE participants. Communication was discussed under the first finding because ongoing nonverbal exchanges were part of the process of building relationships with horses. Under this finding there will be accounts of developing communication skills within the RACE setting.

One participant said he had worked for a trainer before coming to RACE but was never sure what to say when asked how the horse was doing. Being at RACE and taking a communications class had given Matthew confidence, as he relates in the following account.

'When we're going up the gallop … you know the trainer is going to be asking you how the horse is and you want to tell them as best you can exactly how the horse was going so you're just focused on that and you're trying to use everything you learned to pick up, just every movement of the horse … I did work for a trainer before here and you wouldn't be sure in what you're kinda trying to say. But now, even from communications [class] here in RACE, it's giving you more confidence to know what you're talking about, be sure in what you're talking about.' (Matthew)

Ellen said that at the start of the RACE programme, students would respond to trainers' questions about the horse by saying, 'good, boss'. This statement elicited laughs from the other participants. She went on to share an experience.

'… but now you can kind of expand on that, like you're able to say, 'oh, she [filly] got tired after how many furlongs and she was in my hands the whole way. She's off the run'. … Now, after the last few months [in RACE communications class], we all kind of know how to [communicate] exactly. It's good as well for when you're older, if we do make jockeys to be able to tell the owners after a ride how the horses went.' (Ellen)

Surrounded by opportunity

The campus facilities and location of RACE in County Kildare, next to The Curragh Racecourse and Training Grounds, facilitated many positive opportunities, as indicated by some participants.

'[RACE] is a place where everything happens, everything happens here. You are always on the ball, aren't you. I guess you walk out the door and you see someone coming in the door and you look out here.' (Daniel)

'You never know who you're going to see.' (Colm)

'Especially down in that gym. A lot of jockeys like Patrick Mullens, Willy Mullen's son, goes down there. They even have the trainer's association meeting in that building. So like, Aidan O'Brien might be walking through the car park. You could be having a bad day and the next minute Chris Hayes or someone could pass you … Everything about the place [RACE] is unreal, isn't it?' (Daniel)

Two participants chatted about their perspectives on how many different opportunities there were in the horse industry now and how RACE prepared them for real life.

'We're all in RACE here. Not all of us are gonna make jockeys but we have such big opportunities in the racing and like, go traveling, head lad or lass. You could go into the breeding side of it. We could go into training and so on. We have so many opportunities now. It's not just jockey, jockey, jockey.' (Katie)

'That's the great thing about the industry as well, it's not like if you're not going to be jockey, go be a doctor or something. And that the good thing about here [RACE] as well. They're not drilling it into us, oh, yees are all going to be jockeys because they know not all of us will make jockeys. And that's fact, not all of us will, but the good thing is they don't fill your head like you're going to be a jockey. They don't do that here.' (Ellen)

'So they [RACE instructors] don't put you down and say you're not going to be a jockey either. You know, they kind of leave it open.' (Katie)

Finding 3: Theme interpretation and analysis

'Education is what remains after one has forgotten what one has learned in school.'
Attributed to Albert Einstein (Einstein, 1936)

Participants' accounts under theme three clearly showed how practical educational spaces in the horse world encouraged learners to engage with their whole-body to develop relevant knowledge and life skills (Dewey, 1938). In finding three we saw that 'school and educational learning spaces' (Illeris, 2009) were part of the horse-human experience. Real-world educational experiences were sought after by participants. The significance of incorporating experiences which were linked to real-world situations is supported by scholars in various fields, from experiential learning theorists (Dewey, 1963, 2015; Kolb, 1984; Howden, 2012; Quay and Seaman, 2013) and business leaders (Berger, 2015; Harmon and O'Regan, 2015; Hart Research Associates, 2015; Pietenpol, 2020). Support for education which links theory and practice also emerged from equestrians, reported in scholarly and popular sources (Hausberger et al., 2008; Hawson et al., 2010; Harvey, 2017; Horse Sport Ireland, 2017; Ford, 2019).

Being in an environment facilitated by caring educators meant participants felt freer to be themselves and have fun. Learning from an instructor who had 'been there and done that', increased the students' level of respect and attentiveness. A sense of empathy became a part of the learning environment, which helped people feel cared for in their educational setting. When care was coupled with a learners' interest, data suggested learners were even

more likely to pay attention and gain confidence. Receiving guided practice from educators who care is fundamental to positive, educative experiences (Freire, 2000a, 2000b). Expressions of care between learners and teachers differed in relatedness and reciprocity when compared with caring expressions between horses and humans. However, both types of relationships involved caring for and caring about another species and were best aided with action (Smith, 2004; Noddings, 2013). When mutual caring was experienced in an educational setting, participants reported they were more likely to gain interpersonal skills, such as awareness and connection to others.

It is notable that participants brought up the value of play and fun as contributing factors to how positively they viewed educational spaces ‘Having the craic’, stated by Daniel and Gary, happened with each other, with teachers, and while working with horses in professional and leisure settings. These statements are further supported by evidence in an IPC survey. PC as an educational organisation, according to 88.2% of respondents, had good to excellent opportunities to experience fun and friendship in a safe environment (Harvey, 2017). Light-heartedness was valued in the learning process, a concept reinforced in literature and theories of work-play balance (Dewey, 1916; Bisson and Luckner, 1996; ‘Democracy and Education 1916, by John Dewey’, 2008)

Data revealed that spending longer periods of time interacting with horses increased knowledge and built bonds and trust for both species. The concept and importance of regular, ongoing time spent with horses, as revealed under finding two, was contrasted with the limited time which existed in conventional school formats, as shown under finding three. Taking one class in school meant trying to learn within the time and resource constraints of that course, which was difficult, as was the challenge of getting to know a teacher when there was limited contact time. Whereas in educational organisations like RACE, ongoing involvement with learning content while interacting with instructors was the norm. Students lived on campus and had regular interactions with instructors in the classroom, in the barn, and during training sessions.

Strengthening mental, physical, and emotional agility, as indicated in the second section, also took time. This holistic process required ongoing effort which, as reported by participants, was facilitated through the educational design within PC and RACE. The preparation was practical and had immediate relevance. Engagement improved when the experiences were enjoyable. The importance of practical, interconnected, enjoyable, and respectful environments in educational settings like PC and RACE supported literature about

the importance of integrated learning and the benefits of ongoing learning (Hausberger et al., 2008; Share et al., 2012; Coulter, 2014; Dewey, 2015).

Finding 3 conclusion

As seen from participant narratives within theme three, attributes of equestrian education included learning in an interactive and social atmosphere. Classroom learning within RACE, for example, took place in smaller more personalised settings. More intimate educational settings were seen positively because they encouraged students to pay attention; participants knew the teacher listened to them and encouraged them, so they tried their best. In both educational environments, interacting in situ with horses was seen as a critical component to learning. In the third finding, participants once again drew conclusions about the differences between conventional and equestrian educational settings. Data illustrated equine learning environments suited participants better than traditional educational settings because they learned from caring experts, were motivated through their interest in horses, and felt challenged to take responsibility for their own learning. Practical learning helped prepare students for what was coming. Importantly, participants recognised the value of learning theory and practicing concepts in real life. Furthermore, several valued guided practice time before they were expected to apply new knowledge independently. Participants, as students within these two educational settings, recognised their confidence grew and these types of educational experiences made them better.

Participant data revealed that educational environments were viewed as more positive when there were opportunities to develop life skills. Life skills development will be considered next in the fourth theme.

Finding 4 | Theme: Horse-human interactions help develop transferable life skills. The transferability can occur from one horse experience to another and from horse-human interactions to other aspects of life, according to the majority of participants.

> *'Yes, I think it's impacted me, looking at things like, they're always going to move on. With horses, you can't go backwards. What he's learnt or if we've jumped something wrong it's still going to impact him, and you just move on.'* (Sofia) (Image 38)

Image 38: Sofia competing at Tattersalls (Anonymous, 2016)

The fourth thematic finding refers to how knowledge and skills gathered via horse-human interactions are transferred to other experiences with horses and to experiences outside the horse world. Subtopics within this theme will revolve around how responsibility, reflection, having empathy, thinking critically, and gaining social competencies were transferred.

Responsibility

There were many ways participants expressed how the responsibility of caring for a living animal transferred to other life experiences. Caring for another living species was a reminder of how dependent domesticated horses are on humans for basic survival needs.

> *'It's a lot of responsibility … they rely on you a lot.'* (Katie)

With all participants, there were conversations about caring for animals while growing up. For example, one participant stated:

> *'I just like working with mares and foals and injured horses, from young enough, at home.'* (Matthew)

Some found a particular closeness with horses who were housed at home:

> *'It is lovely having them at home … you just see everything; you see the maximum amount. You can see what's going on in there, how they are behaving.'* (Hallie)

My animal caring started with smaller animals at home. We got two kittens from our local library when I was five. Memories from those experiences follow:

> *I was five years old; the kittens were two gorgeous black and white bundles of fur which I named Paddy Paws (she had six claws on her front feet) and Patience. From the start, it was my responsibility to clean out the litter box every day, an unpleasant but necessary job. I remember, or I remember the story being told, that one night I forgot to clean out the box. My Dad woke me up, to the dislike of my mom who didn't want me to be disturbed. He gently reminded me to do my chores. I got up and did the task and went back to bed.* (Lisa)

That experience stuck with me and reinforced how important it was to commit to caring for an animal and own the responsibility. As I got older, I took on more responsibilities with the animals at home which translated into the care of ponies and horses on farms. 4-H, Pony Club, and horse riding instructors constantly modelled responsibility for caring for the whole horse. For example, we learned to daily pick out their feet to make sure there weren't any stones. Stones lodged in a horse's hoof can cause stone bruises and lameness. Picking out horses' hooves is automatic now. In a hazy state, I have left the barn but was compelled to return, no matter the time or temperature, to complete the task I had forgotten. Early experiences helped me learn how to be fully engaged in the responsibility of caring.

A participant echoed my sentiments in a short but impactful statement about caring for horses:

> *'I get great satisfaction out of interacting with them, and in doing that you're looking after something else you know; you're minding somebody else.'* (Hannah)

To extend the notion of responsibility as a transferrable skill, the following idea was expressed.

> *'The responsibility with a capital R is something which is very good for people to get, children all the way up. I think of people who haven't had anything to do with animals, they don't ever learn that they aren't as responsible. They probably don't make good parents either.'* (Joan)

This last comment was met with chuckles from the group, most of whom were parents. The skill of responsibility can be learned when teaching horses boundaries and through trust building which related to similar skills used when rearing children and helping them mature, illustrated in the following experience.

> *'They [referring to consequences if something goes wrong with a horse] are the same with children. The child has to understand what the boundaries are and they're happier that way [group agrees]. They prefer to have a boundary; the horse prefers to have a boundary as well. They [horses] hate if they think they're in charge because it's a herd animal. Okay, the dominant horse wants to be in charge, but all the others don't want to be in charge and if they think they are then they get very anxious ['that's very true', says Maya]. My bully grey horse, he is a bully but he's also a coward so he would hate it if he thought I wasn't actually in charge. He'd think, 'O God, what's going to happen now?'* (Joan)

Reflection and empathy

As discussed, reflexivity is a key component within integrated experiential learning. Reflection was also emphasised by participants using words and phrases like 'reflection', 'reflecting', and 'thinking things through' as illustrated in the following account.

> *'Particularly if you're riding and you know you're in trouble. Like, for me, I would be very quick to do things … I'm always on the alert and I actually have to sink right back into myself and think stop, stop, be really careful. So I have to do the absolute opposite to my natural reaction; dig deep into myself and don't panic, don't panic, and then sometimes it goes right and sometimes it doesn't [laughter in agreement from group].'* (Hallie)

Hallie's experiences were obviously relatable to the group. Other dialogue also reinforced the importance of reflection.

> *'Coming back, trying again, reflecting. There is so much of that in it. Say, coming to a jump … I find that if I'm on the horse it's very hard to tell when you're riding what you're doing wrong so it's great to have a coach on the ground [vocal agreements from group], the coach pointing out, when you're in the moment coming up to a jump for example, you can't see if you check [take up too much contact with the horse's mouth through the reins] the horse without realising, you know. Having someone point it out and then being able to reflect on that and then try.* (Maya)

'That reflective piece is really important. You beautifully described experiential learning … it's constant learning, thinking … think of performing a dressage test and maybe halfway through, you've planned, you've practised, but then on the day of the test is different. The horse or you have an off day. In that exact moment you're having to think 'what can I do, what can I change?, to save it, make it the best we can… The wind comes up or something like that. They [the horse] reacts or don't react, whatever happens you have to think, then your body has to keep doing while you're constantly thinking. It's an amazing interplay that goes on. So the reflection piece, glad you brought that up.' (Lisa)

Becoming more aware of the behaviour of horses was another outcome of learning to work with a horse. Reflection happened when participants listened to what horses wanted and became aware of how sensitive horses were to humans. Joan shared she learned to keep her cool which was 'a good lesson'.

'I think it [horse-human interactions] helps you to chill. I'm not a very chilled person. When you are around the horse, you have to be. You have to consciously make sure that you aren't too [excited] and that's very good for me anyway because I'm not very chilled. Especially the coloured pony, he was very very nervous at first when he first came to the yard. I don't know what had been done to him. I don't know what happened to him but he still is unhappy with small boys with sticks, so I think he had a bad experience with boys and sticks. I always have to be really calm with him. Even though he's 23, he still will lose the plot, okay, and so I think that's very good for me personally. And I suspect other people as well, because you cannot afford to lose your cool around horses. And to learn how to keep your cool is a good lesson.' (Joan)

The following reflection reinforced the idea that 'being cool' around horses was a necessary skill not only because it helped develop empathy but because horses are living beings who can decide at any moment not to go with you.

'Riding a horse is not like you're driving a wheelbarrow. I mean, you're sitting on that horse that's having thoughts and everything, and you need to just understand what they're thinking. Actually, you need to put yourself in their position and sometimes think, oh, what that horse wants from me, because not even everyone, every horse, is the same.' (Mary) (Image 39)

Image 39: Empathy, Mary on grey horse (Anonymous, 2019)

In response to Joan's story about her grey horse and the hay net situation told under theme two, I shared the following reflection.

'[Joan's horse was 'saying' …] "Come on to my agenda", my agenda says, "pick up the hay and put it in the hay net and I'll stop pawing". They train us. Like you said, Joan, it has helped me over the years to be a bit better at reading people. I was more naturally inclined to interact with animals, not that I was antisocial but it [horse interactions] helped me in terms of confidence … to be more aware, hopefully, of people and their reactions.' (Lisa)

Critical thinking and social competencies

On a practical level, the notion of transferability was shared by Sofia, who was finishing secondary school. She saw her experiences with horses as teaching critical skills like working through bad days, looking to the future, and not dwelling on past mistakes. She related her learning with horses to how she reacted to classroom situations.

'If something doesn't go right then I'm more able to [say] okay, what's the next thing? If I do bad on a science test then I say, we can always do better. I think, what can I do to improve this? instead of, I should have done better and like looking back. It's more looking forward 'cause even with horses it goes badly, I still am going to own them … I need to fix it. With horses I look forward.' (Sofia)

Several participants spoke about the skill of alertness, a form of critical thinking in action, as a set of embodied knowledge used when safely riding different horses.

'Not thinking is the worst thing you could be doing.' (Daniel)

'There's so much involved - your brain, your physical body and then the communication with the horse. It's much more complex I'd say then rally driving with a car when you know what the car is going to do. You've got to work on the relationship and then you need to listen to the coach and there's so much going on.' (Maya)

'If I'm riding a horse that I know is strong racing, I will ride perfectly. But when I'm riding a horse that I'm completely relaxed and feel they don't care, something will happen. It's because I'm just not paying attention. If I know I need to be aware that something will happen, most of the time it will be okay. If you're not paying attention anymore, your horse will jump …You need to be always careful and paying attention.' (Mary).

Other participants shared similar experiences which reinforced the need to adapt when handling different horses. Flexible thinking was seen as a key critical thinking skill.

'For example, you can ride a horse that is very strong, very big. And then after that in the next lot you will ride a very small filly that is so cute and weak, and you need to be able to adapt in that situation.' So it's not that easy, how it looks'. (Mary)

'There's no sleeping on a horse.' (Matthew)

'If you are, you'll pay for it.' (Ellen)

'They do have a mind of their own, alright, if they want to mess, they mess.' (Matthew)

'You can't just sit up on a horse and ride … keep trying different things.' (Katie)

Confidence

The majority of participants volunteered that confidence was key. Growth in confidence was developed through ongoing experiences and reflection. Thinking about how experiences impacted confidence levels helped participants change perceptions of themselves.

> '*But if I go in and I'm kinda in really good form and I'm confident. I can ride the horse way better and he goes a lot better for me.'* (Matthew)

> *'You need confidence, you mean, and so you believe in yourself. It's just more about the horse and you're sitting on it …'* (Colm)

Another example of a horse-human interaction which had immediate impact on confidence occurred after I was schooling Lady (Image 40), a horse I was leasing. Two experience journal entries follow.

> *'Carpe diem. Today felt right so I decided to apply one of my new favourite sayings picked up in Ireland; "if not now, when?" Turning Lady around in front of the water fence, she picked up an eager canter but wasn't too quick - listening to my half-halt. Before I knew it, we were over the three [elements in and out of the water] in a lovely rhythm with a smooth "S" curve and no hesitation. Boy did that feel like a million bucks. Big smile, loads of pets and 'well dones' for Lady …*

Image 40: Carpe diem. Lisa on Lady (Anonymous, 2018)

As I reflected on this experience, there was no doubt that one moment of navigating the zigzag line of fences where I overcame a previous bump on the 'learning with Lady road', on my own, had an immediate effect on my attitude, sense of well-being and self-efficacy. I wondered how this positive moment would impact my next ride. Final take away - I believe this story holds truths for our learning, in any environment. A small success or step forward, especially after a previous faltering or failing in the same application, has the power to create meaningful feelings of confidence which then ripple out to our next activities, feelings, experiences and encourage our brains to be reprogrammed, if ever so slightly.' (Lisa)

Katie related two experiences with ponies from her childhood. She gained confidence and kept improving because she learned to manage a challenging situation.

'When you're a kid, it's a lot easier when you get a fall. Like I know when you were a child and you got a fall, you bawl your eyes out crying. I know I did, anytime I fell, even if it didn't hurt, it's kind of the fright. Whereas you are thrown back up, once you get this, straight away back up on the pony to do the exact same thing. Whereas some people that haven't really [had these experiences] they're just like, oh, I don't want to get back up.' (Katie)

'I remember when I was a kid and let's say my pony ran out, I'd get into it, like not anger but I'd get into the zone in my head where you're [the pony] is getting over this jump. Like you are doing that but you kind of needed that from a young age to get me through now.' (Katie)

When chatting about falling off and having to get back on, the following ideas emerged from another participant.

> *'You have more confidence… because you're always anticipating getting on that horse again. Where if you just get back on it then you can ride it, you're like, 'okay I can ride it' [the horse you fell off]. Then you have more confidence to ride anything else, you know.'* (Ellen)

For some, we've gotten braver with age. We are willing to put up with more uncertainty, pushing ourselves to reap the rewards of an exciting horse activity.

> *'As I've gotten older, I appreciate the time more when I'm not enjoying it as well. I may mentally know what I should be doing, but physically getting the body to cooperate can be difficult. That's an interesting piece. Surprisingly enough, I was more chicken jumping, riding as a kid. I've gotten braver as I've gotten older which I know is counterintuitive to what a lot of people do but it took me a while to get there. What happened was that I was riding four wheelers, going up and down mountains. Then I started to be a little bit of an adrenaline junkie on a small scale. I did a little bit of jumping growing up. In my mid 20s I started back again, I did eventing. I had a dressage and jumping background but really didn't start eventing until my mid-20s, about 10 years ago.'* (Michelle)

An entry from my experiences journal supports the idea that, over time and through experiences with horses, confidence can improve.

> *'It's actually interesting, an interesting phenomenon as we get older sometimes, we get braver. I can relate to that for sure. I definitely enjoyed eventing as a kid. I've had breaks for many reasons. As an adult due to some serious traumatic events and some health issues, I figured, 'what the heck', I'll go for it'. I've gotten much braver. I'm certainly jumping much bigger fences in the fields than I ever did as a younger person. It's interesting that you [Michelle] mentioned that.'* (Lisa)

On the flip side of having confidence to overcome fear, participants shared the seriousness of not dealing with fear, especially when working with young thoroughbreds. The following quotes express how confidence was needed to overcome the emotional barrier of fear. Note, part of the second quote is repeated from page 152 because it also supports the topic of confidence.

'If you're afraid there's no point in doing it. You think, some mornings when I could be a bit tired and sluggish and I'm just giving the wrong signal to the horse, and he knows that and he will kind of mess me about a bit.' (Matthew)

'Because horses can feel that, like the horses know and they know when they can take the mickey out of a person like, like somebody, one person could get up on the horse and they take the absolute mickey out of them because they know they're nervous. And the next day someone who's confident, the horse won't. The horse wouldn't do anything because it knows that it wouldn't get away with it. So, you just need to, you just need to be strong.' (Ellen)

Coping and overcoming

The fourth transferrable life skill of coping emerged during all conversations, a significant finding. Managing more bad days than good days, the impact of self-efficacy, views from a gendered perspective, how to move beyond fear while dealing with risk, and how to overcome barriers will be included in this subsection.

Over half of participants spoke about how they dealt with the reality that horse-human interactions involved more bad days than good days.

'When you have good days, it's very rewarding … you got to go through all the bad days.' (Ellen)

'You've got to through all the bad days.' (Katie)

'I know, like I was out for, I wasn't riding for three months [due to an injury]. I'm only back riding like a month maybe. I had so many, like I know this sounds bad, but so many bad days where you just want to give up. But I know my goal … so I stuck it out.' (Katie)

Not only did Katie relate to Ellen's experience but she expanded on it and related the skill of overcoming bad days with racehorses to how she was able to handle difficulties at home.

'I suppose you do. Because of the racing and like, you just have to. If you have a bad day, you just have to get over it. And then you're kind of used to it. So, then something bad goes on at home or something, you're kind of used to taking the bad days or whatever. Or you don't take it as bad as maybe you would have.' (Katie)

When the group talked about competitions, Joan said that so many things could go wrong because horses weren't automatic.

> *'I think that's one of the things, it's not like pressing a button and you win. There are so many things that can mean that the horse can go lame, all sorts of things happen. When it's good, it's great. Often it isn't and you still own the horse … you still have to look after it'.* (Joan)

Some participants seemed to develop self-efficacy due to their experiences riding ponies as kids. These experiences further enforced the concept of overcoming.

> *'I think it does impact you, like it does really help your confidence because you kind of know. Like when I was 10, I was able to ride horses. So now that I'm 18, I know I'm able to ride a horse. So when people kind of, like you said, you have bad day, you still know that you're not a bad rider. Like you know you're able to sit up. It kind of helps.'* (Katie)

To this idea Gary shared an experience about jumping at a young age and how it helped him overcome challenges when jumping now:

> *'I think, I got my own pony was I was nine and I was kinda say encouraged by the parents at home to jump big jumps and even when you fall off, keep jumping him again, and keep going. And even though I was terrified, some of the things that my parents put in front of me to jump. Only for that I probably would have moved away from horses because I was so young. And over time then you just you don't mind, you just jump anything I suppose … it comes back to the achievement of being able to control the horse or get the better of it, that you're not going to let them run at every jump. And I remember one time I fell off a handful of times at the one jump, and I just managed to get him to jump it again. While other people haven't the confidence in me to tell me to do it and encourage me to do it.'* (Gary)

It was interesting that Gary said he overcame his fear and stayed with horses and now he doesn't mind jumping anything.

> *'Yeah, well, I even, I'm thinking, I've only fallen off a few times, because I'm not in it [RACE] that long, which I can think off the top of my head, two. The same horse has dropped me twice now at this stage. And then another horse has giving me a knock. But like, it doesn't stop you, really, like in a way like, I remember even at the start,*

just before we started, I got dropped anyway and the horse went flying up. And the owner caught it, of all people, and they threw me back up. But sure, it doesn't bother you like if you fall, you fall. Yeah, as I was saying there earlier on. As I said previously, if you're going to be worried or if you still don't want to go, then there's no point.' (Gary)

Mental toughness examples appeared throughout conversations. Females experienced certain situations in horse yards differently than their male counterparts. An exchange of experiences between Katie and Ellen illustrates this point.

Ellen: *'Especially with the colts … if you just sit on the colts and plod along, you know, they do something and you kinda don't do anything. They know and they're like, 'oh, I can do what I want here now'. And they [colts] can be dirty like... You have to be tough with them then, they'll cop to themselves and say, 'alright, I can't do anything anyways.'*

Katie: *'In a way like every yard is different, but in our yard, girls aren't allowed to ride colts. [pause] The trainer just doesn't. He doesn't like girls ridin' colts. But like for girls in this industry, like, you just have to kind of, have to get on with it.'*

Ellen: *'Fair enough, he [trainer in her yard] doesn't. He thinks because we're girls like, 'oh no girls can't ride a colt; colts are for the lads'. You have to build up like for yourself this kind of a guard … to not let people…'*

Katie: *'Yay. People say stuff to you, like, 'if you don't get on well with a horse or if the trainer isn't happy…..' Whereas you just need to know yourself - you can do it. You can't let little things get to you at all … You find yourself your mental strength as well. Look, I know my mental strength sounds stronger now after going through the yard than it was before... Whereas if someone said at the start to me, 'oh, you won't be able to ride that', I'd take that to heart straight away. I would have straight away thought, 'oh, I'm not good enough'. Whereas now I'm like, 'I know I'm good enough'.*

Equestrians experienced different kinds of fear or mental blocks when riding horses. Overcoming strategies were needed to maintain interactions with horses. The following is an example of a creative overcoming strategy.

'Even things you might not otherwise do … if I'm nervous on a horse that I'm backing [starting a horse under saddle for the first time], I'll sing. I never usually sing but it

calms me, it calms them, and it makes them think I'm calmer that they are … you can see the [horse's] ears, trusting. Usually the more nervous, the more I'm going to sing. They might start broncing. If you're singing, it makes you calmer and then they're more relaxed.' (Maya)

Again, participants drew conclusions which differentiated experiences with horses from classroom experiences. The following reflection illustrates differences when coping with fear. Joan has a background in education and learned, taught, and volunteered in various traditional and equestrian settings. She explained that learning with horses is a multi-dimensional, layered type of learning.

'There is a difference, school classrooms aren't usually terrifying. Whereas quite often you might be terrified with a horse, and you have to deal with that. I suppose you might sometimes have a very scary teacher in a classroom. They're not going to trot you off where a horse might ['yes's', from the group]. You have to learn to deal with your own fear of the horse. If you're worried it's going to do something, you have to have a toolkit to cope with that. And I think the more you ride, the bigger your toolkit. That means your fear is reduced, because you have these strategies that you use if you think something is going to go wrong. I like that sort of layering kind of learning. As the years go on, you build up a toolkit and that's a bit different from the classroom. I suppose in the classroom when you're learning, you can progress up through the levels in the classroom as well. But it's sort of one-dimensional compared with three dimensions you have with the horse.' (Joan)

Likewise, Hannah overcame fear in the following account:

> *'I really enjoyed the schooling [over fences], I get a great kick out of it. And look, at the start when you first start schooling, I don't really know, I was kind of scared and I wasn't used to it because I would've done like a small bit of jumping but just with a few ponies, nothing with the racehorses, obviously. Because it's a lot faster and a lot bigger. And you're right, I like jumping. So I'm happy in this picture because of how comfortable I'm after getting schooling and how much I've come on since we started, I don't have a big red face anymore.'* (Hannah, Image 41)

Image 41: Hannah practicing jumping over hurdles (Anonymous, 2019)

Another challenge discussed was how participants overcame mental barriers. While this concept was related to discussions within theme two about horse activities requiring mental strength, the following accounts extend the conversation.

> *'I think all of us are strong enough to hold the horse, but just the mind is the part that is holding you back.'* (Mary)

> *'That is, sometimes you're fighting with your head. I think it's a lot against your instinct, it took me a long time as well to catch the horse up again, you can't do it, you know … Like if a horse was getting faster with me, usually I grab the reins again and I grab them tighter, and it just makes things worse. And you're kind of fighting with your head then you know.'* (Daniel)

Colm seemed to experience something similar when he shared this mental struggle.

'And I don't know, don't move your hands but it is so hard not to move your hands as you know. You just have to grab a hold of them again, you might pull them back to you. But just doing the opposite and you're just telling your mind you can't do, you're just going against on your instincts, and then you kind of stay [quiet]. When you ride work, they kind of grab the horse up to pull the bit up into his mouth. So when he feels you grab him up he's like, okay, he [horse] wants to go faster, but you want him to slow down. That's actually something in their earlier training.' (Colm)

Commonly, a passion for horses was shown to encourage many participants to keep going despite physical barriers and injuries. A personal example explains:

'Horses have been integral to overcoming illnesses. I have had a lot of health issues, from brain surgery, neck issues, etc. Horses have been that thing that has popped me back, always [group heard uttering 'mmmm' in agreement]. It's really been an important part of coming back into the world after negative situations in life.' (Lisa)

Another person related how injury became a physical barrier and how she changed her approach as a result:

'For some background, three years ago I had a fall cross-country and broke my collarbone. Last year I had several surgeries that cut me off from riding, so I haven't been actively riding for the past two and a half years ... [she then spoke about her current situation] I have an office job so I am not fit for galloping six horses a day and I don't have any aspirations to do that. I'm more customising my education based on making is safe and fun.' (Michelle)

As mentioned, an ability to cope can be improved through connections with horses and nature. A voice memo I recorded after a particularly hard day illustrates how connections with horses, in nature, helped me work through a difficult experience.

'… driving back from the yard after a tough day but thank goodness for Silver, and horses, and Martin's encouragement, and of course the support of my family but I want to talk specifically about how horses clear my head. Being around them, having to pay attention to their cues and what's going on and trying to do right by them because … of what they continue to do for me… I had a really fuzzy morning at a meeting, it was weird, I lost a lot of confidence, and thought the behaviour of others was quite rude and wondered why I was even there, what's the point if I'm not asked for input, not heard … even if I don't talk as fast … I had a screaming headache this

morning. Sometimes I feel like my brain surgery and all that, slows me down a little bit, processing... People … literally run you over when you speak and in their body language, they close you off … I tried to push through and … stay positive… It's amazing how much better I feel now after being at the yard, in fresh air, getting exercise, hauling things around, using all parts of my body, and allowing my mind to go to another place of concentration apart from the stress and the negative feelings, feeling worthless … To being able to get on … progress Silver a little bit, work on my position, his suppleness, and his rhythm, try to teach him something but always learning. I feel more positive, I feel more confident, I feel able to get through and appreciate the nature around me, and God's creation, it's so beautiful …. It almost brings tears to your eyes, it kinda chokes me up (pause), life is short (pause). I think horses evoke a lot of emotions for people, they certainly do for me and I'm not a very emotional person usually … Being around such a beautiful animal (pause), it brings things into perspective. You look around and think, gosh it's a beautiful night, the sun was shining, the shadows, it's light at 10 o'clock now… Riding around on a horse makes you open your eyes and look around. It's so easy to get caught up in the negative, the crap people shoot at you, maybe they mean to maybe they don't, maybe they're not even aware, or maybe it's a powerplay or greed, or insecurity, or overconfidence … I'm thankful that I got to go out today and ride Silver. I really think these sorts of little snippets of a story that I shared right now, so many people I've talked to… really highlight the fact that horses are having gigantic impact on people's everyday lives.' (Lisa)

Finding 4: Theme interpretation and analysis

The majority of participants, a significant finding, provided examples of how different life skills were developed through their interactions with horses. These findings suggest that many of these skills may be transferrable to other situations in and out of the horse world. Data showed horse-human interactions can create transferrable skills like learning responsibility and confidence. As discussed, learning and being active in the outdoors with horses boosted learner motivation and engagement, enhanced physical and mental health, and assisted in the development of life skills. Scholars have shown being active in nature can improve motivation and self-efficacy (Aisher and Damodaran, 2016; Bratman et al., 2015; Louv, 2012; *Sport Ireland Policy on Sport and Physical Activity in the Outdoors*, 2020; Szczepanski, 2002). Evidence from data confirmed what nature and learning studies revealed - increases in nature engagements can evoke responsibility, critical thinking, and

confidence (Louv, 2012; Rousseau, 1979). From this evidence I am convinced the inclusion of the ecological is an important layer of integration within the experiential learning process.

Life skills development and knowledge transfer are regular topics in popular equestrian magazine articles and further confirm what emerged from the data. Blincoe is a writer, horsewoman, and mom with horsey kids who writes about the benefits to children who ride horses. She believes traits emerge from the horse-human connection which will serve kids for a lifetime and include 'assertiveness, patience, reliability, resilience, health and fitness, and adventure' (Blincoe, 2017, pp. 94–95). From the *Your Horse* article Blincoe states, 'learning to gallop or jump builds a deep confidence that reaches out so far beyond the yard' (2017, p. 95).

Within this finding, four key life skills were identified from participants' experiences with horses: 1) responsibility, 2) critical thinking, 3) confidence, 4) coping and overcoming.

The first key skill was responsibility stemming from the reliance of horses on humans for basic needs. Equestrians must possess a deep level of commitment to care for, breed, train, and ride horses. This care is typically not a solitary effort but happens in teams. Teams offer opportunities for relationship building. Through the responsibility of caring, deeper bonds emerged, which can be linked back to the first finding about building relationships with horses. Fostering responsibility in social contexts is a type of learning supported by Dewey (Dewey, 1974; 'Democracy and Education 1916, by John Dewey', 2008). Learners who developed responsibility were better positioned to contribute to society (Dewey, 1938). Part of becoming a contributor is having an ethos of care. Caring responsibilities were important for participants; they were seen as enjoyable yet recognised as requiring dedication and sensitivity.

Secondly, along with responsibility, participants talked about critical thinking as a key life skill which developed alongside interactions with horses. Critical thinking was connected to the development of social competencies such as awareness, alertness, and adaptability. For example, Colm shared that he had to adapt to riding different speeds and distances depending on the type of racing yard he was working in. Daniel said skills of adaptability and awareness were embodied skills where you must control your mind to change your body position, transferring your knowledge from one situation to another. Critical thinking was shown in other research as vital to navigating the multi-species space (Gardner, 2002). Having this kind of intellectual capacity was reported to be a desired organisational trait (Harmon and O'Regan, 2015; Hart Research Associates, 2015; Pietenpol, 2020). The importance of learning through critical thought and physical action fits with recommendations

of educational scholars (Alheit, 2018; Freire, 2000b; Grummell and Finnegan, 2020). The importance of opportunities to put critical thinking into practical action, was discussed by participants and was a recurring theme in experiential education literature (Alheit, 2018; Dewey, 1963; Higgins and Nicol, 2002; Kolb, 1984; Schön, 2011).

Scholars have indicated socially contextualised learning adds value to whole person living (Carragher and Golding, 2016) and is transferrable to real-world situations (Sin, 2017). Findings have shown horse-human interactions are naturally social because caring for horses and related activities are situated in communal or familial settings. Participants explained the importance of communication because of the team nature of working with horses and competing in horse sports. Effective communication was a skill linked to the development of mutual trust and relationships, processes involving mental, physical, and emotional integration, hallmarks of experiential learning theory (Dewey, 1963; Freire et al., 2014). Other social networks, like Men's Sheds, support the importance of critical thinking and problem-solving as being a needed part of the learning environment. Men's Sheds meet the real needs of older Irish men because they are social, nonformal and informal learning sites which enable the whole person to 'solve problems and add value to people's lives' (Carragher and Golding, 2016). Social competence is developed in positive communities, a benefit linked to experiential learning (Anslow and Maurer, 2015; hooks, 2003; Ojanen, 2012; Zuber-Skerritt and Teare, 2013).

A third key transferrable skill that emerged from the findings was confidence which aligned with findings from an IPC survey. The survey discovered that among the best things about being involved with PC were feelings of achievement, improvement, and confidence (Harvey, 2017). People who interacted with horses in a variety of spaces, indicated their confidence was tested and grew through challenging experiences such as overcoming injuries. A ripple effect of knowledge transference occurred when confidence from horse experiences was applied to other areas of life (Deese, 1958). Participant experiences confirmed that a deep level of confidence, for example, can be developed through learning to gallop a horse which extended well beyond the yard (Blincoe, 2017). Key confidence building moments added up for participants and fostered lifelong learning habits (Barkley, 2010; Bruffee, 1999; Fitzsimmons *et al.*, 2014; Kenny and Hynes, 2008).

As shown, some participants' spoke about being female in the horse world and how this impacted their confidence. Ellen and Katie seemed to accept that trainers at some yards didn't let girls ride colts because colts can be feistier and stronger and take advantage of their riders more than fillies. During these work placement experiences, female participants

didn't begrudge the trainer and respected his decision. In fact, participants used these situations to build their mental strength, which was corroborated in numerous accounts in scholarly literature (Adelman and Knijnik, 2013; Coulter, 2013; Dashper, 2013).

The fourth life skill related to developing coping mechanisms. Findings exemplified that horse-human interactions blended mental, physical, and emotional toughness and helped equestrians learn to deal with challenges (Dashper, 2016; Hartmann et al., 2017; Hawson et al., 2010; Maurstad et al., 2013). For example, participants spoke about how overcoming more bad days with horses than good created self-efficacy and determination, part of a resilience toolkit (Blincoe, 2017; Henderson, 2012). Resilience can unfold in environments where internal and external protective factors, as described in chapter one, are present to build up an individual's ability to cope and move through adversity (Benard, 2007; Henderson, 2012). Persistence and passion, as evidenced in this study's data, are defined as grit by some scholars (Duckworth *et al.*, 2007), and considered part of resilience development by others (Benard and Sharp-Light, 2007; Henderson, 2012). Therefore, equestrians can learn to be more resilient during horse-human interactions, which can transfer and add to resilience to other areas of life, a significant conclusion of this study.

Finding 4 conclusion

Within the fourth theme we discovered how participants' gained knowledge and skills from their involvement with horses. Responsibility, critical thinking, confidence, and overcoming were shown to be life skills which could be developed through horse-human interactions and applied to other situations in life. Participant accounts made a strong case that horse-human interactions created knowledge transfer, through a blending of book knowledge, tacit knowledge, and embodied knowledge.

Maya shared the following account about how she had lost her nerve jumping because of a couple frightening experiences.

> *'I've become anxious about jumping because I had a couple of frights, I lost my nerve and then got back, got back jumping, then lost my nerve again … it's really rewarding to overcome that. If I jump 80s [cm jump height] now I'm thrilled, whereas before I had no problem. If I went and did a 60 [cm] on my young horse, I'd be thrilled with myself. You know what I mean?'* (Maya)

Maya got her nerve back only to lose it again and related overcoming to personal reward. The final and fifth theme will focus on personal rewards from horse-human interactions.

Finding 5 | Theme: Personal rewards arose from horse-human interactions which gave all participants a sense of satisfaction.

> *I did a postgrad cert in Innovation that was very hands on, experiential learning, where we're playing with Lego and we're using spaghetti and marshmallows. The difference in the learning was amazing. That was very like the horse learning, it's for you and it's in the moment. The PC learning is very much like that, it's a personal reward.'* (Maya) (Image 42)

Image 42: Maya relaxing with dun pony (Anonymous, n.d.)

The concept of satisfaction or sense of personal reward is the focus of the fifth and final conceptual thematic category. Many participants found satisfaction from progressing a challenging horse, for example. This sense of reward was fulfilling and motivated them to seek more learning opportunities with horses and in other aspects of their lives. Subtopics within this theme will include how rewards were realised from participants progressing horses and improving themselves. I named the theme 'personal reward' because participants repeatedly used the term to represent their feelings of satisfaction.

Rewards of progressing a difficult pony, horse

Participants gave multiple examples of achieving a sense of personal reward because they were able to improve a problematic pony or horse. One participant illustrated the idea of personal reward effectively when she linked it to the skill of responsibility (finding four) and the process of learning responsibility as a by-product of interactions with horses (finding two).

Image 43: Joan competing at dressage show (Anonymous, n.d.)

'You have a responsibility to the animal. You can't just walk away from them. And I think that's a big thing for young things like Sofia. It's not something you put away in a box when you are bored with it. The thing I've found really rewarding with horses is the feeling that you can progress with them. You start out with something which is not particularly good. My grey horse … he couldn't walk in a straight line when we first got him …. He bucked, mind you he still bucks but not very seriously … I've got the coloured pony as well; he turned out to be really good at dressage. He's done really well for both my daughter and me. And you wouldn't have known that when we first got him because he was in the riding school. We bought him because my daughter fell in love with him in the riding school. And that's really rewarding … you put the effort in and it's really rewarding. With him, because he's not really big and he doesn't look very exciting and he's schlepping around. But them when you pick up the contact in the warm-up you can suddenly see people going, 'oh what?' He turns into a dressage horse. Then he'll go back into being a fat little cob, which he is.' (Joan) (Image 43)

Later, during a chat about status in PC and families who could afford to buy more expensive, made ponies, Joan shared another point about her coloured cob.

> *'We were happy with our little ex-riding school cob. The fact we made him into something was much more rewarding than buying a made pony.'* (Joan)

One of my experiences growing up was similar to Joan's; it was with an appaloosa I bought. Paprika and I were both twelve when our partnership began and I entered the process of retraining her to be a lower-level event horse, mainly for PC and local competitions. We were successful at these levels, and I enjoyed a deep sense of satisfaction when people expressed surprise at our success. We would win dressage classes against a class of fancy warmblood horses and produced numerous clear jumping rounds despite Paprika not having the most stylish jumping form.

An account by Maya provided further evidence of personal reward being linked to learning, as explored from a different angle than the discussion on learning within finding two.

> *'My kids asked me, 'why are we studying this, we're going to forget this'. You can't remember any Irish and you've studied it for years, I was saying, because, blah, blah, but they're kinda right. You are right, with the horses, it's different. As long as the kids want to be there, you're learning for yourself, it's different and you're in the moment more with a goal that's non-concrete ... '[In PC] each child is feeling it in the moment, it's not the one day.'* (Maya)

Horses and humans are learning together and there is great sense of satisfaction when:

> *'you can bring a horse on and do things it couldn't do before.'* (Joan)

A participant explained what motivates his involvement with racehorses.

> *'I just like kind of seeing him progress as well when you're riding him every day. I used to ride a horse in the place I work, and you couldn't even get the bridle on it. And now, it's, you can get on it straight away, no bother to it. He wants to do it, he wants to get out of the stable and do it. I find that amazing.'* (Daniel)

Look how far I've come | Satisfaction with progress

The concept of personal reward as an outcome repeatedly arose when participants reflected on and shared details about the photos they brought to the interviews. Daniel responded to my question about why he selected the photo to share with the group (Image 44) by saying:

> *'Cause I look good in it. I suppose, I'm in the position I wanted to be in. And one looks different on a horse, you know. I felt I was doing it right. I'm kind of in control, on my own.'* (Daniel)

Image 44: 'I look good', Daniel galloping on The Curragh (Anonymous, 2018)

Mary expressed satisfaction in her improved galloping position when she talked about her photo (Image 45). She echoed her peer by talking about her surprise in how well she looked in the photo:

Image 45: Mary galloping bay horse on The Curragh sand gallops (Dempsey, 2019)

> *'I have that picture pose here and picture has made me totally famous by mistake because I didn't even know that the photographers were standing on the side. And I was just doing my own thing like I would do every single day … and that picture, up on the internet, I was actually surprised because I didn't know that I actually looked that good. I didn't know that could be me. I was always looking at jockeys and even people in school, and I was always saying, 'oh, they're so stylish, they look so good'. And then eventually when I said to myself, 'oh, so I suppose it's [her own style and ability to ride] all right.'* (Mary)

There was a trend developing. Colm explained the meaning behind his selected photo (Image 46) which showed him galloping a horse on The Curragh.

'This is my first year of race riding, I'm the same as Daniel. This is Maddenstown (showing Image 46 on his phone), far side of The Curragh. It's just like kind of the same thing only seeing from where I was to where I am. And I've just seen the progression that I have … When we were starting first, we spent nearly two weeks in an outdoor arena with no stirrups at all. That's where we started, nothing, I say restarted. Painful memories. I have to go back and look after Christmas and remember, [I] got thrown off a horse. Like I know my own horses anyway. So there are a lot of good horses that we don't train but like they'd be coming back from a break and you'd be riding horses that are Grade 1 [most competitive race category]. Last year I was barely able to ride a horse, I was thinking "what am I at? I'll never make it" … then I'm finally able to hold a horse.' (Colm)

Image 46: Colm galloping at Maddenstown (Anonymous, 2019)

'But now they [referring to Colm and Daniel] can ride every single horse in the barn, that's a matter of how strong they are it's crazy.' (Mary)

Some participants brought up satisfaction with how they had progressed in their ability to demonstrate race riding skills.

'So this is me [showing Image 47 on his phone].

Well, it's going up a seven-furlong stretch. I haven't rode an awful lot, at all really. I only started really when I came [to RACE]. Obviously, I kind of improved a bit since then. I was working with mares and foals and injured horses and all that craic. Really from young enough, at home, on and off.' (Matthew)

Image 47: Matthew in front, galloping on the grey horse (Anonymous, 2019)

'You had access to horses?' (Lisa)

'I did horses a good bit alright, not riding like that. And then I was here on the trial [admissions trial at RACE] …. And I just learned from there, really literally from rock bottom. So yeah, that was really me, and I'm flying now at the moment I think, yay, hopefully.' (Matthew)

When comparing his earlier interactions with horses to riding racehorses Matthew talked about his experiences riding at speed.

'So obviously you know they [racehorses] are going fast. It's nothing like on TV. But when you're on the ground, you don't really see it but when you're actually on them, it's different. Especially when you're going full clip, which is unreal, there is no better feeling, really, going at that speed.' (Matthew)

Matthew continued with a retelling of how he learned to ride in a better position:

'That's fairly low [the galloping position] for me because I'm quite tall. So I get quite sore. A lot of gym work, work on the legs, and all that stuff, need to build up the legs. Because you're standing [in the stirrups] like that for a couple of minutes at a time, which is obviously long enough. Well, it was tricky enough to get to that position from where I started at.' (Matthew)

Ellen responded by complementing Matthew saying although he started from nothing [no prior race riding experience]:

> *'Now look, his is absolutely flying'.* (Ellen)

Gary shared his self-selected photo and like all in his group, the picture was of him riding a horse up a gallop during assessment week for RACE admission. The photo I received after our interview was different, but his experience of satisfaction is useful to report. Some of the second half of this account is repeated from page 163 because of the support it also provides to this conversation.

> *'So this is my assessment week. We're doing half speed up Maddenstown gallops. And I suppose I enjoyed that because it was, it was an achievement to me that the RACE instructors would let us do half speed. They were confident enough in our riding. I thought that was good that they were confident with us.'* (Gary)
>
> *'Had you riding experience before?'* (Lisa)
>
> *'Yah, I would have been doing say Pony Clubs since I was five … So I came up here and they were telling me in the barn I've been improving. And that keeps you motivated to learn more and do more things. I had done well in school, but I had no interest in it. Horses were all I had interest in really.'* (Gary)

Another aspect of personal reward was the satisfaction of working with horses within a team of people. In one group, the topic of horse sports as team sports was connected to the theme of personal reward. The following exchange illustrates the importance of being a team player.

> Lisa: *'It takes a whole team. There are so many different elements to actually getting a horse out on the racetrack… It's sounds like what you're saying is they [RACE] value there are different opportunities for different people, places to go.'*
>
> Katie: *'Someone watching at the races, like you don't actually realise how much work is put into getting the horse to the races.'*
>
> Lisa: *'I love when I hear interviews after a race and the first thing a jockey says is how much great support he's gotten from the groom, head rider, exercise jockey, etc.'*

Ellen: *'It's such a team sport you need to be a team player in this game. You can't go in with a mindset like it's you on your own.'*

Lisa: *'And working with the horse, that's a team, that's a partnership, a team…'*

Ellen: *'It's so rewarding then you know.'*

Katie: *'It really is.'*

Ellen: *'When you have good days, it's very rewarding.'*

Katie: *'You have a lot of bad days, but when you have good days, it's just good.'*

Ellen: *'You have to go through all the bad days.'*

Kate: *'Yeah.'*

Finding 5: Theme interpretation and analysis

'A good feeling after the round is better than any ribbon.'
Bert de Némethy (Wofford, 2014). De Némethy was the US show-jumping coach from 1955-1980, a time considered to be the golden era of US Eventing.

Experiences which were personally rewarding were shown to positively impact participants. Some were motivated to keep learning because of the reinforcement of their progression. Gary said, '*they were telling me in the barn I've been improving. And that keeps you motivated to learn more and do more things'.* Concepts about personal rewards which emerged from the data added to knowledge that experiences which yield satisfaction have holistic impact on the learner. For example, the rewards from progressing a 'tricky pony' which had its hazards, were comparable to rewards learners reported gaining from working through risky situations in conventional classrooms, as discussed in finding four. Research primarily situated in outdoor and adventure education showed interesting phenomena occurred when learning in risky situations was introduced through safe and professional practice with an aim for increasing knowledge and a sense of personal satisfaction (Bisson and Luckner, 1996; Higgins and Nicol, 2002; Prouty et al., 2007).

Although most participant's accounts were about individual experiences of personal reward, experiences had common characteristics which created comradery. A trend was discovered through the data analysis. Several types of intrinsic rewards were shared by participants -- recognising how far they'd come, progressing a challenging horse, and progressing

equestrian skills. Achieving goals through embodied experiences with horses created emotional, cognitive, and physical benefits. Working in a team within horse sports, for example, was comparable to the shared sense of satisfaction resulting from social learning and experiences within communities of practice (Wenger, 1998).

The concept of personal satisfaction comingled with the importance of relationship building and the life skill of persistence, as explored in earlier findings. Horse-human interactions necessitated a forward looking, positive attitude. Many rewards were internal which kept participants motivated. Overcoming anxiety, or any of the numerous known and unknown risks and challenges, produced a feeling of satisfaction that had relevance (Angstmann et al., 2019; Benard, 2007; Kolb, 1984; Stock and Kolb, 2016). Stories of overcoming like these may represent a way for learners to realise hope. The educational process might be re-examined and enacted differently to help learners become free from their fears in the learning process (Freire, 2000a; Freire et al., 2014). The more opportunities participants had to practice responsibility, empathy, and adaptability, the more critical thinking and confidence skills were built. The more confidence grew, the greater the ability to face new challenges with increased determination.

Finding 5 conclusion

The fifth theme rounded out the findings and was about personal satisfaction. Experiences indicated a sense of personal reward resulted from different aspects of horse-human interactions. Data revealed risks included physical dangers, which always required attention to safety, and mental struggles, coping with disappointments and uncertainties. Satisfaction was realised from progressing a difficult horse and gaining knowledge and skills from a place of unknowing. Simply being around horses provided enjoyment and was an incentive to persevere despite the discussed risks. The rewards, participants agreed, were great because horses give non-judgemental affection and participate with you in shared, powerful experiences (Stock and Kolb, 2016). As one participant said, *'The love of horses brings people together'* (Siobhan).

Chapter 6 conclusion | Integrating experiences

This pivotal chapter moved the thesis from context and biography (chapters one and two), literature review (chapter three), methodology (chapter four), and methods (chapter five), to a presentation and interpretation of findings (chapter six) (Bell, 2010). Chapter six

presented five central conceptual/thematic findings alongside interpretations and analyses which synthesised data about horse-human experiences to address research questions.

The first finding showed how horse-human interactions can facilitate relationship building where special bonds may form. The desire to continue interacting with horses was fuelled by the passion people had for horses' wonderful spirit, beauty, and athleticism, as read on pages 146-147. The relational aspect of horse-human interactions was frequently discussed amongst participants, seen on page 150-152. This evidence was reinforced in literature about how learning is enhanced through relationship building (Boud et al., 1993; Hausberger, 2008; Freire et al., 2014; Davis et al., 2016). The fundamental impact of participants' relationships with horses was shown to connect to the social nature of learning where developing mutual trust was crucial, discussed on pages 154-155, supported by the aesthetic elements of experiential learning theory (Dewey, 1938; Quay and Seaman, 2013).

The second finding demonstrated the numerous ways people made sense of their experiences with horses. Many experiences with horses were shown to relate to the experiential learning process, page 160, supported by experiential learning theory discussed (Dewey, 1938; Freire, 2000a; Quay and Seaman, 2013). Learning techniques centred around embodiment, pages 176-177, and reflection and were influenced by others, page 161. Being connected to another species in the natural environment, pages 164-165, heightened the learning experiences as I've learned scholars who discuss the interplay between nature and learning (Dewey, 1938; Louv, 2008; Howden, 2012). Data revealed that a continuous and integrated approach to learning through horse experiences was best fulfilled when the person drew on prior knowledge, pages 168-170. Participants emphasised the importance of remaining alert, staying in the present to manage risk, all remaining sensitive to the needs of humans and horses, pages 172-175, this phenomenon parallels equestrian, and adventure education literature which reveals the delicate balance of appropriate risk while learning (Prouty et al., 2007; Davis et al., 2016; Hagström, 2016). Learners could create relevance by linking experiences to the future and were often motivated to keep learning if they were having fun, as discussed on page 177-178, like literature which evidences how light-heartedness while learning improves motivation and retention (Dewey, 1916; Louv, 2012; Alheit, 2018). These learning experiences were often perceived as different from conventional schooling experiences, as depicted on pages 166-167.

The third theme examined how participants engaged with learning in equestrian educational spaces of PC and RACE. These organisations differentiated from conventional schooling

experiences. As shown by educational scholars who tout the benefits of relevant learning (Dewey, 1963; Howden 2012; Quay and Seaman, 2013), participants were quicker to find merit in education, which was practical, pages 188-190, and accessible yet challenging, page 191. The whole person benefited when instructors were credible, page 192, and caring, pages 190-191, while expecting the best from each learner, page 192. These benefits underscore what experiential learning and human-animal studies scholars teach about the importance of integrated learning experiences (Hausberger et al., 2008; Dewey, 2015).

The central focus in the fourth theme was the importance of learning skills which were transferable and became life skills (Deese, 1958). Through interactions with horses, participants reported increased opportunities to develop responsibility, pages 198-199, empathy, pages 200-202, and social competencies like confidence, pages 203-206. Learning which boosts confidence, for example, is reinforced by educational scholarship about collaborative learning (Bruffee, 1999; Barkely, 2010). Overcoming inherent risks and challenges of working with horses developed persistence, pages 207-208. Persistence is a skill strongly linked to resilience (Benard and Sharp-Light, 2007; Duckworth et al., 2007; Henderson, 2012; Dashper, 2013; Maurstad et al., 2013). Critical life skills gained from horse experiences were transformational as many rippled into other aspects of participants' lives, page 208-209. The importance of learning transference is a concept underscored by writers who discuss the importance of putting critically thinking into action (Higgins and Nicol, 2002; Blincoe, 2017; Alheit, 2018; Schön, 2011).

The fifth finding examined the sense of fulfilment which could arise from interacting with horses, pages 219-220. Participants shared stories of how they learned to cope with adversity, page 221-222. Working with horses was shown to involve a lot of resilience, reinforcing concepts of how building skills of persistence improve learners' ability to overcome challenges in the future (Benard, 2007), giving hope despite adversity (Freire et al, 2014). Rewards were largely intrinsic which fuelled participants to learn even more, page 222. Many thrived as a result like existing knowledge about how personal satisfaction can assist learning (Bisson and Luckner, 1996; Higgins and Nicol, 2002; Stock and Kolb, 2016).

Findings were individually important but were collectively significant when viewed through their integration. Participants had an underlying passion for horses, and all enjoyed the relationship building process (Finding 1). A love of horses motivated all participants to keep learning through various techniques (Finding 2), and they often get involved with equestrian organisations which offered them something different - a more holistic, experiential way of

learning which contrasted with traits of traditional schooling (Finding 3). Participants recounted ways horse-human interactions helped them develop transferrable knowledge and skills. Social skills of empathy and responsibility, critical thinking skills like adaptability, and coping skills like overcoming fear and working through uncertainties (Finding 4) gave them personal satisfaction which sustained them and encouraged more learning (Finding 5). When all of the findings are integrated, a picture of whole-body eco-experiential learning emerges which can be a model for all interested in moving beyond mind And/Or body polarities within the field of experiential learning. As discovered through the data, learning through educative experiences which were connected to nature developed persistence and grit. Understanding how interacting with horses and the natural world can lead to learning personal responsibility can provide opportunities to develop resilience for a more informed citizenry, synthesised as a significant conclusion of the research in the next chapter.

The five findings which emerged from the data and my interpretations of their central concepts form the foundation for chapter seven. Conclusions will address research questions. Discussions will be broadened into actionable recommendations for educators to consider how to think about and apply ways of learning from the study data. Recommendations also include how future research might build on this study's work in experiential learning. A few reflections on my thesis journey appear as the conclusion to the final chapter.

Chapter 7: Conclusion | Moving beyond [one fence & looking to the next]

'Through the days of love and celebration and joy, and through the dark days of mourning – the faithful horse has been with us always.'

Elizabeth Cotton, American blues and folk songwriter (*101 Horse Quotes for Horse Lovers*, n.d.)

Image 48: Coloured horse with rider, cantering towards the next fence. Photo by Lily Banse on Unsplash.

Introduction

The aim of this study has been to investigate experiential learning from an innovative perspective of horse-human interactions. I wondered how participants went about doing, knowing, and becoming through these experiences, described earlier as Dewey's experiential learning triad. The study was based on a qualitative interpretive analysis of participants' accounts of their experiences with horses and examined how learning occurs through these experiences and what impacts resulted. I discovered an opportunity to add to knowledge about how we learn through experience from a multi-species, whole-body perspective to help move beyond And/Or polarities in education towards personal growth and resilience.

What emerged from the data led me to conclude participants' learning was impacted on a holistic level when they fully engaged in interactions with horses. This learning became part

of who they were and thus had the power to transform them as they gained new knowledge and skills. The effect of these educative experiences permeated into other areas of their lives. An aesthetic approach to learning, built on existing experiential learning theories, was widened through this study to include horse-human interactions. It has significance for the fields of education and human-animal studies and for its possibilities to promote individual growth towards improving responsible environmental knowledge and action.

As a researcher, educator, learner, and participant in the fields of horse-human interactions and experiential learning, this study helped fulfil my responsibility to generate knowledge and actively promote ethical, responsible and sustainable practices. This study challenges us to place importance on individual responsibility, as educators and world citizens. I believe the significance of this study is multi-faceted. Firstly, this study shed light on the dynamic relationship between horses and humans, which has been crucial throughout human history. Secondly, understanding the uniqueness of learning through experiences with horses can shed light on how educators can facilitate more opportunities for learners to develop and practice relational learning, life skills, and resilience. Studying learning in the context of horse-human interactions can provide insights into developing and maintain positive relationships. Positive impacts can be realised through teaching effective communication strategies and interpersonal skills, which can be transferrable to other human to human relationships, for lifelong growth and development. By working to establish and maintain caring relationships within robust and diverse learning situations, we can promote respect for ourselves and other humans and other species to improve our protection and conservation of the natural world. Understanding the integration and continuity of horse-human interactions and experiential learning can show the human impact on the state of the environment and humans' relationships with other species. This includes recognising the importance of overcoming And/Or educational polarities by taking the whole learner and learning contexts into account while embracing our interconnectedness to all living beings. Teaching principles of individual responsibility through asking questions and solving problems of relevant case studies, can highlight the importance of respect and ethical multi-species interactions. Discussing the impact of human activities on the environment, utilising role playing, service-learning, and reflection exercises can encourage learners to consider the perspectives and experiences of horses and other species and how their actions impact well-being of all living beings. We can challenge students to critically evaluate learning opportunities and ethical implications of their interactions with horses and other species. Encouraging informed and responsible choices based on sound, evidenced based practices, we can foster a culture of individual and environmental sustainability. In these ways, knowledge gained through this study can help us become change agents for positive impact.

Learning through nature-based interactions can promote individual resilience which can fuel actions of care for our planet's health as global citizens.

The purpose of this chapter is to explain what contributions were made to experiential learning knowledge by showing how findings culminated in five conclusions. To accomplish this aim, the chapter will first summarise why I took the approach I did and how the thesis addressed research questions before conclusions are presented (Murray, 2011). Recommendations will materialise as suggestions for educators interested in experiential learning and as avenues for future research. Relevant reflections on thesis experiences will conclude the chapter. The chapter is thereby likened to the jumping phase of 'moving beyond' one fence and looking to the next (Image 48) which requires integration of prior and current experiences in preparation for future success. Perhaps study results will prompt educators to re-consider the value of facilitating ongoing, integrated experiences which are useful, joyful, and connected to the learners' environment. Whole body eco-educative experiences are for everyone and hold equal value with conventional 'mind only' learning and 'skills only' training (Dewey, 1958; Quay and Seaman, 2013; Leddy and Puolakka, 2021).

Thesis summary and reflections

An overview of the thesis follows as a reminder of how central themes developed, what worked and what was unexpected. A summary and reflection of the thesis will support conclusions, a design suggested by Murray (2011).

The genesis of this study was contextualised in the first chapter. My concerns about educational and social divides between mind and/or body learning were described. The integration of experiential learning and horse-human interactions were shown to be a unique approach. This was a timely investigation given lingering educational dichotomies and calls to increase human-nature connections for wellbeing and planetary health. Research questions were stated as: Why are adults involved with horses? How do horse-human interactions relate to experiential learning? How might any educative experiences which arise from horse-human interactions impact adults? To rationalise the study's concentration on the horse world, the chapter provided an overview of the strong historical link between horses and humans. The opening chapter introduced the concept of experiential learning as

a process which can be used in all disciplines to improve engagement by helping learners move beyond educational dichotomies.

Chapter two provided aspects of my background. Insights into my socio-cultural history, learning and teaching experiences, interactions with horses, and lifelong curiosity about nature, were intended to help readers connect with the research. Through knowing something of what an insider knows, readers might better understand why an equestrian perspective was used to examine experiential learning. Inclusion of a biographical section demonstrated the value placed on learning through integrated experiences, a central theme of the study.

Chapter three analysed existing experiential learning literature. The review focused on a critique of learning theory centred on Dewey's dynamic experiential learning traits of continuity, integration, and aesthetics. While conducting the literature review, I discovered Dewey's learning through experience theory and Freire's holistic, hopeful approach to learning overlapped because they both worked towards more equitable learning. When these theories were integrated with active learning in nature theories, an intriguing combination resulted, which resonated with the study's aims. The chapter showed ways pedagogy could be utilised in adult learning when the emphasis on teaching knowledge was united with student-centred embodied learning. Multi-species literature enhanced an understanding that horse-human interactions can impact adults' learning and, like other interactions in nature, benefits human well-being. It was important to engage in ongoing literature review to stay up to date on how educational researchers and practitioners were responding to global challenges. Throughout the study I sought to discover how educative experiences could help learners make practical and meaningful links between the past and present, to develop practical knowledge and skills for their 'not so distant' futures.

Methodological philosophies were explained in chapter four. My perspectives on reality and how knowledge is created through socially constructed experiences influenced how research questions were addressed. I realised no one theory could help me work through the study phenomena, therefore an integrated theoretical approach - theoretical triangulation - offered explanations from multiple perspectives (Boeije, 2010). As an insider, outsider in the research situation, I understood there were benefits and cautions to dual positionality. My positionality was linked with political and social implications of being involved with the horse world, as discussed in chapter two. Ultimately, methodological choices based on pragmatism, social constructivism, and interpretivism through reflection grounded the

qualitative study. Taking the study in the multi-disciplinary direction I did was challenging yet added weight to the claim that lifelong learning has benefits for the whole person.

Chapter five discussed how philosophies were put into action. There were several options for data collection (Boeije, 2010; Gray, 2014). I decided to draw on a collection of data, referred to as field notes, which were suitable for analysing human experiences in this qualitative study. The largest set of data came from focused interviews held with twenty-four equestrians where initial conversations with US equestrians informed later interviews with Irish equestrians. I was surprised to learn my use of images during early conversations was photo elicitation, a visual research approach. This realisation motivated me to learn more and apply Photovoice, another visual method, to help participants and readers better connect with the topic. The self-created criteria for coding was explained to justify the typology and emergence of conceptual/thematic findings.

Chapter six presented five conceptual/thematic findings which emerged from analyses and interpretations of data. Participants' experiences with horses appeared to be enriched in positive, relational, practical, and challenging environments. Some of these experiences were shown to be educative because they were continuous, integrated, and aesthetic. Experiences with horses appeared to aid in development of knowledge and skills for learning and life. Interactions with horses were social in nature providing supports which seemed to encourage and motivate participants to persist in learning, helping balance risk and reward. Experiences were described as enjoyable and were fuelled by an undeniable passion for horses which was connected to the aesthetics of experiential learning theory. The majority of participants reported a sense of personal reward from their interactions which motivated engagement in the learning process.

Upon reflection, I expected to hear more about participants' interests in and connections with the natural environment and was disappointed when this wasn't the case. As mentioned in chapter six, perhaps participants assumed these links were obvious because they were talking with fellow equestrians who were also familiar with being in the outdoors. Or perhaps talking about nature connections was a particular interest I brought to the study. The level of discussion around nature in interviews differed from my observations and self-reflections noted in experiences journal entries and audio notes. With participants, there were fewer than expected explicit discussions about connecting with nature. However, evidence indicated interactions with horses provided benefits due to their direct connections with another species in the natural world. From the interpretation and analysis of data, this study suggested that if our everyday doing, thinking, and feeling took an integrated, ecological

turn, then direct experiences with horses might contribute to whole-body experiential learning. From this reasoning, the following conclusions emerged.

Conclusions

'Thus, the task is not so much to see what no one yet has seen, but to think what nobody yet has thought about that which everybody sees.'

Arthur Schopenhauer (Schopenhauer and Roehr, 2014)

Based on knowledge gained through this study about horse-human interactions and experiential learning, I conclude experiences with horses are ecological, multidimensional interactions which can be educative experiences. Such dynamic situations have potential to impact learners' engagement because experiences are continuous, integrated, and aesthetic. What emerged from data analysis can contribute to growing efforts to re-position whole-body experiential learning across educational situations. For example, getting more hands-on learning back into conventional classrooms should aim to complement, not replace, teaching of theory.

Conclusions will be organised around five areas which are interwoven. The conclusions will address research questions and complement the findings, though not in a linear manner (Bloomberg and Volpe, 2008c). Conclusions were discovered through grouping what was learned from findings in response to research questions, and remaining open-minded for new perspectives to surface (Evans et al., 2011). I was surprised to discover an unexpected alignment with educative equestrian experiences and resilience research. Scholars claim resilience can be developed when protective factors are present (Benard, 2007; Henderson, 2012). Factors, which exist both within and outside individuals in socio-cultural environments, were found to closely relate to each study finding. Figure 7 conceptualises the conclusions by integrating the findings from horse-human interactions in this study with the six aspects of the Resiliency Wheel – provide caring and support, teach life skills, increase prosocial bonding, set and communicate high expectations, provide opportunities for meaningful participation, and set clear, consistent boundaries. When internal and external protective factors are present, individuals can improve their ability to move beyond adversities. As shown in this study, resilience can be taught through experience, and factors can be put in place in the environment which actively contribute to human learning and growth. People who interact with horses can become more resilient because of the

integration of protective factors, which act as buffers and help move people towards healthy development (Benard, 2007; Henderson, 2012).

Horse-human interactions are opportunities for eco-experiential learning and the development of resilience

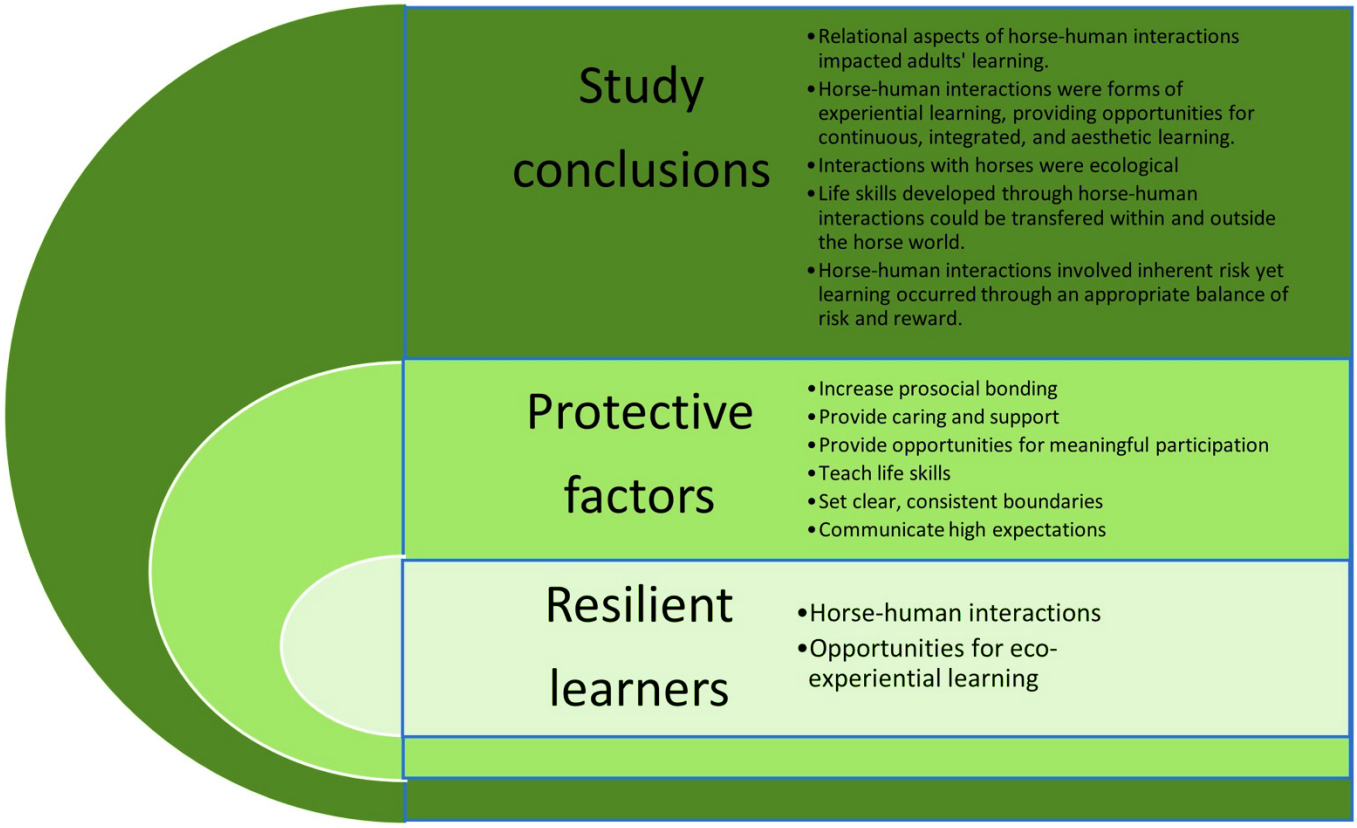


Figure 7: Horse-human interactions, experiential learning, and resilience model (Parce, 2022)

Therefore, from interpretations, analyses, and reflections on data, the following conclusions were drawn.

Conclusion 1) *Interactions with horses significantly impacted adults' learning because of their relational qualities.* Data revealed learning that took place around horses was done in social contexts because individuals were part of horse-human relationships and relationships with other humans in their environment. Each member and their contribution were seen as equally valuable to the success of these relationships. This study illustrated the uniqueness of equestrian interactions because *'humans are working with another live being to achieve a result, be that a leisure experience of sporting performance'* (Finbar). Being social is part of who we are. We are drawn to other living things, other people, other species, and nature.

Thus, whole-body eco-experiential learning meant learning didn't happen alone; teachers, including horses, mentors, peers, and coaches, were there to offer support and guidance. Because an individual was always in some level of community, their learning widened to benefit the group.

Care emerged as another critical factor in relationship building. Caring happened within horse-human environments and was linked to the experiential learning concept of aesthetics. Care is necessary, without it we struggle to be fully human. Findings added to existing knowledge about the importance of empathetic educators in equally caring and supportive learning environments (Wenger, 1998). Data suggested that empathy from horses gave participants hope amid 'more bad days than good'. *So [horses] are so aware of how you're feeling. Look if you're in great form, I find your riding gets better … If something's bothering you, [she] would pick up on it. So [she's] real affectionate as well… to have a friend, you have to be a friend as well … so they can be great friends … I get great satisfaction out of interacting with them … you're looking after something else, you're minding somebody else'* (Mary). Noddings' research reminds us about the ethics of care in the learning process.

Trust was emphasised by many participants as *'being massive'* (Hallie, Joan) and vital to building a relationship with a horse. Trust was also seen as critical to learning. Having mutual trust encouraged empathy and improved humans' awareness of others, which freed them up to learn. Bonding through building relationships with horses related to four types of external protective factors for strengthening resilience - increasing prosocial bonding, providing caring and support, providing opportunities for meaningful contribution, and setting clear and consistent boundaries (Benard and Sharp-Light, 2007).

Enjoying and navigating the relational aspect of horse-human interactions can be a motivation to keep learning. This concept of having incentive through inspiration supports claims by scholars that enjoyment can provide hope in the learning process (Dewey, 1938; Bisson and Luckner, 1996; hooks, 2003; Henderson, 2012; Noddings, 2013; Freire et al., 2014). '*I had so many, like I know this sounds bad, but so many bad days where you just want to give up, but I know my goal. I really, really want to do well in horses. So I stuck it out, like mucking out every day. Because I know that it's not all about just riding horses. They have to be mucked out, they have to be fed and stuff like that. So whereas another person that doesn't want it as bad as me, would have given up really, would have left the course [RACE] and stuff like that. But I just know that it's all [I] want. So ... you have to kind of get on with it.'* (Katie). Freire stressed the importance of holding on to hope amid the struggle of learning. Concepts of hope and care have found new context in this study's findings.

Thus, I conclude participants understood the importance of social support given by horses and other people and that these relationships were key to the continuity of learning (Dewey, 1938, 1974). By integrating mind, body, and emotions in positive contexts where bonding and care were present, learning was more likely to occur. Thus, this study reinforced ideas from existing research on the social construction of knowledge, adding evidence that knowledge can be socially constructed alongside non-human species, in cross-species subcultures. Giving social and emotional factors their equitable place in the learning process may help to move learning beyond educational Ands/Ors polarities.

Conclusion 2) *Many horse-human interactions were forms of experiential learning which provided opportunities for meaningful, continuous, and interactive learning*. This research showed that holistic experiences occurring during horse-human interactions reinforced learning for many reasons. Learning was more enjoyable when experiences involved horses because there was an integration of many factors - thinking, doing, and feeling; theoretical knowledge and practical skills; and movement, play, and nature. Perceiving their interactions with horses as continuous learning journeys encouraged participants to link prior knowledge to practical and first-person experiences in the present, which led to improved ways of being in the future. Repeated practice of continuity revealed participants gained confidence and could better manage difficulties which inevitably arose.

Learning in equestrian environments was often aesthetic as well as practical and relational. Data showed that many equestrian educational settings were spaces where care, beauty, empathy, and playful discovery abounded. These factors led to stronger engagement and greater satisfaction in the learning process. Thus data showed learning through horse-human interactions in equestrian settings was more sustainable than many experiences in traditional classrooms. *'I like that sorta of layering of learning. As the years go on, you build up a tool kit and that's a bit different from the classroom. I suppose in the classroom when you're learning you can progress up through the levels … as well. But it's sorta of one-dimensional compared with three dimensions you have with horses' (Joan).*

Participants engaged in the experiential learning process by working out or questioning problems, maintaining sensitivity to horses and humans in their environments as other living things, reflecting on situations, and testing new ideas in situ (Armitage, 2003; Dewey, 1994, 1938). If participants learned from past mistakes, they were motivated to avoid similar errors in the present and future. This continuity meant participants were quicker to listen to the horse, pay attention to their own instincts, and listen to instructors. *'I suppose the consequences are quite immediate [with horses]. If you get it wrong or get it right, you know*

if you get it wrong, you don't want to go through that stress again so I'm going to learn from it. Where if you get it wrong in the classroom, there's no instant consequence to doing it right. And there's a huge safety issue [with horses]' (Maya).

Therefore, learning experienced while interacting with horses led to improved perceptions of learning and differed from experiences of learning in school (Maurstad et al., 2013; Dashper, 2016; Dashper and Brymer, 2019). Furthermore, learning through experiences with horses could result in the establishment of resilience supports such as the ability to set and communicate realistic expectations about managing risk and safety, provide caring & support for oneself and others, develop life skills, and participate in meaningful activities (Benard and Sharp-Light, 2007).

Conclusion 3) *Horse-human interactions were ecological because they were multi-species partnerships and occurred largely in the out-of-doors*. Horse-human interactions were ecological on several levels. Interactions with horses are multi-species encounters which occur between two or more living things, and they are primarily experienced in natural landscapes. The concept of these partnerships as ecological experiences in ecological settings contributes to the conversation about the importance of where learning takes places. *'Go out on to the gallop, you're on your own. Like I know there's a string of people, but you're there, with the horse. It's just the best thing. You're just going around and there's no one at you. There's nothing. It's just the fresh air. Like it's the best thing ever to clear your head'* (Katie). Placing horse-human interactions in an ecological frame was critical because the study found active movement with horses in the outdoors was good for the health of the whole person. This knowledge added to evidence that nature interactions are essential components for physical and mental wellbeing (Dewey, 1938; Wals, 1994; Higgins and Nicol, 2002; Burgon, 2014).

The impact of the pandemic and living with Covid 19 heightened awareness about the importance of being outdoors. This study is thus timely because it highlighted the undisputed, holistic benefits of enjoying, contributing to, and learning from ecological connections through horse-human interactions. *'You love the horses so you're happy out there in their environment [outside in the yard]'* (Colm). As data showed, learning through the ecological situation of horse-human interactions afforded transferable skill development and opportunities for meaningful participation, two protective factors supported by resilience research (Benard and Sharp-Light, 2007). *'I learn attentiveness from being outside with horses versus inside'* (Damien). Participants talked about the enjoyment of interacting with thinking animals versus inert objects. '*Horses' level of loyalty and patience … is a great eye-*

opener for adding to your life experience' (Finbar). I conclude that a reason horse-human interactions have positive ripple effects on experiential learning are because they are ecological in nature and in context.

Conclusion 4) *Life skills development was an important component of whole-body eco-experiential learning which occurred during horse-human interactions*. Participants described how they learned life skills of responsibility, critical thinking, confidence, and overcoming. Interactions with horses involved problem solving, reflection, and using emotional and physical intelligence to communicate and build trust with another species. Life skills were transferrable. *'If something doesn't go right then I'm more able to [say] okay, what's the next thing? If I do bad on a science test then I say, we can always do better. I think, what can I do to improve this? Instead of, I should have done better and like looking back. It's more looking forward 'cause even with horses it goes badly, I still am going to own them … I need to fix it. With horse I look forward.'* (Sofia)

Furthermore, due to horses' abilities to mirror human emotion and behaviours, participants learned to be more sensitive. Navigating the horse-human relationship required learning often subtle nonverbal communication skills. Learning the language of another species led to the development of stronger interpersonal skills. Communication skills, and other life skills like flexibility, adaptability, and respect for others are needed in successful teams and much of what organisations do today involves teamwork (Harmon and O'Regan, 2015; Hart Research Associates, 2015).

Learning to take responsibility for one's own learning was improved through taking care of horses. Additionally, being a part of an equestrian organisation that offered care and support, as participants described their PC and RACE experiences, was shown to be helpful in life skill development. For example, PC teaches about animal welfare and the responsibility of taking care of a living being.

Data revealed the opportunity to learn life skills was important because it brought satisfaction and confidence and got to the heart of experiential learning (Dewey, 1916, 1963; Freire, 2000a; Quay and Seaman, 2013). As more knowledge and skills were gained in relational and supportive equestrian learning contexts, resiliency grew (Benard, 2007; Henderson, 2012; Noddings, 2013; Freire et al., 2014). Developing life skills related to two external protective factors which contribute to resilience development - teaching life skills and providing opportunities for meaningful participation (Benard and Sharp-Light, 2007). Therefore, I conclude that interacting with horses can led to life skills development.

Conclusion 5) *Horse-human interactions involved inherent risk yet learning occurred through an appropriate balancing of risk and reward.* Risk can take the form of physical, mental, and emotional threats or uncertainties and is experienced within learning processes. When circumstances involved risk, people benefitted from the support and care of others. Equestrians regularly optimised their learning by practically considering alternatives when various risks or challenges were encountered. Learning to lean on others in uncertain circumstances resulted in the use of creative coping skills. *'Having the craic'* (Daniel, Gary) with instructors relieved tensions and appeared to provide greater satisfaction and helped to establish positive learning environments. *'I think that's what it is here [at RACE] as well, you're encouraged to do better all the time, keep improving I think'* (Gary). '*Or if I really don't want to ride this horse [who misbehaved] like I try to talk to someone next to me and have the craic with them because then you relax* (Hannah).

Data suggested confidence and other competencies like heightened awareness could be developed through the inherent risk of working with horses who are large, independently minded animals. Participants found the process of working through uncertainties with horses rewarding. I conclude the ability to cope with adversity is an inherent part of horse-human experiences. Having stronger self-belief helps with an individual's ability to cope with other difficult times in their lives and is further evidence of the positive effects which extend from horse-human interactions.

Discussions about tolerating risk and gaining rewards in horse-human interactions extended conversations typically found in outdoor and adventure education (Bisson and Luckner, 1996; Harrison, 2010, 2006; Higgins and Nicol, 2002; Prouty et al., 2007). Satisfaction from coping with and learning from precarious horse-human situations related to four internal and external protective factors seen in resilience research. These factors include teaching life skills, increasing prosocial bonding, providing caring and support, and setting clear and consistent boundaries (Benard and Sharp-Light, 2007). I conclude that precarious experiences can be educative and rewarding if there is an appropriate balance between interest, enjoyment, risk, and reward.

Recommendations

The research is intended for learners and educators interested in experiential learning in various learning spaces. Sharing study outcomes in meaningful ways is central to

appropriate knowledge transfer. ‘As we seek to understand the processes and mechanisms that underlie quality experiential education programs, we can directly and succinctly inform practice in ways that can be meaningful (Sibthorp, 2009, p. 457). Dewey expected others to keep working on his educational theories as he did (Hook, 1959, p. 1010). His publications added to and challenged knowledge within ongoing conversations about learning through experience. Recommendations will take the form of actionable suggestions which arose from the findings and conclusions and will appear as 1) recommendations for experiential learning educators, and 2) implications for future research.

Recommendations

Recommendations which follow may help learners and educators consider how familiar experiential learning techniques can be implemented with a twist. Three recommendations emerged from findings which may ‘push our institutions ... for broad implications’ (Wenger, 1998, p. 7). As discussed, learning through whole-body eco-experiences, can facilitate equity for the learner through through continuous, integrated, and aesthetic interactions. This is a simple yet impactful approach which makes sense for educators across disciplines and learning situations.

Duplications may be reduced if we understand what students want to learn and how they learn. Everyone is not doing the same thing; all being taught in the same way to the same test where formal education is put on a pedestal or learning a skill for employment is seen as the end all and be all. If educators from different disciplines and pathways collaborate to better understand the whole picture, there is potential to reduce the educational divisions and move beyond the And/Or divide. I recognise good work is going on in many educational spheres and suggest there is more to do. Perhaps ideas from this study’s horse-human experiential learning approach can be integrated into formal and nonformal adult learning curricula or used to create guidebooks which encourage learners in all disciplines to learn through holistic, ecological experiences.

First, I recommend educators across disciplines consider how to add movement and ecology to their learning practice. As discovered through this study’s data, the learning process can be enhanced through the integration of active ecological experiences. Taking students out-of-doors can increase enjoyment, connections with nature, and creative thinking in the learning process. One way to encourage this level of engagement is by bringing indoor learning to the outdoors, and internal, cognitive learning to the body through diverse embodied approaches.

There are opportunities to infuse learning more purposefully through nature experiences in adult education. Rediscovering the joy in learning can be nurtured through attention to aesthetics. Data demonstrated that adding movement to learning through creativity and play within whole-body experiential learning improved enjoyment and engagement. As heard from participants, when we really dig in, get our hands dirty, take on the responsibility of caring for another living being, and learn to cope with environmental conditions, there are potential rewards on many levels. I encourage educators of all disciplines to figure out simple yet increasingly frequent ways to get students out of classroom seats and into the natural environment. For example, instructors could facilitate time during class for students to go outside and hold walking meetings to strategise for a team project. Local ecology, campus and community gardens, and area farms can provide inspiration for learning and the people managing those spaces can be potential learning partners.

The ethos of learning through experiences in nature fits with the findings (Higgins and Nicol, 2002). Nature learning and, specifically, horse-human interactions were shown to improve wellbeing because the actions were ecological in nature and location. In this living with Covid era, the notion of personal responsibility has been repeatedly emphasised to help protect ourselves and each other. Increases in awareness about the state of the environment have resulted in calls for changes in human habits. Bringing humanity closer in tune with nature is critical.

Second, I recommend adult educators consider their dual role within whole-body experiential learning and become practitioners who guide and learn alongside students. Participants reached conclusions that caring educators showed empathy and this trait encouraged learners to listen more carefully and be more engaged in the learning experience. In horse-human interactions, learning transcended differences as horses and humans could be both learner and teacher. Horses were shown to be empathetic and non-judgemental. Horses' willingness to support humans for mutual survival in older times and partner with human in sport and leisure in modern times is remarkable. Horses model equitable learning at the most pragmatic level. Horses appear most willing to learn with humans when mutual trust, and appropriate levels of care and support are established. These concepts of sharing common goals mirror principles of adult education which aims for equitable learning, which is open to all and encourages whole-person growth.

Encouraging educators to take students out-of-doors as suggested in the first recommendation, may be new territory; it might feel risky. If we take risks, like data suggested, we may gain confidence, experience satisfaction, and enjoy learning. This action

may stretch educators to embrace new learning modes, to reach across disciplines, and to learn from students and community members. Being open to ongoing learning as educators can improve empathy for students and may encourage cooperative knowledge production.

Third, I recommend educators consider purposefully integrating life skills development in courses across disciplines and learning spaces. Participants expressed the benefits of practical learning through equine educational experiences. Subjects like communication, career development, maths, and technical skills were part of everyday learning. Classroom knowledge was continuously practiced in real life. For example, there were ongoing opportunities for individuals to improve skills of responsibility because of the high level of dedicated care required for horses by humans. The hour of the day, the weather, and global events didn't change the fact that horses needed to be regularly fed, watered, exercised. Incorporating life skills development, according to participants, could strengthen multi-disciplinary learning. Linking multi-disciplinary learning to real-world applications happened through the mix of curricular, co-curricular, and extra-curricular experiences.

I suggest that at least one community engagement experience be incorporated into each learning experience. There is immediacy in this recommendation. Results of the Irish Student Survey of Engagement showed students were not involved in much community engagement and not spending as much time in active learning, preparing to apply for a job, and networking, among other categories (Higher Education Authority (HEA) *et al.*, 2014). Leveraging community partnerships could be good for student workplace readiness, may encourage lifelong learning opportunities, and could promote connections between education and the community. That is not to say such opportunities don't already exist in educational programmes. In universities, for example, stand-alone placement services and experiential learning offices are doing valuable work by bringing learners and community members together. However, incorporating opportunities for life skills development alongside disciplinary expertise could expand benefits of life skills development as substantiated in this study.

Community and educational partnerships are also a way to break down barriers. When diverse groups work together towards a common goal, all involved can be part of the solution. A collaborative approach, as evidenced in this study, can bring hope. Hope through equitable learning can help to change misperceptions that one type of learning is better than another. To implement this recommendation, I encourage educators to speak with their institution's relevant bodies and seek out government, business, and community groups who are aligned with their interests. Knowing what programmes and resources are in place can

spark conversations and inform analysis to determine what else can be done to enhance learning experiences. Communicating directly with community members and co-developing projects to meet students' needs, community partners' needs, and academic standards is an effective approach from my experiences. First hand experiences implementing projects and reading feedback from hundreds of former students and several community partners convinced me that experiential learning partnerships take work but are well worth the effort.

There remains a need to move towards a democratic ethos whereby there are many paths to knowledge and skill versus funnelling 'everyone through the same pipeline', a focus of higher education according to Schleicher (O'Brien, 2021). From what the data revealed, horse-human interactions are examples of spaces where neither theoretical learning nor practical, skills-based learning, occur in isolation. Instead, theory and practice are embodied with equity through multi-sensory and multi-dimensional experiences. *'Handling a 1200-pound horse requires theory and practice, there's not any one answer'* (Riley). Providing learning environments which encourage connections with other people, other species, and nature can be integrated with practical applications of theoretical experiential learning principles. Humans and non-humans should be invited into more conversations and knowledge exchanges. Surely these are paths towards more democratic learning to meet aims of adult education.

Implications for future research

Ideas for future research emerged from the study's findings and conclusions. Implications also arose from this study's limitations and delimitations. Time and financial resources naturally reduced the ability to perform an extensive, longitudinal study. Data were gathered during the doctoral programme enrolment period. Findings were presented as a snapshot of experiential learning resulting from horse-human interactions with twenty-four participants. Therefore, the findings cannot be projected to other situations and were understood to be relatable, not generalisable. I embodied the experiential research design and, in doing, brought my own perspectives and experiences to the research process, as all researchers do (Bell, 2010).

Since this research drew on Irish and American equestrian's stories of horse-human interactions, I recognised and respected cultural differences. To embrace this limitation, discovered similarities and differences were explored and celebrated. Therefore, analyses and resulting findings cannot be extrapolated to other cultures.

Additionally, I recognise my own limitations as someone new to doctoral research. I am not an expert on the theories put forth in this study, I am a learner and contributor to theoretical and practical conversations in fields discussed. It was a leap of faith to conduct qualitative research which differed from my quantitative approach taken in master's level research. I am still learning about visual research methods and interviewing techniques, for example. In this study, I aspired to raise questions and stimulate conversations around experiential learning, multi-species interactions, and human-animal studies.

This study provided a slice of experiential learning through horse-human interactions. The study's conclusions can improve knowledge about the importance of experiences which have continuity, are integrated, and bring the whole person into the learning process, enhanced through being in the natural environment. Contributing to experiential learning matters because learning for life through our experiences is significant. Therefore, some future research opportunities follow.

- A longitudinal, qualitative study should be considered to discover more about horse-human interactions and their potential to impact connections with nature. Photovoice could be utilised centrally to help participants capture and re-tell their experiences in a visually focused way. Engaging with a series of participant photos taken over time may deepen understandings of the aesthetic impact of horse-human interactions. Analysis of these engagements may further our understanding of how experiential learning is shaped by the beauty of ecological encounters in biodiverse settings.
- A qualitative, comparative study which examined the perceived differences between learning with and around horses and traditional classroom experiences could be useful. For example, a comparison of US and Irish Pony Club alumni through one-on-one interviews with a sample of members would enable cross-cultural, and cross-case analysis on a specific and significant finding from this study. Many of the participants in this study had PC experiences and because they drew interesting conclusions between learning around horses and learning in the classroom, there appears scope to widen this aspect of the experiential learning conversation.
- Conducting a mixed methods study could be undertaken to gain deeper understanding into perceived benefits and downsides of apprenticeship style learning compared with traditional schooling experiences. Survey instruments might be utilised to reach a larger group of learners involved with agricultural and equine education programmes which have apprenticeships or work placements. Surveys would be followed up with regular, in-depth conversations with students over the length of their studies. Examining experiences of learners involved with other

practical learning programmes like the Irish National Stud Breeding Course, Teagasc's Kildalton College equine courses, and the Irish Army Equitation School could add to this study's experiential learning findings. Furthermore, data could build on whole-body experiential learning theory from this and related studies. More new ground could be broken through a multi-species perspective of experiential learning theory. This is a timely recommendation for future research as Ireland aims to offer 10,000 apprenticeships under a five-year Higher and Further Education strategic plan. My recommendation aligns with goals of the strategic plan, to change the culture around how apprenticeships are viewed and create more 'earn and learn' options in green skills and farming, among others (O'Brien, 2021). The concept of 'earn and learn' may further educators' efforts to move beyond the And/Or divide, a stated aim of this study.

- Finally, a qualitative study might be conducted to better understand what and how life skills might be developed through horse-human interactions. Speaking with a broader range of amateur and professional equestrians would expand this study and provide a larger range of perspectives on life skill development. The use of Photovoice would be expanded as participants could be asked to take a series of photos over a period with regular one-on-one conversations about what was going on in each photo as related to life skill development. What emerges may add to the influence of visual research methods in experiential learning research. Data which may emerge from this recommendation could be compared with an additional, yet similar study conducted with a group of non-equestrian adults. Once findings from both studies were synthesised, a practical whole-body eco-experiential learning guide could be developed in conjunction with equine educators and adult and community educators. These studies could build on the contribution of this study and add to experiential learning theory and practice.

Concluding reflections

From reflections on an 'adult education research day' the importance of experience and reflection in the learning process emerged. The learning I experienced related to themes which were discovered in this study. Participation in a virtual research day was a multi-faceted experience, akin to horse-human interactions and what is understood about meaningful learning. On the research day, peers interacted in small groups, providing, and receiving feedback on a piece of work each had created for the workshop. The group I was

placed in were people unknown to me yet were known to each other. Although each person was researching different topics, there was an immediate realisation of more overlaps between our perspectives and experiences than discrepancies. The group expressed the thesis process was perplexing. Each person was overcoming a series of crises in their own way to move knowledge and research forward. Similarly, data showed working with horses was precarious which required persistence to keep going. During the research day we participated in online discussions which can be impersonal and can require risk taking. Once the group connected through shared experiences, we were willing to disclose our ideas and continued with less apprehension.

The one-day event was compact yet did provide some opportunity for trust building. In the morning session, we got to know each other, summarising our research. I took notes while receiving peer feedback on my video. In contrast to the one-day workshop, horse-human interactions and experiential learning can happen over a lifetime. A longer time span aids in the development of trust through relationship building. This process reminded me of the mutual trust necessary in horse-human interactions and, as indicated, as a key ingredient for educative experiences in experiential learning, nature learning, and outdoor learning environments.

I was surprised my small group felt connected to my research topic as much as they did. Some were drawn to discussions about the different ways of knowing through horse-human interactions. Others appreciated my attempts to create a coding system that was practical, organised, and honoured individual voices. Upon reflection, I realised study participants also had expressed preferences for small group learning environments because they enabled connections to form more quickly and more comfortably.

Each person in my group was kind enough to engage with the passive, then active method of engagement requested during my video. Group members' reflections on the passive-active exercise from my video related to earlier discussions on active and passive experiences within experiential learning. The integration of action and reflection are key aspects of experiential learning. At the same time, successful learners embrace self-directed responsibility and do not remain passive vessels waiting to consume knowledge. Two group members said it was a challenge to be a passive listener because I presented a lot of information in a short period of time, so they wanted to take notes. One found it hard to remain engaged during the second, active listening phase because being active was distracting. For example, one person went for a walk while listening to the audio and found it hard to pay attention while they were walking. In contrast, another happened to see horses

in a field while out walking and listening to the video during the active listening challenge. As a result, he felt more connected to the equestrian content. A different person initially felt like an outsider to the horse world but after participating in the passive-active exercise, they felt more like an equestrian insider. This person's experience reminded me of the ongoing fluctuation I experienced of being an insider, outsider during the research.

The research group also seemed to come together because we found common ground. Upon reflection, it appeared the group, like me, found comfort in sharing research dilemmas. Despite the wide variety of topics, research philosophies and designs, we collectively desired to advance experiential learning stories. The coherence around shared researcher values was encouraging; it seemed I was not alone. This experience paralleled the cohesiveness within study groups who entered conversations from different backgrounds and quickly came together over their shared passion for horses. Members of the workshop group and study participants shared a desire to understand more about how embodied knowing fosters a sense of connection to things outside us. Being self-aware, I synthesised, may help learners better connect academic learning to the real 'goings on' with others, with animals, and with their natural surroundings. Thus, a take-away from the workshop experience was a realisation and respect for our different ways of knowing, doing, and being. The fullness of this integrated, aesthetic experience became actualised through our common values. A comradery was formed.

Image 49: Lisa with lamb, Co Galway (Anonymous, 2017)

These experiences during the research which me grow. I realised towards the end of the research that what I experienced, through experiential learning and horse-human interactions, was related to internal and external resilience factors (Benard and Sharp-Light, 2007). The factors included experiencing relational learning through caring and support, bonding with others and meaningfully participating in an embodied research process. I learned life skills and how to set and communicate clearer and more consistent boundaries. And I was challenged to set high expectations. Learning how to balance process and product required finding positive outlets to reduce stress. Never too far away from the thinking during the research, was my need to do, to experience, to stick close to nature entanglements. For example, helping a veterinarian replace a placenta in a pregnant ewe one evening on a farm in Galway kept the whole-body nature of this experiential learning study at the fore. Holding a lamb (Image 49) and working with young horses were rewarding, lovely moments which reminded me to have hope and joy. Accounts of multi-species

experiences shared by participants in this study signified there was something to learn at every turn.

Chapter 7 conclusion | The final furlong

Image 50: Exercising horses at The Curragh Training Grounds (Parce, 2020)

The contribution of this study is distinctive because it gives readers new ways to consider how educational polarities of mind and/or body within the learning process might be addressed through a unique horse-human interaction lens (Image 50). Accounts in this study illustrated experiential learning is an ongoing and changeable process. Life is a series of experiences, with ups and downs (Alheit, 2018; Boud et al., 1993; Dewey, 1963; Kolb, 1984; Lave and Wenger, 1991; Meola, 2016). As this study illustrated, there are chances to learn through everyday ecological experiences which hold potential for learning and growth, providing insights into crucial life skills like resilience development. Data showed learning through interactions with horses could be experienced by a diversity of learners across various environments and thus experiential learning was shown to be for all.

Data and literature analysis suggested there was scope to learn more about how enjoyment and fulfilment through horse-human interactions can improve lifelong learning. These

interactions can become exemplars of learning because of their continuous, useful, integrated, ecological, and aesthetic characteristics. Data showed horse-human interactions provided continuous learning opportunities such that skills of determination and persistence often developed. The ongoing nature of horse-human interactions revealed that experiential learning could generate knowledge if there were links from the past, in the present, and towards a relatable future.

The study showed there were benefits to an integrated process of learning. Learners in this study persisted, they were willing to try different, multi-disciplinary approaches. Some attempts worked and some didn't. New attempts at learning often required new ways of thinking, doing, and feeling. These experiences were freeing and could add enjoyment to the situation. Horses added another dimension to integrated learning processes because they brought aesthetics through their beauty and sensitivity, which added to the possibilities of learning through whole-body ecological experiences. Thus, these holistic experiences met Deweyan principles of continuity and integration and supported the importance of aesthetics. Significantly, opportunities to learn through an ecologically rich environment can improve engagement and thus lead to more learning.

Results indicated whole-body experiences occurred in social and environmental contexts of a horse culture, yet learning could flow into other areas of participants' lives. For participants, this could be a hopeful process which built on Freire's hopeful learning outlook. Growth seemed to occur when there was support from caring instructors and peers during challenging and risky situations. When interactions met the test of continuity and integration within positive, practical, and collaborative learning environments, they became educative experiences. Educative experiences led to the development of life skills with possibilities to enrich and transform, exemplifying the importance of aesthetics.

The Covid pandemic along with social, political, and environmental crises have forever changed the way we live and work. As indicated, increased urgency to strengthen connections with nature have resulted in new research around benefits of nature engagements for wellbeing. This study added to these efforts by introducing fresh perspectives on experiential learning with an ecological bent. I recognise some may perceive horse related activities as commercial or as leisure activities for the privileged. However, there is a need to recognise the intrinsic and educational value of horse-human experiences which attend to both species' welfare. Learning through similar holistic experiences may help build resilience, making this study timely and its conclusions significant, as discussed on pages 235-236.

Therefore, this research aimed to advance ideas around learning through experience by moving beyond the dichotomy of mind versus body, and instead adopting an integrated and holistic approach to learning through the value insights gained from the dynamic interactions between horses and humans. By fostering a culture of respectful and inclusive interspecies interactions, greater awareness, more possibilities for cross-species learning, deeper connections with nature can be created. This type of learning has the potential to cultivate individual responsibility, empathy towards others, and actionable steps to protect and sustain the well-being of our natural world. This study's discoveries about experiential learning through horse-human interactions may create momentum, helping educators move further beyond And/Or divides towards equitable whole-body experiential learning. I am convinced there is more to learn from horses and the people who partner with them.

'You probably will never know everything, and you have every single day something to learn' (Mary).

Appendix A1: Initial [Baseline]Study Participant Information Sheet and Consent Form

Study Title: It's a matter of AND, not OR! Adult education optimised: Experiential equestrian education examined to revalue mind AND body learning.

Thank you for participating in the research study, *It's a Matter of AND not OR...* My name is Lisa Parce, and I am working on a programme closely connected to education around horses in the countryside. My contact details are lisa.parce.2017@mumail.ie, no. 089 245 4333. My supervisor is Bríd Connolly, and her contact details are brid.connolly@nuim.ie and no. 01 708 3306.

What? I am carrying out this research because I am very interested in the way people learn. I am particularly interested in the way people learn from experience, from doing and practicing and thinking. This is very different from learning theory first and then, practising what has been learned.

Learning with horses in the open air and in close contact with the environment is very different from learning in a classroom or lecture theatre. I want to understand this hands-on learning, so that educators can use different approaches to teaching and learning and in particular so that educators can value what we call experiential learning equally with other forms of learning.

Why participate? I consider that because of your experiences with horses, you can help me develop a deeper understanding of the ways in which people learn from experience in equestrian education. This will add tremendous value to this research, which is important not only to teaching and learning but also to understanding connections between what happens in the learning environment and the wider society. My hope is that you will also benefit from participating in the research, as it enables you to reflect on your experience, which in turn will promote adult equestrian education.

How? The study is designed to suit you in the context of your work with horses. Focus groups will comprise of approximately 2-12 equestrians in a semi-structured interview [focused interviews] to gather information about what questions to ask and how to ask them in the main body of the research.

Afterwards: There will be a debrief after each research session. You have my name and contact details and the name and contact details of my supervisor to talk about any concerns or issues that might arise for you. I also have added help-line details if you need them.

I can assure you that what you say will be treated with respect and gratitude and that you can withdraw any or all of your contribution at any time prior to the end of the interviews and focus groups. With regards to informed consent, I will guarantee your confidentiality, if you request it, subject to the following stipulation: *'It must be recognized that, in some circumstances, confidentiality of research data and records may be overridden by courts in the event of litigation or in the course of investigation by lawful authority. In such circumstances the University will take all reasonable steps within law to ensure that confidentiality is maintained to the greatest possible extent.'*

'If during your participation in this study you feel the information and guidelines that you were given have been neglected or disregarded in any way, or if you are unhappy about the process, please contact the Secretary of the Maynooth University Ethics Committee at research.ethics@nuim.ie or +353 (0)1 708 6019. Please be assured that your concerns will be dealt with in a sensitive manner.'

Appendix A2: Initial [Baseline] Study Participant Consent Form

I, _____ (print legal name) agree to participate in *It's a Matter of AND not OR! research study*.

The purpose and nature of the study has been explained to me in writing and verbally.	Yes ☐ No ☐
I am participating voluntarily.	Yes ☐ No ☐
I understand face-to-face interviews will be digitally recorded and will occur in small groups of approximately 2-12 fellow equestrians.	Yes ☐ No ☐
I give permission for my all aspects of my participation to be digitally recorded.	Yes ☐ No ☐
I understand I can withdraw from the study, without repercussions, at any time, before it starts or while I am participating.	Yes ☐ No ☐
I understand I can withdraw permission for use of my data prior to completion of the thesis, in which case material linked to me will be deleted.	Yes ☐ No ☐
I understand confidentiality will be ensured in the write-up by disguising my identity if I request it, meaning only the researcher and her supervisor will be able to identify individual responses. I request confidentiality.	Yes ☐ No ☐ Yes ☐ No ☐
I understand that extracts from my interview or recorded activity may be quoted in the thesis and any subsequent, secondary publications if I give permission in this consent sheet.	Yes ☐ No ☐
Just to alert you, the following stipulation applies. Do you understand the implications of this stipulation?	Yes ☐ No ☐

'It must be recognized that, in some circumstances, confidentiality of research data and records may be overridden by courts in the event of litigation or in the course of investigation by lawful authority. In such circumstances the University will take all reasonable steps within law to ensure that confidentiality is maintained to the greatest possible extent.' *'If during your participation in this study you feel the information and guidelines that you were given have been neglected or disregarded in any way, or if you are unhappy about the process, please contact the Secretary of the Maynooth University Ethics Committee at research.ethics@nuim.ie or +353 (0)1 708 6019. Please be assured that your concerns will be dealt with in a sensitive manner.'*	

Signature

Date

Appendix B1: Main Study Participant Information Sheet and Consent Form

Study Title: It's a matter of AND not OR: an examination of embodied and cognitive learning in horse-human interactions to extend experiential learning theories for adult and community education in an Irish context.

Who? My name is Lisa Parce, and I am working on a doctoral programme closely connected to what goes on with education and horses. My contact details are lisa.parce.2017@mumail.ie, no. 089 245 4333. My supervisor is Bríd Connolly, and her contact details are brid.connolly@mu.ie, no. 01 708 3306.

What? I am carrying out this research because I am very interested in the way people learn. I am particularly interested in the way people learn from experience, from doing and practicing and thinking. This is very different from learning theory first and then practising what has been learned. Learning and being involved with a horse, another living being, in the open air is very different from learning in a classroom or lecture theatre. I want to understand this hands-on learning, so that educators can use different approaches to teaching and learning and in particular so that educators can value what we call experiential learning equally with other forms of learning.

Why participate? I consider that because of your experiences with horses, you can help me develop a deeper understanding of the ways in which people learn from experience when involved with horses. This will add tremendous value to this research, which is important not only to teaching and learning but also to understanding connections between what happens in the learning environment and the wider society. My hope is that you will also benefit from participating in the research, as it enables you to reflect on your horse learning experiences, which in turn will promote equestrian education, participation in horse activities, and horse welfare.

How? The study is designed to suit you in the context of your work with horses. Small groups from a cross-section of Irish equestrian organisations will be asked to engage in a multi-phase process. First, if willing, participants will record two or three of their interactions with horses, also known as Photovoice (still images or brief videos). The purpose is to give you the freedom to capture your hands-on engagement with horses in whatever capacity you are currently involved. Then, we will gather for an informal chat about ‘why horses?’ and you will have an opportunity to share your Photovoice media.

Afterwards: There will be a debrief after each research session. You have my name and contact details and the name and contact details of my supervisor to talk about any concerns or issues that might arise for you. I also have added helpline details if you need them. I can assure you that what you say will be treated with respect and gratitude and that you can withdraw any or all of your contribution at any time prior to the end of the study. With regards to informed consent, I will guarantee your confidentiality, if you request it, subject to the following stipulation: *'It must be recognized that, in some circumstances, confidentiality of research data and records may be overridden by courts in the event of litigation or in the course of investigation by lawful authority. In such circumstances the University will take all reasonable steps within law to ensure that confidentiality is maintained to the greatest possible extent.' 'If during your participation in this study you feel the information and guidelines that you were given have been neglected or disregarded in any way, or if you are unhappy about the process, please contact the Secretary of the Maynooth University Ethics Committee at research.ethics@nuim.ie or +353 (0)1 708 6019. Please be assured that your concerns will be dealt with in a sensitive manner.'*

Appendix B2: Main Study Participant Consent Form

I, _____ (print legal name) agree to participate in the research study entitled, It's *a Matter of AND not OR!*

The purpose and nature of the study has been explained to me in writing and verbally.	Yes ☐ No ☐
I am participating voluntarily.	Yes ☐ No ☐
I understand face-to-face interviews will be recorded with an audio device and will occur in small groups of approximately 2-3 fellow equestrians.	Yes ☐ No ☐
I give permission for my all aspects of my participation to be digitally recorded and Photovoice images I share to be used in the research and in any future publications related to the research.	Yes ☐ No ☐
I understand I can withdraw from the study, without repercussions, at any time, before it starts or while I am participating.	Yes ☐ No ☐
I understand I can withdraw permission for use of my data prior to completion of the thesis, in which case material linked to me will be deleted.	Yes ☐ No ☐
I understand confidentiality will be ensured in the write-up by disguising my identity if I request it, meaning only the researcher and her supervisor will be able to identify individual responses. I request confidentiality.	Yes ☐ No ☐ Yes ☐ No ☐
I understand that extracts from my interview or recorded activity may be quoted in the thesis and any subsequent, secondary publications if I give permission in this consent sheet.	Yes ☐ No ☐
Just to alert you, the following stipulation applies. Do you understand the implications of this stipulation? *'It must be recognized that, in some circumstances, confidentiality of research data and records may be overridden by courts in the event of litigation or in the course of investigation by lawful authority. In such*	Yes ☐ No ☐

circumstances the University will take all reasonable steps within law to ensure that confidentiality is maintained to the greatest possible extent.' *'If during your participation in this study you feel the information and guidelines that you were given have been neglected or disregarded in any way, or if you are unhappy about the process, please contact the Secretary of the Maynooth University Ethics Committee at research.ethics@nuim.ie or +353 (0)1 708 6019. Please be assured that your concerns will be dealt with in a sensitive manner.'*	

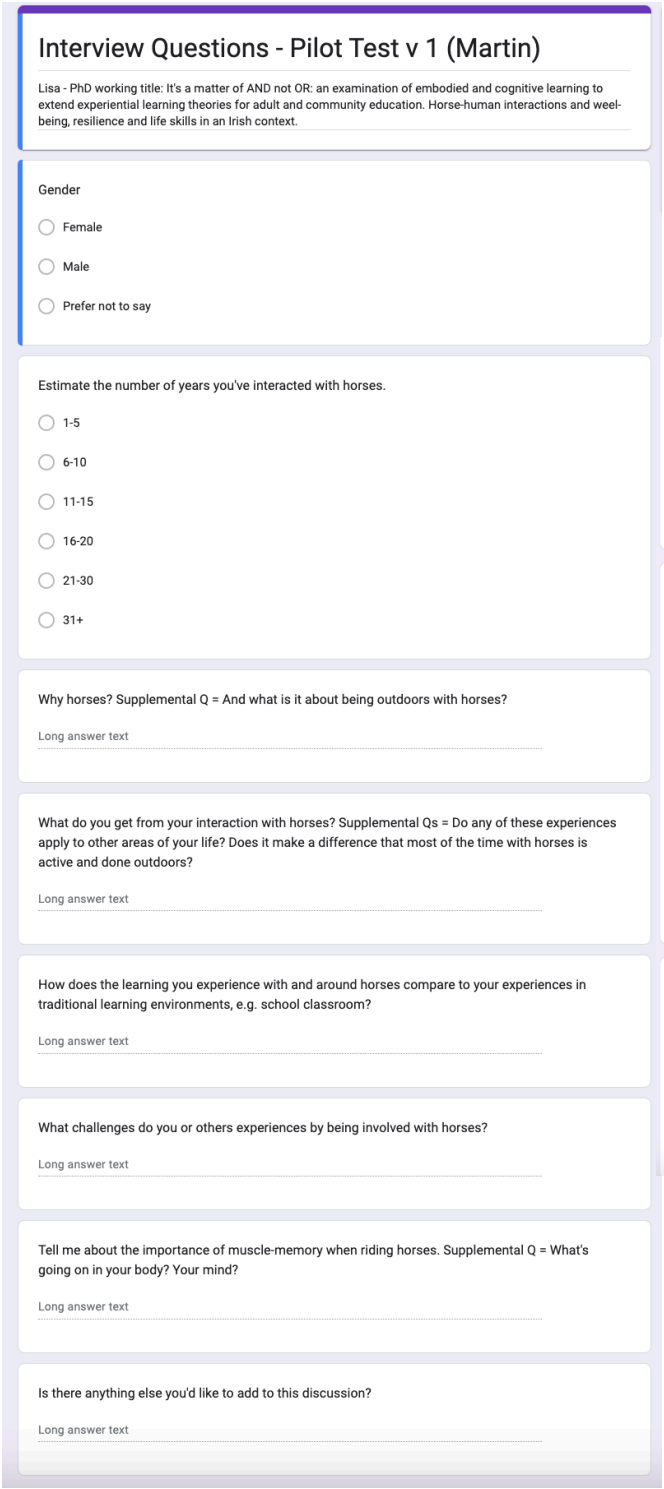
Participant signature | Date

Researcher Signature | Date

Appendix C: Piloted versions of interview questions and sample responses

Note: These questions were part of the testing and re-testing process conducted between recording initial and main study interviews.

Pilot questions – version 1 questions and sample responses



Interview Questions - Pilot Test v 1 (Martin)

Lisa - PhD working title: It's a matter of AND not OR: an examination of embodied and cognitive learning to extend experiential learning theories for adult and community education. Horse-human interactions and weel-being, resilience and life skills in an Irish context.

Gender

- Female
- Male
- Prefer not to say

Estimate the number of years you've interacted with horses.

- 1-5
- 6-10
- 11-15
- 16-20
- 21-30
- 31+

Why horses? Supplemental Q = And what is it about being outdoors with horses?

Long answer text

What do you get from your interaction with horses? Supplemental Qs = Do any of these experiences apply to other areas of your life? Does it make a difference that most of the time with horses is active and done outdoors?

Long answer text

How does the learning you experience with and around horses compare to your experiences in traditional learning environments, e.g. school classroom?

Long answer text

What challenges do you or others experiences by being involved with horses?

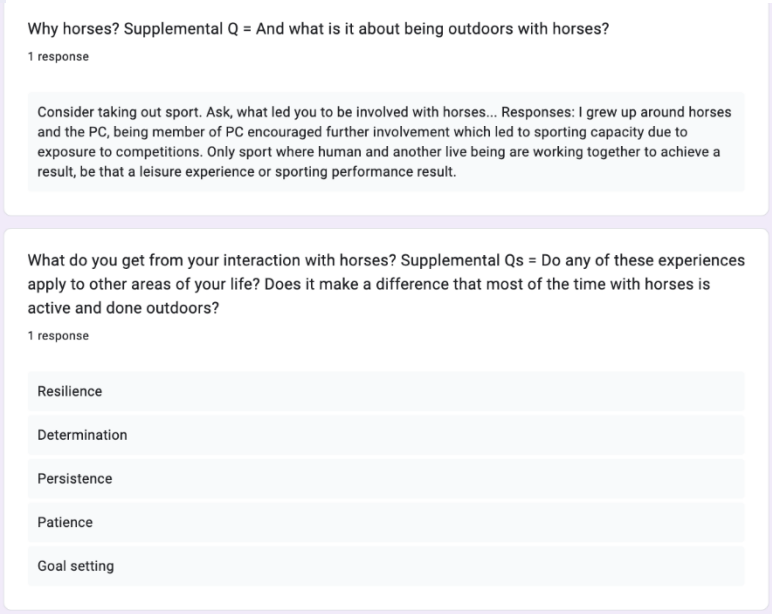
Long answer text

Tell me about the importance of muscle-memory when riding horses. Supplemental Q = What's going on in your body? Your mind?

Long answer text

Is there anything else you'd like to add to this discussion?

Long answer text



Why horses? Supplemental Q = And what is it about being outdoors with horses?

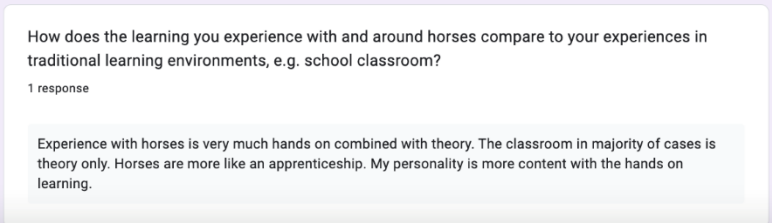
1 response

Consider taking out sport. Ask, what led you to be involved with horses... Responses: I grew up around horses and the PC, being member of PC encouraged further involvement which led to sporting capacity due to exposure to competitions. Only sport where human and another live being are working together to achieve a result, be that a leisure experience or sporting performance result.

What do you get from your interaction with horses? Supplemental Qs = Do any of these experiences apply to other areas of your life? Does it make a difference that most of the time with horses is active and done outdoors?

1 response

- Resilience
- Determination
- Persistence
- Patience
- Goal setting

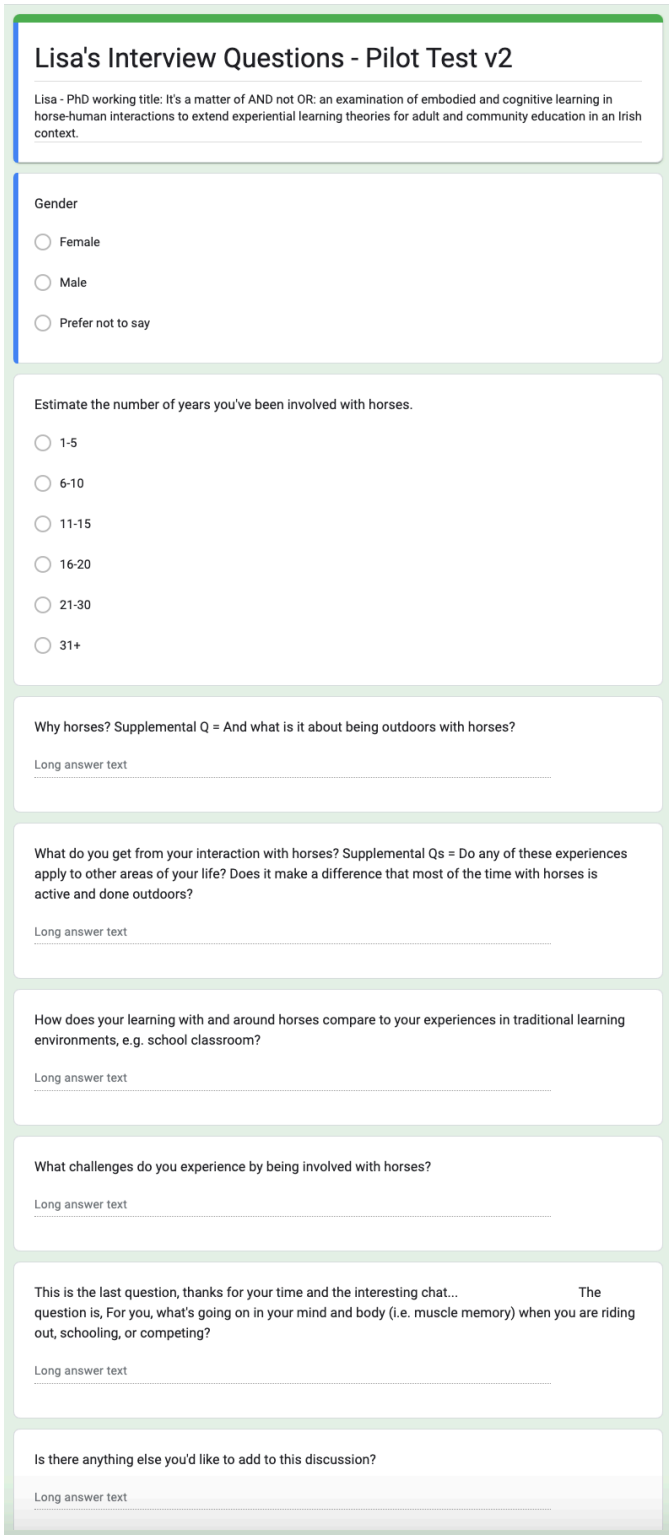


How does the learning you experience with and around horses compare to your experiences in traditional learning environments, e.g. school classroom?

1 response

Experience with horses is very much hands on combined with theory. The classroom in majority of cases is theory only. Horses are more like an apprenticeship. My personality is more content with the hands on learning.

Pilot questions – version 2 questions and sample responses



Lisa's Interview Questions - Pilot Test v2

Lisa - PhD working title: It's a matter of AND not OR: an examination of embodied and cognitive learning in horse-human interactions to extend experiential learning theories for adult and community education in an Irish context.

Gender

- Female
- Male
- Prefer not to say

Estimate the number of years you've been involved with horses.

- 1-5
- 6-10
- 11-15
- 16-20
- 21-30
- 31+

Why horses? Supplemental Q = And what is it about being outdoors with horses?

Long answer text

What do you get from your interaction with horses? Supplemental Qs = Do any of these experiences apply to other areas of your life? Does it make a difference that most of the time with horses is active and done outdoors?

Long answer text

How does your learning with and around horses compare to your experiences in traditional learning environments, e.g. school classroom?

Long answer text

What challenges do you experience by being involved with horses?

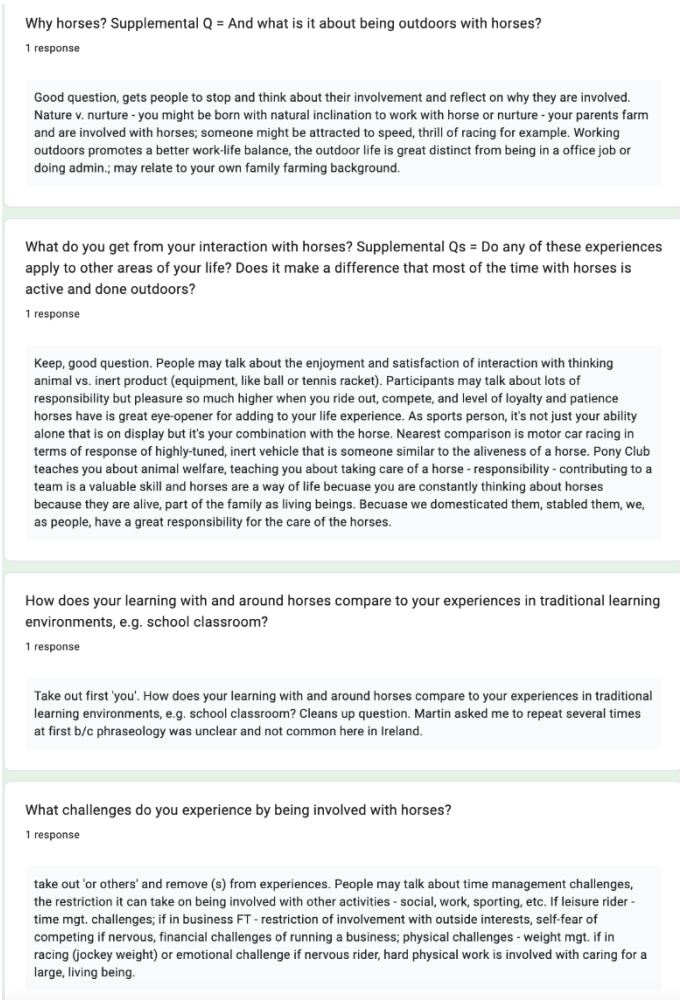
Long answer text

This is the last question, thanks for your time and the interesting chat... The question is, For you, what's going on in your mind and body (i.e. muscle memory) when you are riding out, schooling, or competing?

Long answer text

Is there anything else you'd like to add to this discussion?

Long answer text



Why horses? Supplemental Q = And what is it about being outdoors with horses?

1 response

Good question, gets people to stop and think about their involvement and reflect on why they are involved. Nature v. nurture - you might be born with natural inclination to work with horse or nurture - your parents farm and are involved with horses; someone might be attracted to speed, thrill of racing for example. Working outdoors promotes a better work-life balance, the outdoor life is great distinct from being in a office job or doing admin.; may relate to your own family farming background.

What do you get from your interaction with horses? Supplemental Qs = Do any of these experiences apply to other areas of your life? Does it make a difference that most of the time with horses is active and done outdoors?

1 response

Keep, good question. People may talk about the enjoyment and satisfaction of interaction with thinking animal vs. inert product (equipment, like ball or tennis racket). Participants may talk about lots of responsibility but pleasure so much higher when you ride out, compete, and level of loyalty and patience horses have is great eye-opener for adding to your life experience. As sports person, it's not just your ability alone that is on display but it's your combination with the horse. Nearest comparison is motor car racing in terms of response of highly-tuned, inert vehicle that is someone similar to the aliveness of a horse. Pony Club teaches you about animal welfare, teaching you about taking care of a horse - responsibility - contributing to a team is a valuable skill and horses are a way of life becuase you are constantly thinking about horses because they are alive, part of the family as living beings. Becuase we domesticated them, stabled them, we, as people, have a great responsibility for the care of the horses.

How does your learning with and around horses compare to your experiences in traditional learning environments, e.g. school classroom?

1 response

Take out first 'you'. How does your learning with and around horses compare to your experiences in traditional learning environments, e.g. school classroom? Cleans up question. Martin asked me to repeat several times at first b/c phraseology was unclear and not common here in Ireland.

What challenges do you experience by being involved with horses?

1 response

take out 'or others' and remove (s) from experiences. People may talk about time management challenges, the restriction it can take on being involved with other activities - social, work, sporting, etc. If leisure rider - time mgt. challenges; if in business FT - restriction of involvement with outside interests, self-fear of competing if nervous, financial challenges of running a business; physical challenges - weight mgt. if in racing (jockey weight) or emotional challenge if nervous rider, hard physical work is involved with caring for a large, living being.

Appendix D: Main study focused interview questions, a summary

Note: The following summary was written and included at the top of each main study transcript file. The verbiage served to remind me of the purpose and structure of the interviews.

I entered the group conversation with four ideas to add some loose structure to the dialogue and respect participants' time as indicated on the consent form. Time spent on questions was open to modification and I let the participants control the flow of the conversation. Questions were not always asked in the same order.

Main interview prompts:
1. Why horses? Use of an image of video (PhotoVoice) to communicate an experience
2. What do you learn (get) from your interactions with horses?
3. How do your interactions, learning with horses, compare with traditional schooling?
4. What is going on in your mind and body while you are working with horses, on the ground or in the saddle?

Appendix E: Coding table example from main study group 1 transcript

Q# | P#	Question or participant transcript	Categories	Themes	Comments

Main Interview #1
PhD Transcript 1
Interview conducted on x/xx/xx
4 participants

Overview: Main study interview with a group of XYZ. Chat was informal, around a kitchen table with tea and snacks and lasted over an hour, 1 hour, 12 minutes. Transcript = 45 pages.

5 Participants
Lisa (interview)
P1 = 1; P2 = 2; P3 = 3; P4 = 4

Summary: I entered the group conversation with four, semi-structured ideas to add some loose structure to the dialogue and respect participants' time as indicated on the consent form. Time spent on questions was open to modification and I let the participants control the flow of the conversation. Main interview ideas were: 1. Why horses? Use of an image of video (PhotoVoice) to communicate an experience 2. What do you learn (get) from your interactions with horses? 3. How do your interactions, learning with horses compare with traditional schooling? 4. What is going on in your mind and body while you are working with horses, on the ground or in the saddle?

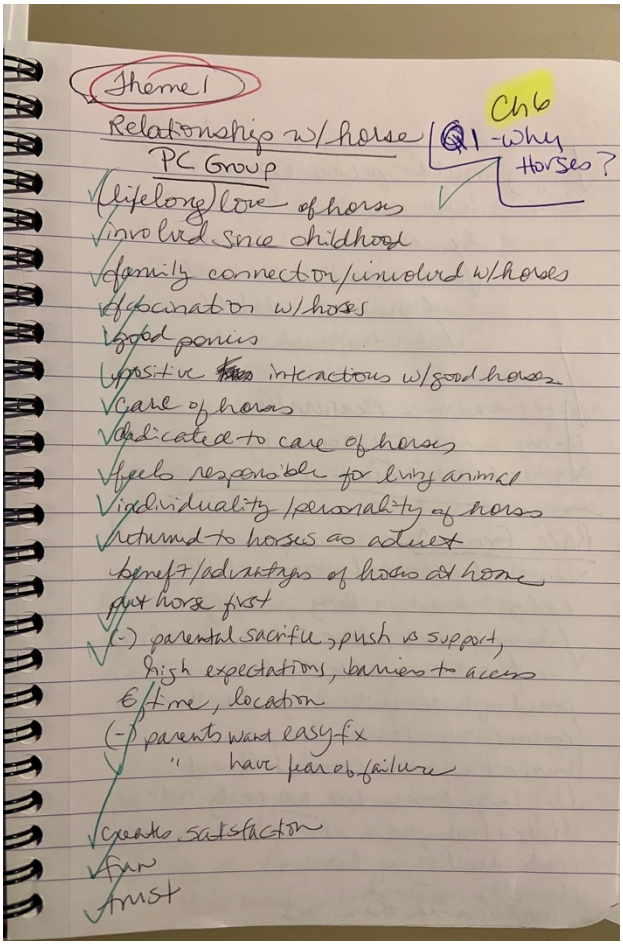
Comments revealed several dozen central ideas, from which about 13 themes were detected, then 6 larger categories were extracted. Participant mentions which were related to the 6 main categories were calculated and appear below.

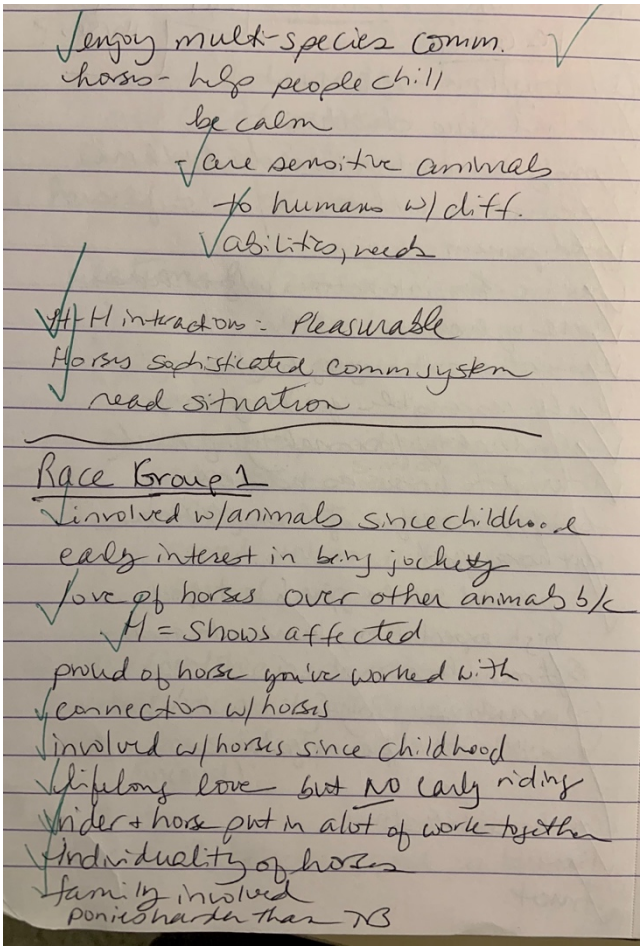
6 larger categories (number of incidences)
Relationship with horse (68) = 1st
Different ways of educating (21) = 4th
Transferability (30) = 3rd
Different ways of learning (34) = 2nd
Personally rewarding (10) = 6th
Overcoming (15) = 5th

Q# | P#	Question or participant transcript	Categories	Themes	Comments
Q1	Why horses?			
P4	This is Chocolate who couldn't be touched. I have Connemara ponies and Kerry Bog ponies. It took months [for them] to be captured in the field. I grew up on a farm where my mom runs a livery yard. I've always been around horses. My mom would be brilliant with horses. She can ride, and grew up riding, but she doesn't ride. This is when Chocolate suddenly decided to trust me. I got the saddle on, the bridle on. Thinking of doing a bit of dressage with her. Because I haven't competed since I was in PC. This is her in Kilruddery, not so long after. And she's so calm, so lovely. She's my girl in there.	Relationship with horses x 3	PhotoVoice Involved with horses since childhood (early exposure, family connection) Competition Individuality of horses	Photovoice Early exposure to horses Different horses/horse breeds have different personalities, traits, challenges Return to horses, competition as adult
P3	I was interested in what P4 was saying about listening to the horse b/c that is something which I'd like to try and do as well. I think that if you can allow the horse to express its personality (hmmms from group). The grey horse would absolutely go bollocks and he would try anything on anyone. He'd try to scrap people on doorways, he'd lunge at hay barrels, he's constantly trying to out wit you, he's a real intellectual challenge because he's an intelligent animal. Whereas the other one, the coloured, is really obliging, he's really really obliging but he was really really nervous. He used to huddle at the back of his stable, now he follows me like you would with your Connemara. He just you know, to get that trust from him now is a really lovely thing to have. So that's something when you feel pleasure as a person when you have to trust an animal.	Relationship with horses x 3	Multi-species communication; listening Individuality of horses Trust	Listen to horses by allowing them to express uniqueness Trust gained b/t humans and horses Relationship and trust building gives humans pleasure

Appendix F: Open coding example

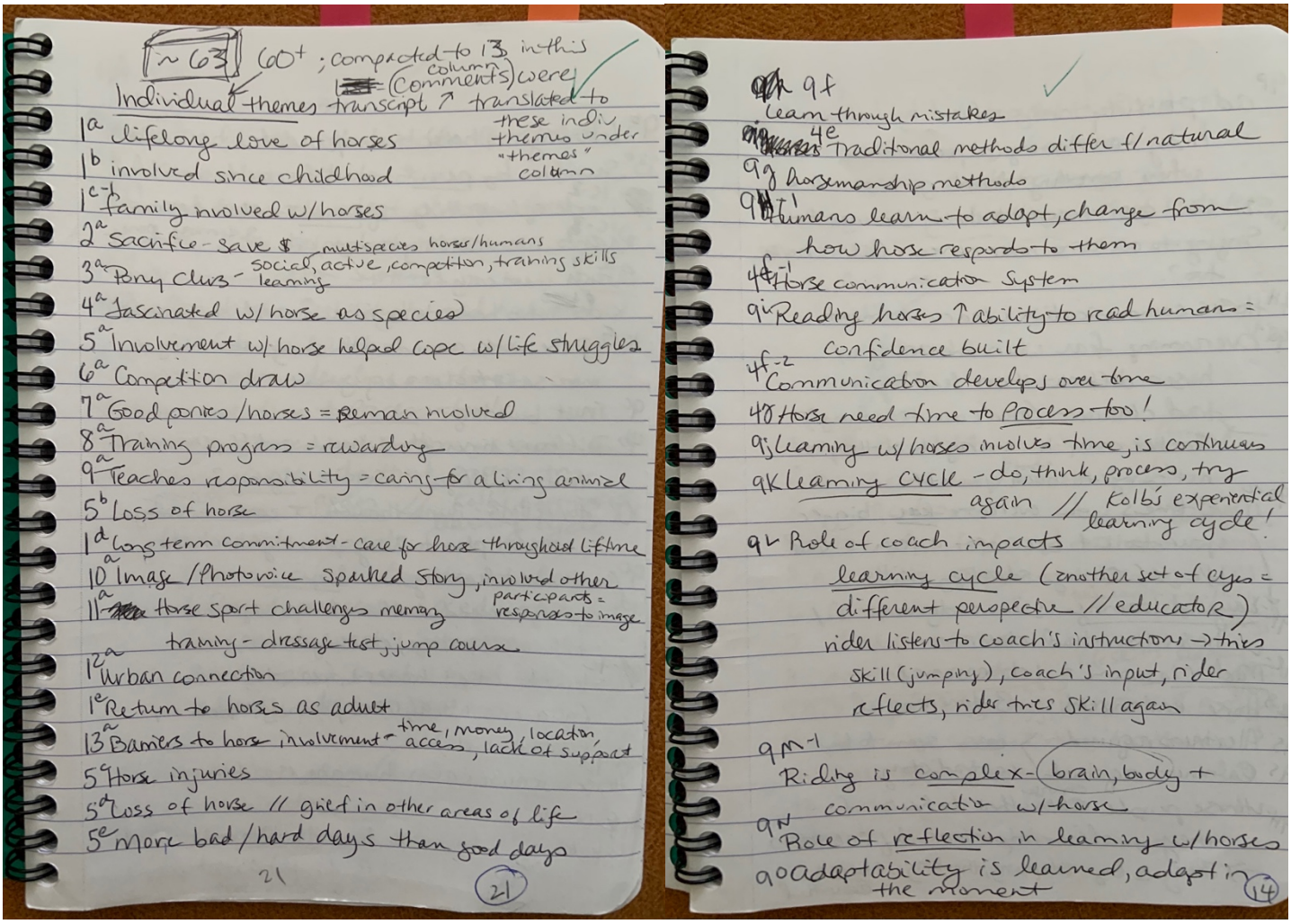
Note: These two pages are a sample from eleven handwritten pages created during the open coding phase of data analysis, prior to the creation of the table shown in Figure 6. They show how I pulled similar phrases from question 1 recorded during the PC Group interview and RACE Group 1 interview. I then transitioned into making typed notes as seen in the 'Comments' column in Appendix E.





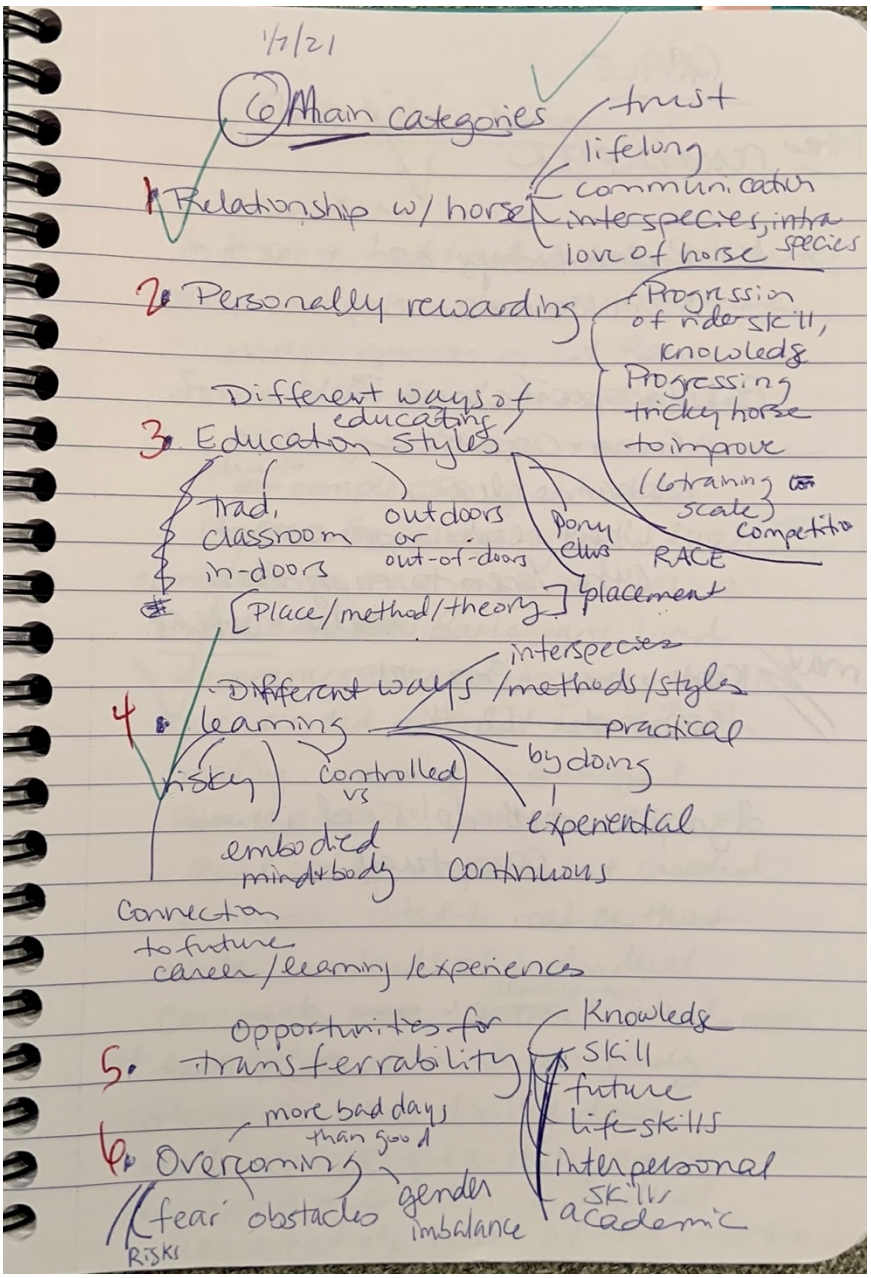
Appendix G: Manual axial coding example

Note: These two pages are a sample from six handwritten pages created during the axial coding phase. The numbers on the left side of each page show how I started to filter the 62 nodes, grouping them into a smaller number of themes. At this point, the broader themes weren't named as the process was fluid and went through further iterations.



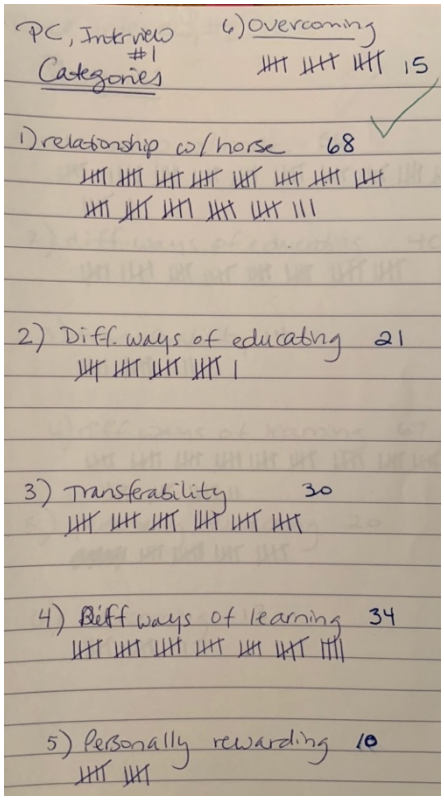
Appendix H: Six thematic concepts from inductive coding

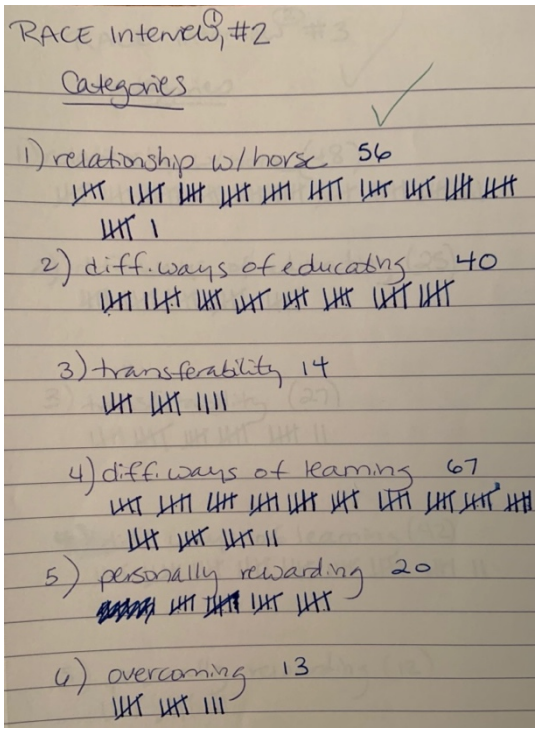
Note: This page illustrates how I analysed the 13 broader themes into six, named, thematic concepts during the data analysis phase of the study.

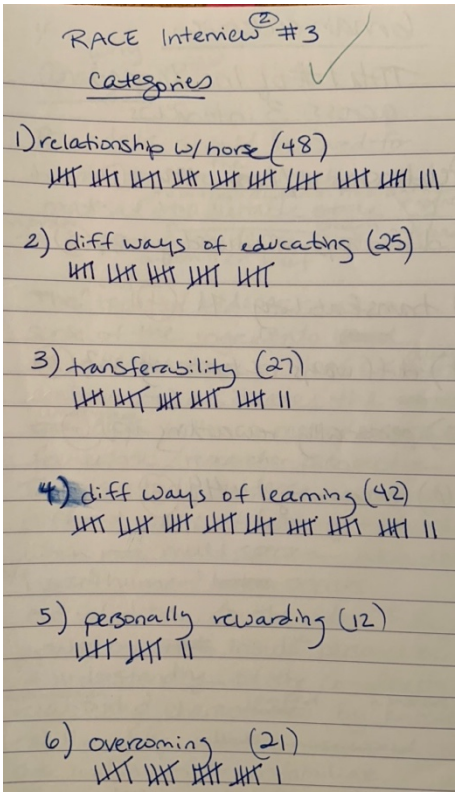


Appendix I: Tabulations of nodes within six thematic concepts

Note: These pages show how I tabulated how many times each node occurred within the three main study transcript groups. It is clear that words, phrases, and ideas related to 'relationships with horses' occur most frequently.





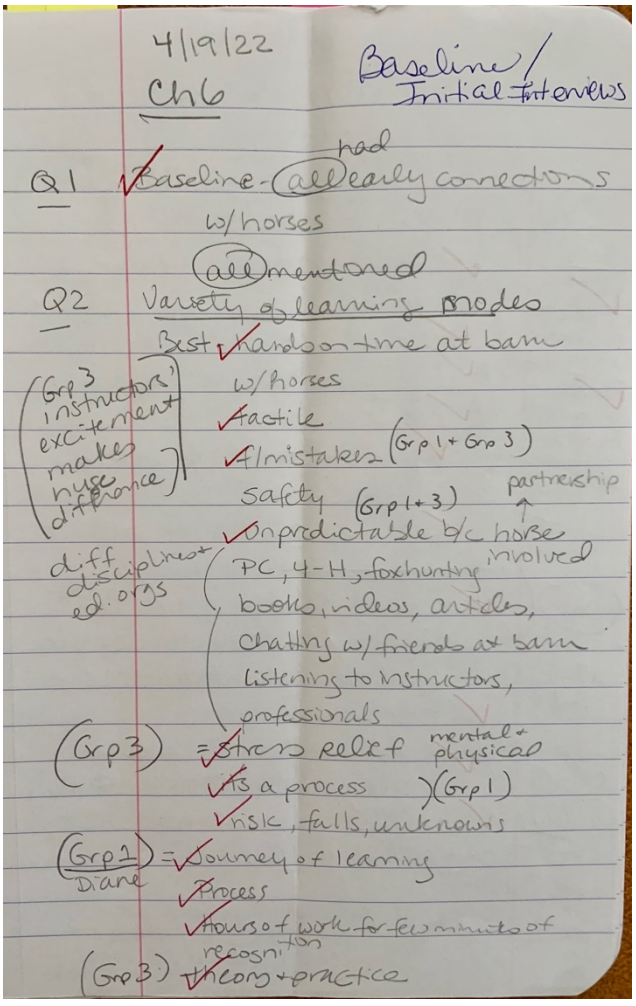


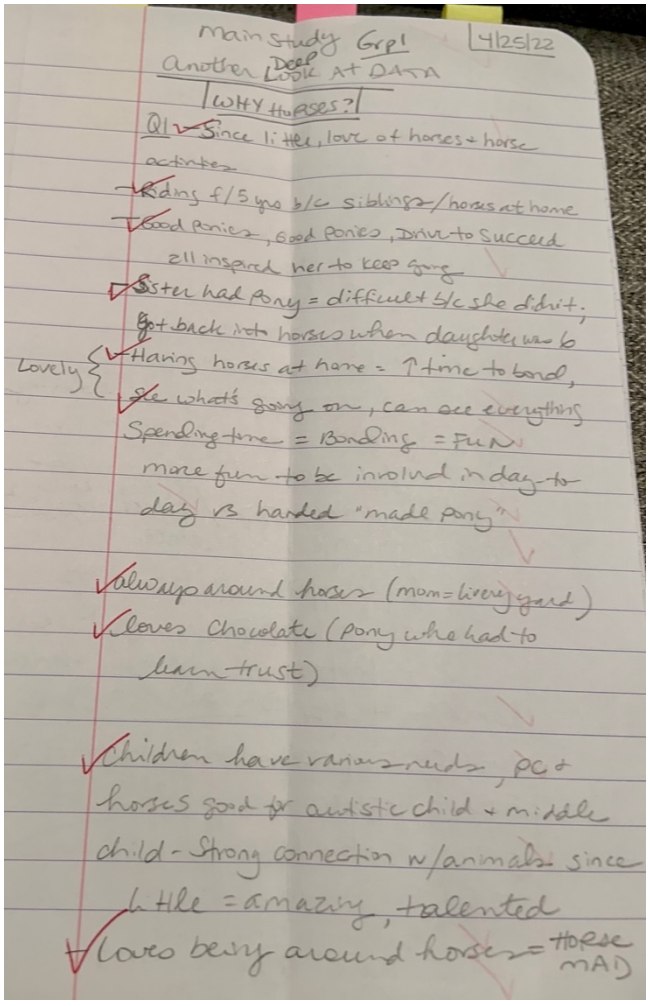
Appendix J: Revisiting coding, examples of cross-case analysis

Note: These two pages are samples created during a later stage of the study when I took another look at my primary data set. The page on the left is a sample from three pages showing how I revisited initial study material. I performed a cross-case analysis by analysing response nodes across groups (written as 'Grp 1', 'Grp 3' on this page) as they related to each of the interview questions (shown as 'Q1' and 'Q2').

The page on the right is a sample taken from 21 pages showing how I revisited main study transcripts (written as 'main study Grp 1' on this page).

Red check marks indicate that I cross-checked ideas handwritten on coding pages with quotes and ideas which appeared in the existing draft of my findings, chapter six. I used this process of cross-checking raw data with the draft of findings to check the reliability of my analysis and to uncover nuances from the raw data which I may have missed the previous year. When possible, I clarified language in my write-up and removed or added material to enhance the data story.





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