

A Community-Based Referral Agents Perceptions on Equine-Assisted Learning

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Word Count: 14,748

Being a report of an investigation submitted as a partial requirement for the award of

Psychology (Honours) at the University of Southern Queensland

Date of submission: 6th October 2022

Statement of Originality

This report contains no material offered for the award of any other degree or diploma, or material previously published, except where due reference is made in the text.

Name: Nicola den Braber

A handwritten signature in black ink that reads "Nicola den Braber". The signature is written in a cursive style with a large initial 'N' and a stylized 'B'.

Supervisors name: Dr Samantha Brown

Date: 6th October 2022

Acknowledgements

I never expected completing an Honours thesis to be easy, and I was right. However, some people made it that much easier for me. Firstly I would like to thank my supervisor, Dr Samantha Brown. Her passion and excitement for this project brought tremendous energy to our regular meetings. I am grateful for her attentive, open-door approach and her thoughtful, insightful guidance through this process.

Secondly, I would like to thank the team at Reason to Thrive. I want to extend a special thanks to Michelle Beatty, who was instrumental in recruiting participants for this study. Furthermore, I would like to thank the research participants. I met a group of dedicated community-based professionals who gave me their precious time. I felt moved and privileged to hear their stories.

Thirdly I would like to thank my family and friends. I am grateful for your encouragement and for listening to my challenges in this process. Also, my son William, although young in years, seems to transcend his age and constantly gives me the motivation to keep going; he is my ultimate inspiration.

This leaves just two very special thanks. First, Dr Levinson's dedication to his dog Jingles (Levinson, 1997), the first official therapy animal, was pinned up in my study throughout this project. I have read it numerous times while writing this thesis and found it emotional and encouraging, so thank you, Dr Levinson and Jingles. Lastly, I thank my constant study companion, Henry the cat, who can always be found on my desk lying on a pile of journal papers.

Abstract

Equine-Assisted Interventions (EAI) are gaining mainstream attention among the general public and community-based professionals. The limited empirical base reports that EAI decreases negative affect, increases positive psychosocial functioning, and is a promising alternative intervention for vulnerable populations. Community-based professionals believe EAIs are legitimate psychosocial interventions; however, they lack knowledge and an understanding of what they constitute. The current study explores the perception of equine-assisted learning (EAL), a sub-category of EAI, from the point of view of community-based referral agents. Six community-based professional representatives from not-for-profits, government and educational organisations who refer clients to the Reason to Thrive EAL skills development program participated in semi-structured interviews. The collected data was analysed using a reflexive thematic analysis method within an exploratory qualitative research design. The themes identified in response to the research question of why the community-based referral agents choose EAL for their clients were the theme of complex trauma and three sub-themes emotional safety, building relationships, and high engagement. In response to the research question of how the community-based referral agents believed EAL facilitates change for their clients, were two main themes experiential learning and empowerment. The research found that community-based referral agents perceive EAL as an engaging intervention suitable for complex trauma survivors. They reported the horses facilitate emotional safety and support their clients in self-exploration. The experience is believed to improve clients' psychosocial functioning, and the program's experiential approach empowered participants to reframe their sense of self, supporting positive transformations in their life.

Keywords: Equine-assisted learning, horses, complex trauma, attachment theory and experiential learning theory.

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Chapter 1: Introduction

Overview of the Research

Animal-assisted interventions have grown in popularity over the last half a century. Furthermore, researchers in the field of human-animal interactions suggest it is in the process of a paradigm shift and establishing a science-based future (Fine et al., 2019). Although the research area of equine-assisted interventions is still in its infancy, there is an emerging trend within the literature reporting the positive effects on a range of psychosocial outcomes, including decreased negative affect and increases in psychosocial well-being (Halberg, 2018). Additionally, equine-related research suggests that the most vulnerable populations with complex psychosocial needs are the most likely to benefit from alternative interventions, which include horses (Naste et al., 2018; O’Haire et al., 2015).

These populations are often survivors of complex trauma who have suffered adverse childhood experiences such as emotional and sexual abuse, neglect and interpersonal violence, or exposure to highly volatile environments such as war and displacement (Cook et al., 2005). Hence complex trauma victims are at risk of psychosocial impairment, including abnormal mental health, poor relationships, and disengagement from mainstream education and communities. The impact of complex trauma can continue into adulthood in a perpetual cycle of interpersonal abuse and violence (Cook et al., 2005). Survivors of complex trauma can experience difficulties engaging and achieving successful outcomes in conventional psychological trauma-informed therapies (Naste et al., 2018; O’Haire et al., 2015). Emerging evidence suggests that equine-assisted interventions may be a beneficial alternative therapy for trauma populations due to their novel experiential approach that can facilitate psychosocial insight within a framework of emotional safety (Naste et al., 2018; O’Haire et al., 2015; Wilson et al., 2017).

Despite emerging evidence reporting equine-assisted interventions as a promising alternative therapeutic model for vulnerable populations. Yet, the empirical base for animal-assisted interventions, including those with horses, is plagued with criticisms of poor scientific rigour, including weak methodology, terminology misuse, and the lack of a unified theory (Santonanelli et al., 2020). Interestingly despite these criticisms and the lack of a strong evidence base, there has been an increase in healthcare and educational professionals engaging their clients in animal-assisted interventions (Lopez-Cepero, 2020). Therefore today, it is not unusual to find animals in settings such as universities, prisons, schools, therapist's offices and aged care facilities working to support the well-being of humans (Corleto, 2018; Hartwig & Smelser, 2018; Ward-Griffin et al., 2017; Zents et al., 2017). Furthermore, animal-assisted interventions have grabbed the media's attention and the general public's imagination, with stories regularly reported in news and television outlets regarding how animals positively support human psychosocial functioning (Therapy Dogs in Education, 2022).

Community-based professionals, including psychologists, counsellors and social workers, are responsible for providing interventions for vulnerable populations who fail to gain positive outcomes from conventional psychological therapy. Equine-assisted interventions have been identified as a promising alternative therapy for vulnerable people, especially complex trauma survivors (Naste et al., 2018). However, the limited empirical base regarding interventions that include horses creates an ethical dilemma for psychologists working within the science-practitioner model; due to their responsibility to science-based practice and strict ethical, registration and accreditation standards (AHPRA, 2022; APA, 2022).

Unfortunately, there is a lack of research on why community-based professionals refer to and believe animals in therapy benefit their clients. However, the limited studies regarding

community-based professionals' perceptions of animal-assisted interventions report they consider them a legitimate intervention for psychosocial wellness. Yet, the research also indicates they lack knowledge regarding animal-assisted interventions (Hartwig & Smelser, 2018) and have a limited understanding of the equine-assisted intervention process and its mechanisms of change (Stapleton & Grimmett, 2021).

A recent survey of 300 mental health professionals, including psychologists, counsellors, and clinical social workers, was conducted to ascertain their perceptions of animal-assisted counselling in a clinical setting (Hartwig & Smelser, 2018). Although 91.7% of participants perceived animal-assisted counselling as a legitimate counselling modality, 83% of the same cohort reported they had little understanding or working knowledge of the use of animals in therapy. The survey did not capture which animals the practitioners believed were beneficial. However, dogs and horses were the animals they would most like to work alongside (Hartwig & Smelser, 2018). Stapleton & Grimmett's (2021) study investigated the perception of community-based professionals regarding equine-assisted psychotherapy. The researcher found that the professionals they surveyed were hesitant to refer clients to psychotherapeutic interventions involving horses because they did not understand what it involved and not because they believed it lacked legitimacy.

The Focus of the Study

There is a growing interest in animal-assisted interventions as a psychosocial treatment despite the limited empirical base and reported lack of understanding among community-based professionals (Hartwig & Smelser, 2018; Stapleton & Grimmett, 2021; Lopez-Cepero, 2020). Therefore, this current study aims to add to the field of animal-assisted intervention research, specifically extending the knowledge base of equine-assisted interventions for clinicians and researchers. Horses bring a unique aspect to animal-assisted interventions as

they are prey animals, have finely tuned survival responses, and are innately sensitive and responsive to environmental cues (Skeen, 2013). Preliminary equine-assisted intervention research is encouraging that horses can facilitate improvements in participants' biopsychosocial well-being (Halberg, 2018). Furthermore, they have been reported as an advantageous alternative or adjunct intervention for vulnerable populations, including complex trauma survivors who are often resistant to conventional psychological therapies (Maujean et al., 2013; Naste et al., 2018)

Therefore, this study explored the experience of community-based referral agents who enrol clients to Reason to Thrive, a Queensland-based organisation that delivers equine-assisted learning, a skills development program for at-risk youth and women impacted by domestic violence. The research will aid researchers and psychologists in understanding why community professionals refer vulnerable clients to horse-related interventions despite the lack of a strong empirical base. Furthermore, the consequences of not pursuing equine-assisted intervention research could inadvertently deprive those vulnerable populations with complex psychosocial needs, who could benefit from alternative therapeutic approaches versus conventional talking therapies.

The following sections in this chapter introduce complex trauma. Then continues with a brief overview of the history of the human-animal relationship and animal-assisted interventions, including terminology definitions recommended by the International Association of Human-Animal Interaction Organisation (2018). Next, equine-assisted intervention literature will be reviewed. Finally, the theories for the mechanism of change and perceptions of equine-assisted interventions are briefly discussed.

Literature Review

Complex trauma. Complex trauma (CT) is a multifaceted response to prolonged, repeated, and cumulative experiences of an interpersonal nature, such as neglect, physical, emotional, sexual abuse, and domestic violence often experienced during childhood (Cook et al., 2005). The consequences of CT are far-reaching, impeding healthy attachments and biopsychosocial development, which can result in survival-based adaptations and dysfunctionality across the lifespan (Cook et al., 2005; Courtois, 2004; Naste et al., 2018; O'Neill et al., 2010). In Australia, child maltreatment is responsible for a large percentage of the burden of psychological disorders. For example, it is estimated that 20.9% of anxiety disorders and 15.7% of depressive disorders in males, and for females, 30.6% of anxiety disorders and 22.8% of depressive disorders are due to CT (Moore et al., 2015).

Cook et al. (2005) conducted a literature review on complex trauma. They identified seven domains of impairment correlated with childhood trauma (1) attachment, (2) biology, (3) affect regulation, (4) dissociation, (5) behavioural control, (6) cognition and (7) self-concept. Due to this complicated symptomology, populations with CT are challenging to treat, and they may be hesitant to engage in conventional psychological interventions (Maujean et al., 2013; Naste et al., 2017; Wilson et al., 2017). Therefore, developing novel and engaging alternative psychosocial-based interventions to treat CT populations is essential (Naste et al., 2018). The literature on equine-assisted interventions as a treatment for CT is promising and is being seriously investigated as an adjunct trauma-informed intervention (Naste et al., 2018; O'Haire et al., 2015). In addition, several systematic reviews of the empirical literature on animal-assisted interventions, including horse-related treatments, report positive results in reducing trauma symptomatology (Hediger et al., 2021; O'Haire et al., 2015; Wilkie et al., 2015).

Naste et al. (2018) conducted a pilot program by trialling trauma-informed equine facilitated therapy designed to treat complex trauma. A model of equine facilitated therapy for complex trauma incorporated horses with the empirically grounded trauma-informed framework of attachment, regulation and competency. The researchers reported positive outcomes for a range of biopsychosocial issues connected with CT, including improvements in self-regulation, somatic and behavioural control, cognition and learning, perceptions of safety, relationship building, and decreases in depression and anxiety. Furthermore, the clinicians reported the client-horse interaction resulted in a calming effect that supported the therapeutic alliance creating a safe space for open communications, emotional processing, reflection and improving self-awareness. These outcomes firmly place equine-assisted interventions as a contender as an adjunct therapy to address CT.

Human-animal relationship. Our relationships with animals suggest that there are innate evolutionary and biopsychosocial processes that interlink and bond humans with animals. (Beck, 2014; Beetz, 2017; Fine et al., 2019; Fine & Beck, 2019; Levinson, 1978, 1997; Serpell, 2019). During the 18th century, European theologians and philosophers spoke of the benefits of keeping animals to help children develop self-understanding and socialising skills, and the phenomenon of pet-keeping emerged (Levinson, 1978; Serpell, 2019). However, it was not until the 1960s that child psychiatrist Boris Levinson observed a positive reaction to his pet dog, Jingles, in a non-verbal child who had received much therapy but with no success. This interaction prompted Levinson to promote animals in therapy, laying the foundation for the field of animal-assisted interventions (Fine, 2017).

Animal-assisted interventions. Psychiatrists Elizabeth and Sam Corson were some of the first researchers to use animals in a clinical setting. In their landmark study, $n = 50$ hospitalised psychiatric patients were invited to interact with a group of dogs. The doctors reported the dogs acted as a social catalyst that improved communication amongst the staff and patients creating a convivial humanising atmosphere within the facility (Corson et al., 1977). The Corsons coined the term 'social lubricant', as the animal appeared to create a warmth that supported a foundation for a therapeutic relationship, thus supporting Levinson's earlier observations (Corson et al., 1977; Fine et al., 2019). However, the study only offered an anecdotal glimpse into the potential of animals in a clinical setting. Although an encouraging start, it was far from the rigorous empirical evidence required by the scientific community.

A pivotal turning point for the human-animal interaction research field and animal-assisted interventions (AAI) was the study by Friedman et al. (1980). Their ground-breaking research assessed 92 patients hospitalised for chronic heart disease and their survival percentages post twelve months. They reported that pet-owning patients' survival rates were 94% versus 72% in the non-pet owners reporting a statistically significant relationship between survival and pet ownership (Friedman et al., 1980). This study became the flagship for the therapeutic benefits of animals and inspired a wave of research. Today research has extended beyond the benefits of pet ownership with a significant focus on the use of AAIs for serious health and social issues such as autism (Malcolm et al., 2018), substance use disorders (Kern-Godal et al., 2016) and abnormal psychopathology, interpersonal violence and complex trauma, including post-traumatic stress disorder (Burgon et al., 2018; Fine et al., 2019; Frederick et al., 2015; Halberg, 2018; Kendall & Maujean, 2015; Naste et al., 2018; Schroeder et al., 2018; Wilkie et al., 2018).

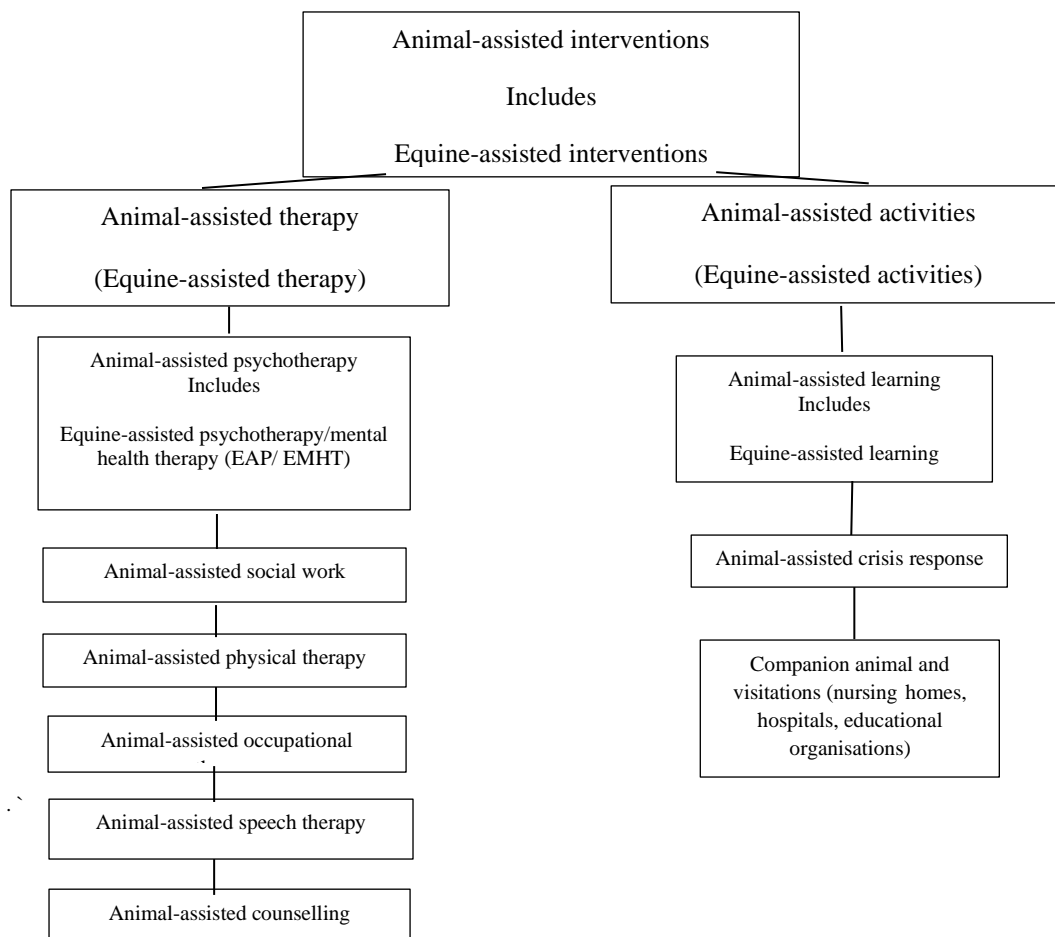
However, the research field of AAIs is not without its challenges. It has been criticised for its lack of scientific rigour, including an over-reliance on anecdotal reports, a lack of randomised control trials, small sample sizes, researcher bias, inconsistent use of terminology and the absence of theory (Bert et al., 2016; Holder et al., 2020; Lopez-Ceparo, 2020; Rodriguez et al., 2021; Santonanelli et al., 2020). Promisingly, in a review of the current state of AAI research Lopez-Cepero (2020) reports that there has been an increase in random controlled trials and protocols to reduce bias and increase the internal validity of AAI studies. Nevertheless, some critical issues continue to hinder AAI research. In an umbrella review of AAI, systematic reviews highlighted that the inconsistent use of terminology is highly detrimental to the field (Santaniello et al., 2020), making studies hard to compare, evaluate, and replicate, creating uncertainty regarding the value of AAIs.

Terminology. The International Association of Human-Animal Interaction Organisation (IAHAIO) recognised the need for clear definitions for AAI terms and published a white paper in 2018. The IAHAIO actively encourages human-animal interaction researchers to adopt the following definitions. Therefore, they have been used within this study's context unless referring to the term used in a specific study. AAI is an umbrella term encompassing a spectrum of structured and goal-oriented activities, therapies and educational programs. They involve the intentional use of animals, animal handlers and professionals from education, health and human services to improve the well-being of people. AAIs have a range of sub-categories, including animal-assisted therapy (AAT) and animal-assisted activities (AAA). AATs are formal, structured, goal-oriented therapeutic interventions focused on enhancing an aspect of the human participant's psychosocial or physical well-being. AATs are directed or delivered by an expert registered and bound within an ethical framework of an overarching professional body, such as occupational or physiotherapists, psychologists or social workers. In contrast, AAAs are planned, goal-oriented informal

programs involving a human-animal team for recreational, motivational or educational purposes. Providers of AAA may work directly or informally with healthcare or education professionals (IAHAIO, 2018). Although AAA may have therapeutic goals, they are not considered therapies, an area of AAI research that is often confused (Halberg, 2018). Figure 1 offers an overview of the AAI range and its sub-categories, AAT and AAA. The figure identifies equine-assisted learning, the focal intervention for this study, as a sub-category within AAA.

Figure 1

The Range of Animal-Assisted Interventions and Sub-Categories



Note: Figure adapted from the Handbook of Animal-Assisted Therapy, ch. 3, p26 (Fine et al., 2019).

Equine-assisted interventions. Whilst a range of animals are used within AAIs, therapies and activities with dogs and horses dominate the AAI research literature (Maujean et al., 2015). As with AAIs, the terminology is often confused regarding equine-assisted interventions (EAI) throughout the empirical literature. Equine-assisted learning (EAL) is a sub-category of EAI and the primary focus of this study, and it is classified as an AAA. EAL is a life skills program that facilitates personal growth through experiential learning, developing participants' psychosocial skills (Burgon et al., 2018; Halberg, 2018; Stock & Kolb, 2016). EAL can include horseback riding; however, activities are often ground-based, working with a horse in small teams. Experiential learning activities include observing horse behaviour, hands-on tasks such as grooming, and using non-verbal skills to navigate the horse around obstacles are common curricular activities (Burgon, 2014; Halberg; 2018; Stock & Kolb, 2016).

Horses bring a unique aspect to psychosocial learning as they are prey animals, giving them the advantage of having finely tuned survival responses. The horse is sensitive to environmental cues and has an innate ability to mirror affect (Bachi, 2013; Skeen, 2013). Consequently, the horse's responsiveness can facilitate self-awareness and psychosocial learning. Furthermore, the horse and its behaviour can be abstractly conceptualised to metaphorically represent emotions or behaviours that relate to the participants and their real-life issues (Burgon et al., 2018; Klontz et al., 2007; Stock & Kolb, 2016; Wilkie et al., 2016). An advantage of EAL is that it is experiential and not overly reliant on verbal communication. Vulnerable populations, such as at-risk youth and complex trauma survivors, can be challenging to treat in a conventional therapeutic setting (Lietz & Napan, 2020; Maujean et al., 2013). They can have high levels of mistrust, and low levels of motivation, making rapport and engagement difficult, consequently resulting in poor therapeutic outcomes (Maujean et al., 2013; Naste et al., 2018; Wilkie et al., 2016). Lietz & Napan

(2020) interviewed New Zealand equine therapists who deliver trauma-informed equine therapy to at-risk youth. The therapist believed many of their participants were burnt out by conventional talking therapy, and sharing their feelings with the horse was powerful in the young person's trauma recovery. The therapist felt the horses facilitated emotional safety, unconditional positive regard, and the non-reliance on verbal exchange reduced the risk of re-traumatisation.

An Australian-based research team, Maujean et al. (2013) recognised at-risk youth's resistance to conventional therapy and the need for non-traditional interventions. As a result, they piloted a novel psychological intervention called horse play, which used a horse as a therapeutic tool. Recruited from Queensland Youth and Family Services (QYFS), $n = 16$ young people who failed to respond to conventional psychological-based therapies were enrolled in the ten-week horse play program. The participants and their case managers were interviewed post-completion. Although the study does not stipulate the qualitative analysis method, the researchers identified five themes enjoyment, psychological and social benefits, engagement, transferable skills and mechanisms of change. The $n = 12$ participants who completed the program reported decreases in negative affect and elevations in mood, positively impacting their motivation for life. Among the positive changes reported were increased engagement in school, improved self-control and confidence in their ability to connect to others. The case managers felt the task-oriented nature of the program supported the young people in learning coping skills that transferred outside of the EAI. For example, the participants described how they initially felt scared of the horse and overcoming their fear built resilience and confidence to manage their anxieties in real-life situations. The case workers believed the horse-participant connection was pivotal in the psychosocial changes they observed. They reported that the young people would refer to “my” horse. Indicating the participants formed attachments with the animals. While this study reports positive effects for

the participants, it does not address the rationale for the horse play program if at-risk youth are less resistant to EAI versus conventional psychological therapy.

Kendall & Maujean (2015) reported significant improvements in participants' self-efficacy and self-esteem. The treatment group $n = 12$ were assigned to the 10-week horse play program and were the participants in the study conducted by Maujean et al. (2013). The waitlist control group $n = 10$ were recruited from a vocational school but were known to the QYFS as being treatment resistant. The waitlisted participants received no treatment between assessment time intervals. The dependent variables were measured on the general self-efficacy and Rosenberg self-esteem scale at time points pre, mid and post-intervention. The treatment group showed a significant increase in self-efficacy and self-esteem across the time points versus the control group's scores which remained unchanged. While the study reports a positive effect for participants, the sample size was small, and the study lacked extraneous variable control reducing mediator and moderator effects to ascertain how much the observed changes were due to the horse play program

Frederick et al. (2015) assigned high school students $n = 26$ who had met at least one of the at-risk Texas Education Agency criteria for academic failure and disengagement to a treatment group of a 5-week grounded EAL program or to a waitlist control group. Participants' levels of hope and depression were measured on the Adolescent Domain-Specific Hope Scale and the Major Depression Inventory, which participants completed pre and post-treatment. Participants in the treatment group had a statistically significant increase in hopefulness with a medium effect size compared to the control group post-treatment. Furthermore, depression scores in the treatment group showed a decrease; however, there was no significant difference between the treatment and control groups. It should be noted that both groups simultaneously received the 'usual' but unspecified standard of care. Therefore, this may explain why there was not a statistically significant difference in the decrease of

depression for both groups due to the lack of extraneous variable control for the participant's usual treatment. Unfortunately, it is difficult to ascertain from the study to what extent the positive effect observed was due to the EAL program.

A meta-analysis of seven studies of EAI random control trials conducted between 2005 and 2014 evaluated EAI efficacy on at-risk youth populations and found an overall statistically significant medium effect on psychosocial functioning for participants (Wilkie et al. 2016). However, whilst the meta-analysis results help to support the integrity and efficacy of the positive effects of EAI, problematic scientific issues remain in general for EAI studies, particularly small sample sizes and an absence of control of extraneous variables. In addition, Wilkie et al. (2016) highlighted that a lack of procedural information across the studies also prevents moderator and mediator analysis essential to establish the level of the EAI's effect above and beyond the standard care participants received.

Theory. A consistent criticism of AAI research and EAI studies is their lack of an underpinning theory (Santonanelli et al., 2020). Theory is the foundation for understanding mechanisms of change and supports purposeful scientific enquiry to explain, predict and control outcomes (Vincent & Farkas, 2017). Attachment theory (AT) is one of the most discussed theories within AAI literature to elucidate mechanisms of change (Bachi, 2013; Vincent & Farkas, 2017). AT centres on the emotional bond of relationships between people and may extend to include animals (Geist, 2011; Vincent & Farkas, 2017). An ideal attachment system should offer safety and security so a child can develop self-regulation, cognitive ability to support learning and social skills to establish positive relationships. The attachment experience forms a person's internal working model and is the foundation for how they perceive relationships with themselves and others (Bachi, 2013; Beetz, 2017; Cook et al., 2005). Unfortunately, complex trauma survivors can be vulnerable to developing an insecure attachment style, which can devastate a person's biopsychosocial development,

causing biological dysfunction, emotional and cognitive deficits, social and behavioural problems and abnormal psychology throughout the life span (Beetz, 2017; Cook et., 2005; Geist, 2011).

Some human-animal interaction researchers suggest EAI parallels attachment theory psychotherapy (ATP) (Bachi, 2013). A therapist's role at the core of ATP is to create a haven of safety; a secure base referred to as a holding environment representing maternal care. In the context of EAI, the horse and the natural setting enriches the holding environment (Bachi, 2013; Lietz & Napan, 2020). Understanding the role of the horse from within the framework of AT's holding environment, Bachi (2013) suggests three factors are involved (1) the horse's back is a mobile therapy setting that physically and symbolically holds the client (2) the horse supports trust and rapport, and (3) the horse is non-judgemental and accepting creating emotional safety. The EAI process is postulated to restore the client's internal working model of their attachment style, rectifying deficiencies that can stop personal growth (Bachi, 2013). Therefore the horse enriches the holding environment by being non-judgmental, creating an emotionally safe place for introspection and emotional processing.

A neurobiological theory suggested to explain the effects observed in AAI is the activation of the neurochemical oxytocin (OT) (Beetz, 2017; Beetz et al., 2012; Holder et al., 2020; Schreiner, 2016; Wells, 2019). OT is a hormone and neurotransmitter released into the brain and circulatory system via sensory stimulation. OT is activated at birth, during breastfeeding, and during invited physical intimacy, including sex, stroking and touching. The suggested effects of OT include pair-bonding and attachment, increased socialisation, and stress reduction, all effects observed in participants of EAI (Beetz, 2017; Beetz et al., 2012; Holder et al., 2020; Schreiner, 2016; Wells, 2019). Research suggests OT release is triggered during an animal interaction. However, most studies on OT and human-animal interactions involve companion animals, and they report OT release is more likely to increase

when the animal is familiar (Holder et al., 2020; Wells, 2019). It has also been posited that the release of OT is two ways; therefore, humans and animals benefit from the interaction (Fine & Beck, 2019). However, an interesting study that monitored the horses' OT levels during an EAI with veterans diagnosed with PTSD found no increase in the levels of the horse's OT (Malinoski et al., 2018). Nevertheless, it seems intuitive that most people are drawn innately and positively toward animals which is suggested in the biophilia theory that humans are inherently drawn to natural settings, including animals (Barbiero & Berto, 2021). Therefore, neurobiological factors of the release of OT during an interaction with an animal may be part of a chain reaction that can partially explain the mechanism of change observed in AAIs.

Aside from theories explaining the biopsychological benefits of AAI, Stock & Kolb (2016) suggest EAL programs are an experiential format and align with experiential learning theory. Experiential learning theory defines learning as 'the process whereby learning is created through the transformation of experience' (Kolb et al., 2001; Stock & Kolb, 2016). Experiential learning theory is a stage cycle model that includes concrete experience, reflective observation, abstract conceptualisation and active experimentation (Stock & Kolb, 2016). The theories discussed in this paper may offer some insight within a theoretical framework as to why the horse-human relationship may be therapeutic. However, at this stage, no one theory has holistically captured the underlying mechanisms of changes observed within EAI.

Perceptions. There is limited research regarding community-based professionals' perceptions of EAI. Much of the EAI research is conducted by program facilitators and therefore has a substantial bias (Lopez-Cepero, 2020). Stapleton and Grimmett (2021) conducted a quantitative study assessing the understanding and perception of equine-assisted psychotherapy amongst $n = 129$ general members of the community and $n = 55$ healthcare professionals. The healthcare professional sample included general practitioners, psychologists and counsellors. Equine-therapist were excluded from both sample groups. The researchers found that the general community sample was significantly more accepting of equine-assisted psychotherapy as a treatment for psychopathology than the healthcare professional's sample.

The authors suggested the lack of acceptance within the healthcare professional sample was due to their lack of understanding of EAI. Consequently, they are hesitant to refer clients to treatments that include horses. In addition, healthcare professionals, including psychologists, must adhere to strict ethical, registration and accreditation standards (AHPRA, 2022; APA, 2022). Therefore, they may be cautious about accessing interventions with a limited evidence base. However, the researchers argued that equine therapies could provide an alternative for those populations resistant to conventional psychological interventions. They further suggested that the reluctance to refer to EAI's could deprive the most vulnerable populations of getting support, which could be considered a breach of the ethical principles of autonomy and justice. The study is one of only a few investigating the perceptions of health care professionals and EAI; however, the sample size was small; therefore, the findings cannot be generalised. Yet, the authors raise important points for the field of psychology to consider.

Community-based professionals, including psychologists, are ethically responsible for prioritising their client's needs and well-being when considering treatment options. Not all

populations respond well to conventional therapies; therefore, it is necessary to have an arsenal of interventions (Maujean et al., 2013; Burgon et al., 2018; Lietz & Napan, 2020; Naste et al., 2018; O'Haire et al., 2015; Vincent & Farkas, 2017; Wilson et al., 2017). Furthermore, AAI is growing in popularity (Lopez-Cepero, 2020), and the literature reports the general community considers psychosocial treatment with horses acceptable (Stapleton & Grimmett, 2021). Therefore the field of psychology has a scientific responsibility and an ethical obligation to pursue knowledge and grow the empirical base for EAI to support clients' autonomy regarding how they wish to pursue their therapeutic journey.

The Current study

While it is acknowledged that EAIs are still in a preliminary research stage, the reported effects on vulnerable populations resistant to conventional therapy are encouraging. (Lietz & Napan, 2020; Maujean et al., 2013; Naste et al., 2018). In addition, community-based professionals are referring vulnerable clients to an increasing number of psychosocial interventions, which include horses (Stapleton & Grimmett, 2021). Although very little is known about their perception of EAI and why despite the lack of a strong evidence base, they believe interventions that include horses benefit their clients.

The current study aimed to explore the perceptions and experiences of a cohort of community-based professionals who refer their clients to a Queensland-based EAL program. Exploring the experiences of community-based professionals will address a significant gap in the literature and help other professionals, including psychologists, gain insight into what an EAL program might offer vulnerable clients. A qualitative research design was used to achieve a deeper level of understanding regarding their perceptions of EAL. This study sought to answer the following questions.

1. Why do community-based referral agents choose equine-assisted learning for their clients?
2. How do the referral agents believe equine-assisted learning facilitates change for their clients?

Chapter 2: Method

Research Design Overview

Due to the study's exploratory nature, a qualitative phenomenological design informed the inquiry strategy for this study. Qualitative research is ideal for exploring experiences and supporting the researcher in understanding the participant's world (Austin & Sutton, 2014). Accordingly, the research adopts an exploratory approach to highlight the participants' lived experiences, perspectives and beliefs (Byrne, 2021). A semi-structured interview with open-ended questions was used during the data collection process to give the participants freedom to share their experiences. The research's ontological and epistemological perspectives are theoretically framed within a relativist constructionist paradigm. This position ascribes meaning to the participants' subjective socially constructed reality. Furthermore, this theoretical framework recognises the researcher is entwined within the research process (Braun & Clarke, 2013; Cresswell & Cresswell, 2018). Therefore, reflexivity is essential to the research design to identify the researcher's assumptions, bias and influence on the research outcomes (Darwin Holmes, 2020).

A reflexive thematic-analysis (RTA) approach was adopted to analyse the qualitative data. RTA is a researcher-driven interpretative approach that facilitates data analysis and identifies patterns within the data. Codes and themes are driven by the researcher's engagement and reflective interpretation of the data set. Equine-assisted learning is an emerging research field. Therefore, the analysis was a data-driven inductive process with no preconceived theoretical framework (Braun & Clarke, 2013; Byrne, 2021). Instead, post-data analysis and after-theme identification theories were considered deductively to frame findings and give the discussion context.

Recruitment and Participants

Approval for this research was granted by the University of Southern Queensland (UniSQ) Human Research Ethics Committee (USQ HREC: 22REA082) in compliance with the National Statement on Ethical Conduct in Human Research. This research aimed to explore the beliefs and perceptions of community-based professionals. This study identifies participants as referral agents (RAs) who engage their clients to Reason to Thrive (RTT). RTT is a Queensland-based not-for-profit organisation that provides equine-assisted learning (EAL) skills development programs for at-risk populations, including children and youth at risk of disengagement from formal education and women impacted by domestic violence (Reason to Thrive, n.d.). The RA's clients attend between four to eight 90-minute sessions at the RTT equine facility, where they are challenged to engage in ground-based tasks with horses. The rationale for focusing on RTT RAs as participants for this study is that the UniSQ is establishing a partnership with RTT for research and future postgraduate student practicum placements. Therefore this is a preliminary exploratory study with the RTT RAs before moving to quantitative research. Hence the inclusion criteria for study participation were RAs who refer clients to the RTT EAL skills development program. Consequently, the sample focus is narrow. However, purposive samples produce rich and informative data (Braun & Clarke, 2013).

Due to ethical approval restrictions, the Honours student researcher (HSR) was not permitted to recruit the RTT RAs directly. Therefore the recruitment of study participants relied on the RTT program facilitator to invite their RAs to express their interest in participating in the study. To assist in the recruitment, the HSR prepared an email invitation (Appendix A). The email explained the study, participation requirements and contact details. The RTT program facilitator emailed eleven potential participants during June 2022.

Interested stakeholders were asked to respond directly to the HSR's university email. No incentives were offered for voluntary participation.

On receipt of an expression of interest, an introductory phone call was made by the HSR to the respondent. The study was explained, and the respondent was given the opportunity for questions. If they were still interested and wished to participate, they were emailed a project information sheet (PIS) (Appendix B) and a participant consent form (Appendix C). The PIS provided an overview of the study, expectations for participation, benefits and risks, privacy and confidentiality and the research team's contact information. The HSR arranged an online zoom meeting upon receipt of the signed consent. A confirmation email with the zoom meeting link was sent directly to the participant.

Seven responses were received. One respondent was not a RA for RTT, therefore, was excluded. Six interviews were conducted during the last week of June and the first week of July 2022. A sample of six is deemed adequate for a small project with an experiential focus (Braun & Clarke, 2013). Personal demographics were not collected as these variables did not apply to the inclusion criteria. However, all participants were > 18 years, and the gender distribution was female $n = 5$ and male $n = 1$. Participants were all Queensland based and considered their geographical location as regional $n = 2$ and metropolitan $n = 4$. Participants were employed as school counsellors, $n = 2$, mental health nurse practitioners, $n = 1$ and social workers, $n = 3$. Furthermore, they represented educational institutions, government-funded community agencies and not-for-profit organisations.

Data Collection

Data was collected via an individual semi-structured interview method. All the interviews were conducted online through the UniSQ zoom account. Interviews were recorded with consent from the participants, with the zoom software and on the HSR mobile phone. The interview questions (Appendix D) were designed to build rapport and invoke

organic, spontaneous conversation, prompting further exploratory questions to understand the participant's experience and beliefs (Braun & Clarke, 2013). At the end of each interview, the participants were asked if there were anything further they wanted to add. The suggested interview time was 30 minutes, and the average interview time was 35 minutes providing a total data set of three hours and thirty minutes. Upon completion of the interviews, the digital recordings were uploaded onto Panopto, a video content management software. The digital interviewees were processed within the Panopto transcript conversion program producing a text-based transcript for each interview. These transcripts were loaded into Microsoft word and edited to ensure they accurately reflected the participants' words and utterances. To protect the participant's anonymity, they were assigned gender-neutral names.

Data Analysis

Reflexive thematic analysis (RTA) is a flexible interpretative approach to data analysis and is deemed ideal for novice researchers (Braun & Clarke, 2013). Furthermore, an inductive approach was implemented due to the exploratory nature of this study and the limited empirical base available for EAL. RTA is an immersive process for the researcher; by engaging with the data set, patterns of meaning are coded, and the codes provide evidence for the themes (Braun & Clarke, 2020). The non-linear recursive approach suggested by Braun & Clarke (2013) has six phases, offering the researcher the opportunity for an immersive, analytical experience.

Phase one: Data Familiarisation. The familiarisation process began by actively listening to each digital interview. Then re-listening while reading the printed transcripts noting inaccuracies. Next, the transcripts were rechecked against the original digital recordings, listening and simultaneously editing the transcript in word. However, only changes to mistranslations due to the software or the addition of ellipsis to denote a pause or non-semantic sounds were added to the transcripts. Braun & Clarke (2013) suggest a good

transcript has minimal editing to maintain a true reflection of the participant's expression. This was a stop-start process, re-listening and editing to ensure the transcript reflected the interview recording as accurately as possible.

Phase two: Initial code generation. Braun & Clarke (2013) describe a code as “a word or a brief phrase that captures the essence of why the researcher believes that piece of data may be useful”. Each transcript was coded inductively, free of underpinning theories with a complete approach, analysing each part of the data potentially relevant to the research questions (Braun & Clarke, 2013). Initially, notes and memos were made manually on the printed transcript; however, an excel spreadsheet was started due to the large number of codes. Each code was assigned a row, each participant a column. The relevant data extract for each code was added under the participant column. Some codes had evident semantic meaning, such as “the fight, flight and freeze mechanism”; however other codes were more latent, for instance, “seeing self in a different light”. Eventually, the coding process offered a complete picture of the data without reliance on individual transcripts. Braun & Clarke (2013) recommend that “codes should work when separated from the data”. However, due to the recursive nature of RTA, a back-and-forth process was inevitable between the transcript, the codes, and the spreadsheet. Furthermore, the data extracts could have multiple codes equating to multiple meanings. The process supported pattern identification building the initial themes.

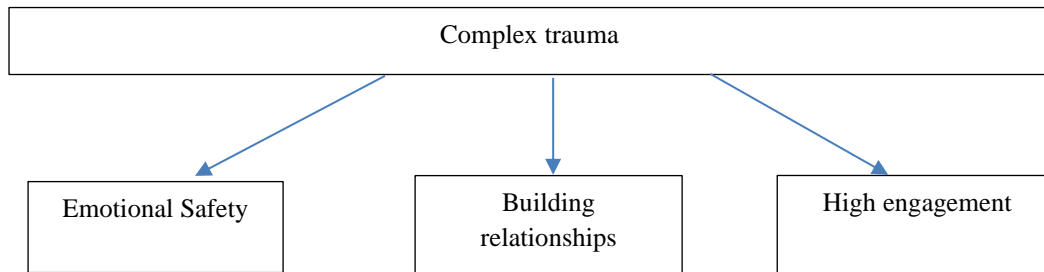
Phase three: Initial theme generation. The complete data set was now represented on the excel spreadsheet to support an interpretative analysis to identify meaning across the whole dataset. Next, the codes were analysed for patterns, and commonalities, such as topics and issues linking central organising concepts and the initial candidate themes were identified (Braun & Clarke, 2013; Byrne, 2022). Finally, the codes were grouped under each candidate theme.

Phase four: Reviewing the themes. The principal researcher and I discussed the preliminary candidate themes relevant to the data patterns and the research questions. We both realised that the research questions had morphed somewhat; therefore, the principal researcher sought supervision. Thus, during this phase, the objective was to gain code clarity and interpret how they informed the themes and sub-themes. There was some culling and changing of codes, and this interplay led to the revision of candidate themes.

Phase five: Defining and naming themes. Each theme and subtheme should stand individually, reflecting internal consistency. However, as a whole, the themes and subthemes should relate a consistent narrative across the data set to answer the research questions (Byrne, 2022). There was substantial discussion and rehashing of the themes before finalisation. Subsequently, the process continued to be recursive, combining inductive and deductive analysis. Extracts were identified aligning with the themes and sub-themes related to the research questions and updated on the spreadsheet. Figure 2 depicts the theme of complex trauma and sub-themes, emotional safety, building relationships and high engagement identified to answer research question one. Figure 3 illustrates the two themes of experiential learning and empowerment to answer research question two. The theme of complex trauma was the underpinning theme that connected the whole data set.

Figure 2

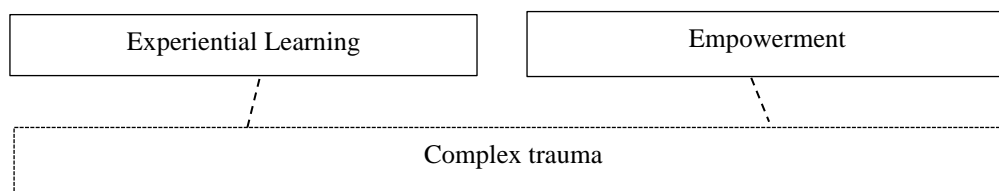
Thematic Map for the Research Question One: Why do Community-Based Referral Agents choose Equine-Assisted Learning for their Clients



Note: Developed thematic map illustrates one main theme, complex trauma and three sub-themes, emotional safety, building relationships and high engagement.

Figure 3

Thematic Map for the Research Question Two: How do the Referral Agents Believe Equine-Assisted Learning Facilitates Change for their Clients



Note: Developed thematic map illustrates two main themes, experiential learning and empowerment. The theme of complex trauma is the connecting factor across the whole data set.

Phase six: Producing the report. During this phase, a return to the literature was required. Due to the emerging nature of EAI research, there is a lack of theoretical underpinning. Therefore, the initial literature review was broad and focused on attaining general knowledge of the human-animal interaction research field. The theme of complex trauma connected the data set and consequently supported a deductive approach, narrowing the literature review to studies involving vulnerable populations. Thus, enabling the findings and discussion to be placed within a theoretical context.

Researchers' description and reflexivity

Reflexivity is essential to the qualitative research process. It acknowledges that the researcher's engagement can affect the process and influence the outcomes. Therefore, it is necessary from the outset for the researcher to articulate their positionality and acknowledge their assumptions and bias (Austin & Sutton, 2014; Darwin Holmes, 2020). Therefore, I am a white, British-born cisgender female. I don't believe I have a strong political or religious position that would influence this project. However, my social-economic background, I acknowledge, places me in a position of privilege. In addition, I was born in a rural area of the UK and have childhood experiences of spending time with horses. Finally, I love animals and intrinsically appreciate their comforting qualities.

I was elated when I found out I was going to work on a project that included animals. Therefore the first supervision session was full of rapid chatter about how fabulous animals are and how exciting the project was. Before the research started, I had already decided that this project would be great; the outcome would be positive, even though I knew nothing about animal-assisted or equine-assisted interventions. However, the voice inside my head insisted, "of course, animals are healing; everyone knows that, don't they? I mean, I do!"

As a novice researcher, I understand the importance of objectivity; after all, most of my psychological science degree has had a quantitative focus. However, being taught you must be objective verse trying to be, I found they are very different things. At the start of this study, I realised my subjectivity was tenacious and attempting to put my emotions about the topic to one side was more complicated than I thought. Then a wave of covid hit, which stopped any opportunities to visit the Reason to Thrive facility. Although disappointing, this was probably the best thing to happen from a research point of view. Having the space to sit back, take stock, and reflect on my assumptions and bias toward this project, swapping my animal lovers hat for my researcher hat was a critical and necessary step. From that point on,

I approached the project pragmatically, the horse became a variable, and the pursuit was to explore the participant's experience, not to prove that my subjective voice was right.

Nevertheless, I kept a firm eye on my thoughts, making notes in my journal for discussions in supervisory meetings.

Additionally, my supervisor and I decided I should not visit Reason to Thrive during the project to curb bias and remove assumptions. I also made a conscious effort not to over-engage with the participants about animals and kept my subjective thoughts to myself. During the interviews, I felt an advantage that I had not visited Reason to Thrive as my own experience could not interfere. Furthermore, during the data collection process, I realised how little I knew about horses, especially equine-assisted learning. I began to feel like a researcher rather than a person who liked the idea of horses in therapy. I realised that knowing nothing, having as few assumptions as possible, and being aware of bias was an advantage for this research.

The field of human-animal interaction is a complex area of research, and it has been hard to navigate and unravel even without the burden of tacit knowledge. However, suggesting that I could altogether leave my emotion for animals to one side would be naïve. I sense from the human-animal interaction literature that I am not the only researcher to struggle with a blinkered approach to our furry friends. However, that doesn't mean the research should be dismissed; far from it. The founder of animal-assisted interventions, Boris Levinson (1982), suggests that understanding why animals innately make humans feel safe needs more than science. For many, the human-animal bond is intuitive, an essential factor to consider. Therefore my subjective voice is still shouting; however, I hope the reader can see my researcher's voice was dominant.

Chapter 3: Findings and Discussion

This study aimed to explore the experience of an equine-assisted learning (EAL) program from the perspectives of community-based referral agents who engage their clients in the Reason to Thrive EAL skills development program. The six community-based professionals, including school counsellors, social workers and mental health nurse practitioners, were interviewed to answer the following research questions:

- 1) Why do community-based referral agents choose equine-assisted learning for their clients?
- 2) How do the referral agents believe equine-assisted learning facilitates change for their clients?

The data analysis identified three main themes and three sub-themes. In response to research question one, there was one main theme and three sub-themes. Theme (1) Complex trauma and the sub-themes of (1.1) emotional safety, (1.2) building relationships, and (1.3) high engagement. In response to research question two, there were two main themes (1) experimental learning and (2) empowerment. Tables 1a and 1b offer an overview of the themes, codes and an example of a data extract.

Table 1a

Reflexive Thematic Analysis Data Summary for the Research Question: Why do Community-based Referral Agents Choose Equine-Assisted learning for their Clients?

Theme One	Description and example data extract	
1) Complex trauma	Complex trauma is due to repetitive and enduring interpersonal maltreatment, often starting in childhood (Cook et al., 2005). "Every person that's come into their life has hurt them physically, sexually, emotionally, financially... animals won't, so that's safe". (Cameron)	
Sub-theme	Codes	Description and example quotes
1.1) Emotional safety	Safe environment for self-exploration Personal safety Secure attachment	Emotional safe space is foundational to trauma recovery (Cagle-Holtcamp et al., 2019) "There's some safety that you can't always create in other settings".(Jamie)
1.2) Building relationships	Rapport building, "social lubricant", the therapeutic alliance Unconditional positive regard, Team and collaboration Building relationships with people and horses for support	The referral agents observed improvement in communication and connections supporting healthy relationships. "they really do develop a beautiful connection with the other [clients]". (Dylan)
1.3) High engagement	Really special experience Motivating and engaging Feeling valued	The referral agents described the experience as novel and valuable. "They remain motivated for the how many weeks do we do it seven weeks.". (Jesse)

Note: Examples of codes provided evidence for the themes or sub-themes. The data extract in the table is a representative sample from the data set.

Table 1b

Reflexive Thematic Analysis Data Summary for the Research Question: How do the Community-Based Referral Agents Believe Equine-Assisted Learning Facilitates Change for their Clients?

Theme	Codes	Description and example data extract
1) Experiential Learning	The horse–metaphoric teacher	Experiential learning, concrete experience for a transformative change. (Stock & Kolb, 2016)
	Reflection	“can see that if they are relaxed, their behaviour again impacts how the horses respond to them.” (Jesse)
	Window of tolerance	
	Emotional regulation	
	Fight, flight and freeze	
	Self-awareness	
2) Empowerment	A different approach/light	Empowerment is “the promotion of the skills, knowledge, and confidence necessary to take greater control of one’s life” (APA, 2022)
	Mastery	“awareness of that inner locus of control around, you know, in regards to their environment”. (Jamie).
	Confidence	
	Self-esteem	
	Self-efficacy	

Note: Examples of codes provided evidence for the themes or sub-themes. The data extract in the table is a representative sample from the data set.

Research Question One

Why do community-based referral agents choose EAL for their clients?

Theme 1: Complex Trauma. Treating people with complex trauma (CT) presents a range of biopsychosocial challenges. The spectrum of issues can be rooted intrapsychically and can unconsciously impact social functioning (Courtois, 2004). Therefore interventions for treating CT should be trauma-informed approaches that holistically address the foundational biopsychological needs to integrate mind and body (Kezelman et al., 2016).

The referral agents (RAs) interviewed for this research all spoke about supporting their client's challenges in the context of CT. Jamie offered an insight into the biopsychosocial position of many of their clients when they present for support "we're working on very much on that bottom rung of the Maslow triangle". Cameron spoke about how their clients were often from the most vulnerable populations who have exhausted support networks and struggle in mainstream society "these are people who just don't get a fair go anywhere, and it's been really hard for them". Cameron also shared insight into their clients' trauma experiences and their impact on their functioning.

Every person that's come into their life has hurt them physically, sexually, emotionally, financially...this will have been from the time that they were born, pre-birth. These are the ones that go on to be involved in domestic violence relationships that have really awful interactions with people everywhere. Their life experience is that people will always hurt them. (Cameron)

The RAs identified a range of biopsychological symptomatology, including emotional and somatic dysregulation, trust and attachment issues, and negative affect. Furthermore, they referenced the social challenges of their clients, such as poor relationships, homelessness, domestic violence, and disengagement from education and support networks. Jamie shared how their clients live with long-term trauma before connecting with support services.

Our [clients], without a doubt, they've all been through trauma, normally they coming just out of it when they're entering our housing services, so we're literally taking them off the street or taking them from couch surfing and getting them into stable housing that they may not have had. For some of them have been in foster care, and 30 foster carers like never had real stability that they've got any control over. (Jamie)

These psychosocial outcomes of trauma noted by the RAs align with the empirical literature that suggests the effects of CT are multifaceted, resulting in disruption across biopsychosocial development (Cook et al., 2005; Levenson, 2017). Furthermore, five RAs reflected how trauma manifests in survival-based adaptations such as emotional dysregulation and heightened physiological arousal. For example, Alex explained, "when you have your fight or flight response triggered often in infancy, it becomes far more accessible". The empirical literature highlights CT can disrupt neurological development, resulting in the autonomic nervous system being on constant alert (Cook et al., 2005; O'Neill et al., 2010).

Continual physiological arousal can impact a person's day-to-day functioning due to poor somatic, emotional and behavioural control. The RAs talked about how their clients are often in a perpetual crisis that prevents trauma processing and recovery. Jamie spoke about the continuing effect of trauma on their clients.

They don't have very strong emotional regulation skills, and it boils from their fight-flight-freeze responses that's what's happening continuously; they haven't been able to grow through that and recover from trauma, yet they're still reacting they still often in that trauma experience. (Jamie)

Dylan also explained many of their clients have ongoing issues with trauma "in their day-to-day lives, there's a lot of chaos and complexities going on and umm they're dealing with a lot of ongoing trauma in their lives". Trauma survivors often live in unsafe situations,

leading to re-traumatisation. However, the person may not be aware of the re-victimisation patterns as CT survivors often lack a sense of safety (Courtois, 2004).

Therefore treating CT survivors, the intervention needs to be trauma-informed and incorporates safety, trust and collaboration (Levenson, 2017). Why community-based RAs choose an EAL for their clients will be considered within the context of the three sub-themes, 1.1) emotional safety, 1.2) building relationships and 1.3) high engagement.

Theme 1.1: Emotional safety. Attachment theory (AT) suggests that when attachments with caregivers are disrupted, a person's internal working model of attachment is compromised, affecting their ability to somatically and emotionally self-regulate, inhibiting emotional safety (Beetz, 2017). The National Centre for Safe Supportive Learning Environments (2022) defined emotional safety as "an experience in which one feels safe to express emotions, security, and confidence to take risks and feel challenged and excited to try something new". Kezelman et al. (2016) consider safety and stabilisation essential as the first steps toward healing from trauma. When people feel emotionally unsafe, they can feel vulnerable, apprehensive about disclosure, and lack the confidence to make changes (Cagle-Holtcamp et al., 2019). The RAs all referred to their clients as feeling unsafe, which manifested in poor self-regulation, mistrust and lack of confidence. Cameron expressed how trauma survivors are guarded and fearful of negative consequences.

If you think about the patient with the trauma and never being safe and never being able to express anything and having to be very, very careful with your words and your thoughts and everything knowing that that can all be weaponised. (Cameron)

The RAs acknowledged a lack of safety as detrimental to their client's psychological and social functioning. Jamie explained that the lack of emotional safety could impede their client's confidence and ability to understand their own needs "it is that personal safety of knowing how to make safe choices and how to consider their own needs, like if they're

feeling scared, how to trust their own instincts, that basic level of how to keep themselves safe". Consequently, the lack of emotional safety can be a barrier to seeking support in mainstream health care systems due to mistrust and fears of stigma, shame and re-traumatisation (de Boer et al., 2021; Kantor et al., 2017). Cameron reported their clients find a clinical environment intimidating, "clinical zone its really hard for people to feel safe... people with trauma, its not safe, that's not a place of safety". Another RA shared how they felt that the outdoor environment at Reason to Thrive's EAL program, although unfamiliar, was more comfortable for clients than traditional indoor support group settings.

We do try to make it trauma informed but they come into this office to come into this enclosed space you know umm they walk through the door there's all these people sitting on the couch like that can be quite intimidating ... but when they come to a equine-assisted learning, it's all outdoors there's so much space they're not in a closed space together there's space for them. (Dylan)

All the RAs felt that the horses and the outdoor environment lent themselves to establishing a safe base for self-exploration. Lietz & Napan (2020) suggests the horse and the natural setting of equine facilities can enrich a holding environment. Within attachment theory, the holding environment creates a secure base and haven of safety to build trust and supports introspection (Bachi, 2013). Alex described the Reason to Thrive EAL program as a unique experience to support emotional safety, which can be hard to attain in conventional therapeutic settings "there's some safety that you can't always create in other settings in a therapeutic setting especially...that allows them to want to access parts of themselves that they can't otherwise access". Another RA also articulated that a horse can provide feelings of emotional safety for clients with a background of CT, "it feels less intimidating for them [clients] that they're just going to go and walk around with a horse and then talk about it". Another RA explained that even though the clients can be emotional when working with the

horse, the horse seems to provide a sense of safety, allowing the clients to feel safe enough to push through emotional boundaries, and learn intrapersonal self-regulation skills.

If you're frightened [client], it's actually fine, but I'm frightened is something that trauma survivors often don't have access to understanding their own fear, and so you have to be able to go, ah I'm a bit scared of you [horse] like how are we going to, you know, can we still work together, what are we going to do to work together to get through this task. I'm feeling frightened [client], you know, but you're [horse] going to move forward, you're going to step over this pole, and I'm frightened. There's this mindfulness and objective observation that is that it's hard to create the space for in other settings. (Alex)

The RAs felt that not being over-reliant on verbal communication was an advantage that allowed a holistic focus to integrate body and mind. Jesse shared, “when they interact with the horse, they don't have to say anything, so this is very comfortable; it's all about the position of the body, um, it's all about grooming, it's about touch”. Cameron suggested that the non-verbal connection with the horses facilitated emotional processing safely.

The horses are safe.....you don't have to talk; they're not going to ask you to dredge up a whole lot of stuff but on that on that other level, on that emotional level and that non-verbal level, you can move all of that energy and start transforming it and relate in a different way. (Cameron)

These observations replicate Lietz & Napan's (2020) qualitative study that reported that trauma survivors find intervention with horses less intimidating and less likely to lead to re-traumatisation than conventional psychological therapies. EAI's focus is in the moment; it's not about the past and does not require the participants' to retell their trauma experiences. EAL supports a bottom-up approach to trauma treatment and addresses the somatic

symptomology of feeling unsafe. Consequently, the CT survivor can experience emotional safety and build resilience toward recovery. Overall the data patterns of safety in the current study suggest the RAs believe the EAL environment effectively nurtures emotional safety for their clients. Furthermore, they regard the horse as pivotal in enriching the holding environment supporting a secure base for self-exploration.

Theme 1.2: Building relationships. A therapeutic relationship is pivotal to supporting positive psychosocial change (Kern-Godal., 2016; Stubbe, 2018). Critical to a successful therapeutic relationship is the therapeutic alliance, a collaboration between two people working to alleviate a client's suffering and rectify harmful behaviours (Ardito & Rabellino, 2011). However, CT survivors can have high levels of mistrust, adding a barrier to the therapeutic alliance and their development of relational engagements (Cook et al., 2004; Maujean et al., 2013). Dylan explained their clients found “relationships can be really tough to develop them but also to maintain”. In AT, if a child experiences a poor relationship with their primary caregiver, it can result in an insecure attachment (Bachi, 2013), affecting their ability to form and maintain relationships. Cameron discussed the impact of poor attachments made life hard for their clients "if you start life with an unstable attachment or an insecure attachment, then it makes it impossible pretty much for people to navigate life". Within the framework of AT, the horse offers the participant an opportunity to experience a relationship with a living thing that provides unconditional positive regard and a haven of safety to build trust (Bachi, 2013). It is suggested that the human-horse bond can address deficits in the participant's representation of relationships helping to correct their internal working attachment model and improving interpersonal skills (Bachi, 2013).

The belief that the horse can support relationship building and therapeutic alliance was evident in the data. Dylan commented, "it's a space for not having judgement, the horses don't judge them; they need to be honest and transparent with the horses, which is something that is

quite unfamiliar". A study using horse therapy to treat adults with substance use disorders found that participants developed a relationship with the horses akin to a friendship which was an advantage in the therapeutic process (Kern-Godal et al., 2016). Cameron suggested the horses acted as a social lubricant supporting the therapeutic alliance "you know, what happens is that's the bit of the icebreaker, so they come back here".

Corson et al. (1977) coined the phrase 'social lubricant' when they observed dogs' convivial effects on hospitalised patients and staff interactions. Jamie shared how the horse is instrumental in creating an atmosphere of unconditional positive regard, "the [clients] love how the horse is willing all the time to build that trust, they [clients] turn up, the horse doesn't know them, but they're still willing to try and trust that person". Therefore the RAs perceive the horses can help break down the barriers to building relationships, thus supporting the therapeutic alliance and the therapeutic process. Jamie further explained that the experience improved communication between themselves and their clients.

It just opens up more conversations for us [RAs] and opens up the comfort of having those conversations. It's really wonderful just the result even of prompting a new conversation that we [RAs] can then continue to build on, you know; sometimes it just does that opening to that conversation about self-reflection in a safe way. (Jamie)

Identified in the data was the EAL program was instrumental in improving connections among their clients' peer groups and was considered a valuable outcome. Most of the RA's directly referred to the program facilitating peer relationships. Kezelman et al. (2016) state that peer support from other trauma survivors is important to trauma recovery, as they can offer support, respect and understanding from a lived experience perspective. Jamie spoke about how the experience encouraged a supportive atmosphere among participants, facilitating communication without overtly confronting them.

It's the first time they've willing to have those conversations in front of others, and because it's a small, really supportive group and it's not related directly pointedly at them, it's sometimes just talk about the horse and how did the horse feel and why do you think the horse reacted? And so you can slowly start gettings into the conversation. (Jamie)

Relationships were reported to strengthen due to the team-oriented and task-driven nature of the EAL program, as a collaborative effort is needed to achieve the tasks at hand. Jesse commented on their client's improved ability to work together by the end of the program “I would never have believed at the start that these [clients] would be able to work in a team of three linked arms, one blindfolded, one giving instructions one not being able to hear it was just quite extraordinary”. Another RA reported observing positive outcomes among the peer group from attending the program “they really do develop a beautiful connection with the other [clients] when they're working as a team like guiding the horses and doing the different activities with them”. Schroeder et al. (2018) reported CT survivors who attended equine-facilitated psychotherapy found that connection with their peers throughout the program was a key contributor to the participant's feelings of acceptance and recovery. Although the human connection in the EAL experience is important, the horse appears to be a conduit to communication breaking down the barriers to building relationships by nurturing trust and confidence.

It is evident from the data that all the RAs believe that the EAL program has a positive effect on the client's social interactions and the therapeutic alliance. The EAL program allows participants to safely build relationships with the horses, the RAs and their peers. In turn, this exposes them to the experience of positive attachments and may support the reparation of deficits in their internal working attachment model and their perceptions of relationships (Bachi, 2013; Cook et al., 2004).

Theme 1.3: High engagement. As discussed within theme 1.1, clients with complex trauma (CT) can be reluctant to conventional trauma therapies. Therefore non-traditional and novel treatments are needed to encourage engagement in the CT recovery process (Naste et al., 2018). The two-component engagement theory suggests when an intervention supports high engagement, participants' behaviour and effect can be positively impacted by improving effort, participation, self-regulation, and learning (de Vreede et al., 2019). A pattern among the current research data suggests the EAL program creates high engagement among the program participants. The horse's appeal and the experiential nature of the experience are highly motivating and rewarding.

It's the animal factor for one thing it's I think the extra time they get to spend, you know, it's an activity so that alone is often more interesting but then when we discuss openly and transparently [...] we're going to discuss your learnings from that, that they're very ready for that they're like, great. I want to learn some skills about myself, and it's just the fact that it's a horse seems to be more of a draw card. (Jamie)

The emotional connection the person feels toward the horse can contribute to the motivation to be involved in the program (Karol, 2007; Kern-Godal et al., 2016). All of the RAs suggested that their clients found being with the horses a special experience. Alex shared that their clients are quite surprised by the experience “there's always someone going wow, like, yes, that was amazing, that I've never done anything like that before”. Charlie's comments also suggest the experience is valued by their clients, facilitating feelings of self-worth.

I think because the opportunities may be a few and far between as well, that there's almost this like sense of this is something really special that I've got to do, and I've got

to invest in myself, and somebody else sees the value in investing in me to do it as well.

(Charlie)

Two RAs described how their clients are motivated to attend the EAL program. Dylan shared, “once they do, do it the first time, every week, they're like, “Oh, when are we doing horses again?”. Jesse also described high enthusiasm and motivation among their clients to attend the EAL program, adding that they do not always see the same levels of engagement in other types of self-development programs.

A real novelty here we have a thing that's just going to take a group [clients] that would be maybe a little bit disengaged and a little bit traumatised in their past and because it's a novelty is to bring them in together and they remain motivated for the seven weeks. You know, the six of them would be lined up waiting for us [...] and that was a big thing because a lot of the times with any sort of personal development programme, it's difficult to get the [clients] engaged in it because they, you know, it just doesn't have that novelty, that sense of adventure. (Jesse)

Lewis et al. (2020), in their systematic review of dropout rates in psychological therapies for the treatment of people with diagnosed PTSD, found that trauma-focused clinical interventions were significantly associated with high drop-out rates. Therefore complimentary interventions such as EAls, in which the client's trauma experience is not the primary focus, encourage lower attrition rates. However, they may not be as effective at reducing trauma-related symptomology verse conventional trauma-informed psychotherapy (Lewis et al., 2020). Yet, the EAL program seems to be an important first step in the trauma recovery process for the RA's clients. Charlie suggested the EAL program “ it was an introduction for them to be able to then seek further therapeutic supports, which was amazing umm because they hadn't found a fit before that”.

The themes identified as complex trauma, emotional safety, building relationships and high engagement help to answer research question one, why do the community-based RAs choose EAL for their clients? Furthermore, when the research question is considered within the context of attachment theory, the horses offer the clients a haven of safety by enriching the holding environment. Thus, creating an opportunity to repair deficits in their internal working attachment model, subsequently improving intrapersonal and interpersonal skills and positively impacting social functioning.

Therefore, the RAs believe the EAL program provides an environment to nurture emotional safety. In addition, the horse facilitates a secure base for self-exploration, innately offering unconditional positive regard for supporting the building of relationships. Finally, the program is highly engaging, offering clients a sense of self-worth due to their participation in a unique, memorable and joyful experience that can support trauma recovery “it's joyful, it's a joyful thing instead of having to be on guard all the time and make yourself small, you can kind of expand”. (Cameron)

Research Question Two

How do the community-based referral agents believe equine-assisted learning supports change for their clients? The questions will be explored within two themes (1) experiential learning and (2) empowerment.

Theme 1: Experiential learning. Equine-assisted learning (EAL) is an experiential learning program designed to teach life skills through accomplishing ground-based tasks with horses (Halberg, 2018). The horse facilitates psychosocial learning as it innately mirrors clients' behaviours and emotions, promoting reflective observation that can support transformational changes in the participant's life (Bachi, 2013; Stock & Kolb, 2016; Wilkie et al., 2016). Stock & Kolb (2016) proposed that EAL programs parallel experiential learning theory. Experiential learning theory is “the process whereby learning is created through the transformation of experience” (Stock & Kolb, 2016). Experiential learning theory is a 4-stage cycle model that proposes learning starts with stage (1) a concrete experience that leads to stage (2) reflective observation. Then, stage (3) abstract conceptualisation considers the acquired insight metaphorically and relates it to a meaningful context. Finally, stage (4) active experimentation occurs when the learning is implemented within a real-world setting (Stock & Kolb, 2016). Naste et al. (2018) reported that the experiential focus of being with a horse positively supports participants' cognition and learning. Jesse shared an example of how clients gain a concrete learning experience while working with the horses.

The whole grooming process at the start was really good...the [clients] had to act in a certain way with the horse to do things. The [clients] had to actually had to listen, and if they didn't listen, they didn't behave in a certain way towards the horse; the horse would just tell them to them to bugger off, the horse would not respond in the way that the horse should have responded so sometimes they couldn't get the horses to move because they weren't standing in the right place. (Jesse)

Horses are prey animals and, therefore, are highly sentient creatures that are attuned and reactive to their environment (Skeen, 2013). They can read body language, detect a person's intent and authenticity, and react accordingly. Due to the horse's innate tendency to mirror effect (Bachi, 2013), the participant receives immediate feedback. To work effectively with the horse to achieve the task, the participants may need to learn to adjust their emotional and physical behaviour. These experiential learning opportunities offer a chance for introspection and can increase self-awareness through reflective observation. Alex explained how the innate nature of horses supported introspection.

Horses are extremely sensitive because of their need for survival and because they're in the moment and their responses are honest and also disappear, you know like they will refuse to do something for a reason, and then you can find a way to connect with them and then they will do the task. You know like a sort of there's a straightforwardness to it that I feel like connects to or is therapeutic for trauma survivors in a really special way... There's something about horses ... the horse forces them to or supports them too, but something happens in that that connection where they can access parts of themselves that don't always get access. (Alex)

The RAs all observed that the interaction with the horses encouraged a behaviour change or helped to stabilise their clients. For example, Jesse said, "they [clients] can see that if they are relaxed, their behaviour again impacts how the horses respond to them". Dylan shared their clients could find a sense of calm with the horses.

That calming connection they give them, yeah, it's just, you know, that hypervigilance that a lot of them operate in and a lot of the time you just watch it completely drop when they're with them, it's just this calming aura. I kind of it's almost like, I can't explain it, but it's just this energy that the horses give them, and they just adore it.

Going to the horses, we have found that the heightened state they're [clients] often really regulated, and they're come down to a nice, we call it in their window of tolerance. (Dylan)

The window of tolerance within the Trauma Resiliency Model is, referred to as the resilience zone when the person attains an optimal state of self-regulation. In this stable condition, somatic and psychological well-being can be experienced, creating the perfect conditions for learning and trauma processing (Grabbe & Miller-Kara, 2017). A neurobiological theory explaining the calming effects observed in animal interactions is the activation of the neurochemical oxytocin. Oxytocin is a hormone and neurotransmitter released into the brain and circulatory system via sensory stimulation, for example, when stroking and touching the horse. One of the suggested effects of oxytocin is stress reduction. (Beetz, 2017; Beetz et al., 2012; Grabbe & Miller-Kara, 2017; Holder et al., 2020; Schreiner, 2016; Wells, 2019). Therefore being with horses can help participants to feel calm and induce the resilience zone. The RAs talked about how their clients often operated in crisis mode. Dylan referenced one client's mode of operandum as a continual crisis, except when she was with the horses.

She does operate in crisis a lot of the time, you know, everything was a crisis. When she did come to equine assisted learning, that sort of crisis was not there anymore; she was regulated, she was engaging, and yeah, it was quite nice to see how it could kind of take her out of that crisis, headspace. (Dylan).

Most RAs referenced the fight, flight and freeze survival mechanism. They believed that the experiential learning structure of EAL could support clients' psychoeducation. For example, the horse's innate survival responses could be abstractly conceptualised to represent the participant's experiences of fight, flight and freeze.

The times that I've engaged with EAL, a lot of it has been around learning about those initial things through an external body, so the horse has the, you know, the horse is a prey animal, and so as a response, when they perceive threat, they take off. When they perceive connection and unity, they [horse] actually feels well supported. Umm utilising those and then seeing them [horses] externally helps some people to be able to connect with their own experience of fight-flight-freeze, and then that becomes the basis of understanding their environmental connection social connections. (Charlie)

Furthermore, the client's experiences from the EAL program are seen by the RAs as an opportunity to gently approach and support their clients address real-life issues. Metaphors and abstract conceptualisation of the horse experience (Klontz et al., 2007; Stock & Kolb, 2016). Can help trauma victims to understand their own real-life experiences without the overreliance on conventional talking therapy, which has been reported as a barrier for trauma victims (Burgon, 2014; Kantor et al., 2017; Lietz & Napan, 2020). Charlie illustrated using the horse metaphorically and help-seeking behaviours.

It really became a conduit between strengthening [clients] in their health-seeking behaviours because they were able to then initiate a really soft entry into, hey, maybe I do have some of these challenges that represent that horse's experience, and they do it as a group to protect each other maybe I need to start linking in with those support services, too and allowing it to happen because it's OK. So it becomes that conduit between I'm here, and I need to actually be here to have a healthy, happy life and the way that I can do that now, as I can see this is why people experience what they do, and I can now access the support. (Charlie)

When the EAL program is contextualised within experiential learning theory. The concrete experience of being with horses promotes reflective observation and abstract

conceptualisation. In turn, helping the RA's clients to understand their reactions and behaviours and how these relate to their real-life situations. Jamie offered an example of active experimentation and how the skills learnt from the EAL program helped to resolve their client's real-life issues.

Two [clients] were living together, and the living situation in the share house was almost, you know, coming to a breaking point. It was very close to breaking point, and then to be able to come back and use the reflective trust, building respect allowing space, honouring somebody else's needs and your own for safety was so beneficial, and it really saved that housing relationship and we went into a housing meeting with them using the skills and reflections from that equine, so it was really valuable. (Jamie).

Theme 2: Empowerment. Empowerment is “the promotion of the skills, knowledge, and confidence necessary to take greater control of one’s life (APA, 2022). In broader terms, empowerment encompasses self-esteem and self-efficacy and supports positive self-evaluation and identity awareness (Perez et al., 2012). EAI studies have found participants gain a sense of achievement and empowerment through mastery of the activities completed with the horse, increasing self-confidence, self-esteem, self-efficacy and a sense of agency (Burgon, 2014; Craig et al., 2020; Kendall & Maujean, 2015; Kern-Godal et al., 2016). The RAs indicated they believe the EAL program supports client empowerment. Jesse directly referred to their clients feeling empowered due to the EAL experience, “[clients] wanted to work with the horses they felt very, very empowered, empowered by what they were doing”

Trauma can disrupt a sense of self, and survivors can view themselves through the lens of victimisation and helplessness (Lanius et al., 2020). Therefore, empowering complex trauma survivors to reframe their sense of self is critical in positively moving their lives forward (Craig et al., 2020). Alex suggested the EAL program can enable their clients to

reframe their sense of self, “starts to build a framework of things that they would like in their lives that are different to what they lived before, that they're more capable and more complex and dynamic”. They also reported they observed increases in their clients' sense of agency, empowering them to consider themselves in a different light.

I notice for the [clients], the real like I didn't know I could do that kind of moments. Like, wow, I led the other [peer], and the horse through this obstacle that we [clients] thought there was no way they [clients] could do or we problem solved it. Actually, there was this kind of cheat you could do it which [clients] hadn't thought about at first you know these [clients] don't get many opportunities in their life to see themselves in those kind of ways to see themselves as leaders or great communicators or collaborators, problem solvers. (Alex)

These positive impacts of the experience with the horses observed by the RA's regarding their client's sense of empowerment align with the EAI empirical literature. Klontz et al. (2007) found interventions using horses supported independence and improved self-supporting behaviours, reducing helplessness. Frederick et al. (2015) reported that an EAL program renewed the participants' sense of hope. Another RA shared how their clients can feel a lack of autonomy and self-efficacy; however, echoing Alex, they reported that the EAL experience could enable positive shifts in self-esteem and perceptions of control.

From an angle of perhaps lack of control, lack of self-worth, lack of feeling like they have any ability to change how somebody treats them. Now they're [clients] coming at it from a way of, like. Oh yeah, I'm in that experience now. Like, yeah, I'm more! I suppose, umm, a more awareness of that inner locus of control around, you know, in regards to their environment. (Jamie)

Several RAs discussed how their clients could initially be scared of the horses. However, the program facilitator exposed the horses at a pace the clients were comfortable with, supporting the feelings of control and building participants' confidence. Jesse shared how by the end of the program, the clients were keen to work with the bigger horse, "the [clients] had gained so much self-confidence in their ability to develop that trust that they wanted to work with the big horses". Maujean et al. (2013) reported that young people who attended a horse play program overcame their initial fear of horses, which improved their self-esteem, self-efficacy and confidence to manage anxiety in other areas of their lives. Kern-Godal et al. (2016) reported overcoming the fear of the horses was part of the challenge and excitement of horse-assisted therapy and supported participants' sense of achievement and empowerment.

The changes in the clients observed by the RAs were reported as quite dramatic and occurring within a short time frame. Jamie was delighted that one of their clients gained so much confidence from the RTT EAL skills development program that they felt empowered to look for work.

I've literally had a [client] say to me literally it was mind-blowing. A week after they went to this [EAL] we were walking around and they said, "You know, since going to the equine therapy, I'm really ready to look for work. That [client] just gotten the job, went to a job interview yesterday, got the job and starts on Monday, working five days a week. (Jamie)

Experiential learning and empowerment themes answer research question two and explains why the RAs believe EAL facilitates change for their clients. They perceive the RTT EAL program supports psychosocial skill development through the experience of being with the horse, that in turn supports self-efficacy transforming their sense of self, subsequently

empowering the client's sense of agency to make positive change. Cameron was excited to share how one of their clients, who had been highly disengaged," half an hour with the horses, and she's going these are things that I need to be talking about". Cameron felt the EAL program was instrumental in empowering their client to make positive life changes.

I've noticed she walks a little taller. She's actually engaged in really good psychotherapy work just recently. Other things have changed [client] living situation has changed other things have changed, but I still feel like this [EAL] was the first step of that... don't think she would have done that before. (Cameron)

Chapter 4: Conclusions

The current study explored the perceptions of equine-assisted learning (EAL) among community-based referral agents extending the limited empirical base of equine-assisted interventions (EAI) and EAL. Themes of complex trauma and the sub-themes of emotional safety, building relationships, and high engagement offer insight into why community-based referral agents choose EAL for their clients. In addition, experiential learning and empowerment themes explain how they believe EAL facilitates change for their clients with complex trauma. The findings in this research highlight that the referral agents perceive EAL as a beneficial intervention that improves their clients' psychosocial functioning. They report that the horses support their client's emotional safety for self-exploration and empower them to consider new outlooks to make positive life changes.

Complex trauma is a multifaceted condition with a range of biopsychosocial symptomology. Complex trauma populations can be challenging to treat and support due to high levels of mistrust and low motivation (Maujean et al., 2013). In addition, they can be reluctant to engage in conventional psychological therapy resulting in high treatment dropout rates and poor therapeutic outcomes (Lewis et al., 2020; Najavits, 2015). Therefore, there is a need for alternative or adjunct interventions to treat complex trauma survivors (Maujean et al., 2013; Naste et al., 2018). EAI studies with complex trauma and vulnerable populations have shown encouraging results to decrease negative affect and increase biopsychosocial functioning. However, a reported lack of understanding of psychosocial interventions using horses within community-based professional cohorts, including psychologists, may impede vulnerable populations from accessing the potential benefits of EAI.

The current study aligns with previous EAI qualitative research studies that report improvements in participants' interpersonal and intrapersonal skills (Maujean et al., 2013; Lietz & Napan, 2020). Therefore the research findings strengthen the empirical evidence that

EAls are promising alternative or adjunct interventions. The advantage for complex trauma survivors is the bottom-up approach of EAI and its focus on emotional safety and self-regulation, which are paramount to trauma recovery (Kezelman et al., 2016). The horse is representative of a therapist and enriches the holding environment (Bachi, 2013). The animal offers unconditional positive regard, with no need for the participant to re-tell their trauma story, facilitating emotional safety. The participants find being with the horses calming. In turn, this helps self-regulation and supports participants to function in the resilience zone, the optimal arousal state for trauma processing (Grabbe & Miller-Kara, 2017). The experiential learning format and the collaborative team-oriented activities facilitate a sense of achievement and confidence. The shared experience creates a base for conversations, strengthening relationships and supporting the therapeutic alliance. These interactions between the horses, the peers and the RAs may help to restore the participant's internal working model of their attachment style, rectifying deficiencies that can improve interpersonal skills and social functioning (Bachi, 2013).

Consequently, this current study reports that EAL programs like Reason to Thrive can offer participants a highly engaging experience that provides safety and stabilisation, critical in the foundational phase of trauma recovery (Kezelman et al., 2016). In addition, participation is empowering, building self-esteem, self-efficacy and a sense of agency toward transformation in their lives. Finally, community-based professionals, including psychologists, may gain insight from this research, supporting them in making informed decisions regarding the EAL as a viable first step to recovery for their vulnerable clients who are resistant to conventional psychological trauma interventions.

Limitations and Future Research

There are several limitations identified for this study. The first is the narrow purposive sample size of six participants. The study's participation criteria included only community-based referral agents who refer to the Reason to Thrive (RTT) skills development program, reducing generalisation and external validity. The rationale for the decision to include only RTT referral agents is that the University of Southern Queensland (UniSQ) is establishing a partnership with RTT for research and future postgraduate student practicum placements. Therefore this is a preliminary exploratory study with RTT. The collaboration between UniSQ and RTT has the potential for various research opportunities.

In this study, the number of sessions the RA's clients attended was not explicitly investigated; however, it should be noted as a potential limitation as the program session number varied between the RAs' clients. Therefore, future quantitative studies will need to control the variable number of sessions. A natural progression to extend this research would include the referral agents' clients, the direct participants of a Reason to Thrive equine-assisted learning program using a mixed method design incorporating quantitative and qualitative approaches.

The breadth of research possibilities is vast but complex due to the number of extraneous variables involved in the human-animal relationship. Therefore, a starting point could be replicating Naste et al.'s (2018) equine-facilitated therapy for complex trauma study. Using a convergent mixed method design, combining qualitative and quantitative data framed within the empirically based trauma-informed attachment, regulation and competence model measuring psychosocial variables such as self-regulation, somatic and behavioural control, cognition and learning, perceptions of safety, relationship building, and decreases in depression and anxiety.

The rationale for this study was due to the limited literature available on the perceptions of equine-assisted interventions among community-based professionals. Therefore it seems intuitive to extend this research to interview psychologists capturing their perceptions of horse-related interventions. Broadening this research will continue to add to the limited empirical base for EAI.

The final limitation to address for this research is researcher bias. The reflexive thematic analysis framework acknowledges the researcher's subjectivity. Furthermore, it is considered a research tool, not a flaw in the research process (Braun & Clarke, 2020). However, when the research subject evokes emotion, there will always be a higher potential for blind spots. Therefore, due to the interpretative nature of qualitative data analysis, research design and a framework of scientific rigour are essential to support internal validity and manage bias.

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Appendix A

Dear All,

Researchers at USQ are looking to briefly interview stakeholders before the end of May about their thoughts and experiences with referring to Reason to Thrive.

Please see the below information from USQ and the attached detailed information sheet. If you are interested in participating, you can contact Nicola via email (CC'd into this email) as well as find it listed below.

Horses Helping People – An Equine-Assisted Learning Project

The use of horses within personal development programs is gaining mainstream attention. As a result, a growing field of scientific research is interested in equine-assisted activities and their potential for personal development. This study hopes to expand the current empirical knowledge by exploring the perspective of professionals who have chosen equine-assisted learning to support the personal growth of their clients.

Your Participation

We would value your insight into your experience as a key stakeholder of the 'Reason to Thrive' equine-assisted learning program. This study aims to collect data from participants via one-on-one interviews, using open-ended questions, about your referral experiences to the 'Reason to Thrive' equine-assisted learning program. The interviews will be no longer than 60 minutes and will be conducted via zoom at a time of your convenience. In return, we aim for the study process to be a beneficial exercise for you, supporting the opportunity to reflect on your referral practices. Furthermore, you will be helping to expand the current empirical knowledge regarding equine-assisted learning, which may assist community services such as a 'Reason to Thrive'.

Further information

You are invited to visit the project information statement attached to this email for further study and participation details.

If you can help?

If you would like to participate in this study, we invite you to express your interest via contacting Honour student researcher, Nicola, at w0106841@umail.usq.edu.au. We would appreciate hearing from you by the 23rd of May 2022. Upon receiving your reply, Nicola will contact you to arrange an interview at a suitable time. If you have any questions, please do not hesitate to contact Nicola or Sam (the senior researcher) on the details below.

Nicola den Braber – Honours student researcher, University of Southern Queensland.

Email: w0106841@umail.usq.edu.au

This research has been approved by the University of Southern Queensland Ethics committee, H22REA082

Appendix B

University of Southern Queensland



Equine-Assisted Learning Project

Interview Participant Information

This sheet documents the basic information that must be provided to you to assist in the process of achieving informed consent. Please refer to 2.2.6 of the National Statement on Ethical Conduct in Human Research, 2007 (updated 2018) for further detail.

Project Details

Title of Project: **Equine-Assisted Learning: Referral agent experiences**
 Human Research Ethics Approval Number: **H22REA082**

Research Team Contact Details

Honours Student Researcher

Nicola den Braber
 Email: w0106841@umail.usq.edu.au
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Principal Investigator

Dr Samantha Brown
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Description

The use of horses in personal development programs is gaining mainstream attention. As a result, there is a growing interest in equine-assisted learning (EAL) and therapy (EAT) as alternatives to conventional personal development and mental health intervention programs. However, there is a lack of empirical-based research exploring and examining these programs.

The research team requests your assistance as a stakeholder who refers to an equine-assisted learning program to share your experiences and perspectives on the benefits

and any limitations for such programs. This information will assist in identifying current referral practices for equine-assisted learning as well as add to the lack of literature on this emerging area of intervention and support.

The results of the project will be available as a summary document to participants but may also be communicated through journal and conference publications.

Participation

Your participation will involve a one-to-one interview that will take approximately 60 minutes of your time and will take place via zoom at time that suits you. The interview will be framed as a space to reflect on your referral experiences and will consist of several specific open questions which will explore referral pathways, program experiences and outcomes, and client suitability for EAL. Some of the questions include: What do you believe are the main benefits of an EAL program versus a conventional personal development program? Have you found that some clients respond better to EAL than others?

Are there specific client issues or factors that you think are unsuitable for participating in an EAL program, and what would these be?

The interview will be audio recorded. Interviews will be transcribed, de-identified and then analysed across participants for themes.

Your participation in this project is entirely voluntary. If you do not wish to take part, you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. You may also request that any data collected about you be withdrawn and confidentially destroyed. If you do wish to withdraw from this project or withdraw data collected about you, please contact the Research Team (contact details at the top of this form).

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland.

Expected Benefits

Research findings may inform future support of the community through a better understanding of the benefits and any limitations around participation in an equine-assisted learning program.

It is expected that this project may benefit you through increased reflection on your referral practices.

Risks

While the information provided in the interviews will remain confidential within the research team and pseudonyms (eg Stakeholder 1, Stakeholder 2) will assigned to de-identify transcripts, there may be a chance that an organization may be identifiable based on what a participant shares.

Privacy and Confidentiality

All comments and responses will be treated confidentially unless required by law.

The interview will be audio recorded for the purpose of transcription, whilst you will not be provided a copy of the interview transcript for review, you may withdraw and request that any data collected about you be withdrawn and confidentially destroyed at any stage.

For reasons of rigour, it is not possible to participate in the project without being recorded. Audio-recordings will be transcribed by the interviewer and each participant will be assigned a pseudonym.

In accordance with section 2.5.2 of the "Australian Code for the Responsible Conduct of Research", interview data will data will be made available for future research purposes, unless otherwise indicated. Future use of data will be only after the future research proposal has been given ethical approval. You may still participate in the current study if you choose to not make your data available for future research use.

A project summary of results will be made available to you on completion.

Any data collected as a part of this project will be stored securely as per University of Southern Queensland's [Research Data Management policy](#).

Consent to Participate

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to participate in this project. Please return your signed consent form to a member of the Research Team prior to participating in your interview.

Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

Referral Services

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project, you may contact the University of Southern Queensland Manager of Research Integrity and Ethics on +61 7 4631 1839 or email researchintegrity@usq.edu.au. The Manager of Research Integrity and Ethics is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

Appendix C

Consent Form

Equine-Assisted Learning: Referral agent experiences

Project Details

Title of Project: Equine-Assisted Learning: Referral agent experiences

Human Research
Ethics Approval
Number: **H22REA082**

Research Team Contact Details

Honours Student Researcher

Nicola den Braber
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Mobile: 0410 415 923

Principal Investigator

Dr Samantha Brown
Email: Samantha.Brown@usq.edu.au
Telephone: +61 7 3812 6238
Mobile: 0432 769 220

Statement of Consent

By signing below, you are indicating that you:

- Have read and understood the information document regarding this project. Yes / No
- Have had any questions answered to your satisfaction. Yes / No
- Understand that if you have any additional questions you can contact the research team. Yes / No
- Understand that the interview will be audio recorded. Yes / No
- Are over 18 years of age. Yes / No
- Understand that any data collected may be used in future research activities related to this field. Yes / No
- Agree to participate in the project. Yes / No

Participant Name

Participant
Signature

Date

Please return this sheet to a Research Team member prior to undertaking the interview.

Appendix D

Interview protocol – Equine Assisted Learning Project

Basic Information:

- Date of the interview:
- Start Time: Finish Time:
- Interviewer: Nicola den Braber
- Interviewee:
- Digital File Name:
- Transcription File Name:

Introduction:

- Introduce self
- Study purpose (scripted):

Aiming to understand why referral agents choose an animal-assisted intervention and the perceived benefits for their clients.

- Re-iterate informed consent
- Structure of the interview, number of questions, and approx. duration
- Request if avoidance of the use of client/student names
- Define any terminology of abbreviations, AAI animal-assisted intervention, EAL equine-assisted learning.
- Ask if interviewees if they have any questions
- Confirm they are ready to start

Opening Questions: Ice breakers

- 1) **Can you tell me about your organisation?** (Education / Charity / Specialist area)

- 2) **What is your role?**

- 3) **Do you have personal experience with horses?**
 - In what capacity?

WHAT

- 4) **How long have you been referring your clients to animal-assisted interventions, and which AAI have you used?**

- 5) **Which AAI's are you currently using?**

- 6) ***What is your understanding of how equine-assisted learning works (EAL)?**
 - What is your perception of the role of the horse?

WHO and WHY

7) ***Can you tell me about the students/clients you are referring to the equine-assisted learning program? And why EAL?**

- *(Age group, Ethnicity, Population)*

- *Can you expand on why you feel equine-assisted learning was an appropriate program for your students/clients?*

8) ***What benefits do you feel your clients gain from the EAL?**

9) ***Were there any challenges or concerns?**

10) ***Has there been a student/client experience that stands out for you, beneficial or adverse?**

General prompts:

- Could you tell me more about that?
- Could you expand on that point for me?
- That is interesting, could you give me more detail?
- Could you help me understand your response more?
- What does X mean?
- Can you clarify to me what you mean by that?

Closing Instructions:

- Thank the interviewee for their time
- Do they have any questions?
- Re-iterate confidentiality
- Request if I need something clarifying, could I contact them?