

**From the Horse's Mouth: A Grounded Theory Study of Client and Staff Views and
Experiences of the Role of Horse-Human Interactions in Equine-Assisted Therapy and
Learning for Disadvantaged Young People**

Puffin O'Hanlon

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Thesis declaration form

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signature:

Name: Puffin O'Hanlon

Date: 21/10/2020

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Overview

This thesis explores the role of interactions between people and horses in Equine-Assisted Therapy and Learning (EAT/L) interventions for disadvantaged young people (YP).

Part one is a conceptual review of the theories, methods, and techniques currently used in EAT/L research and practice for disadvantaged YP.

Part two is an empirical research paper that explores the role of interactions between people and horses in interventions at a charity offering EAT/L for disadvantaged YP. It aimed to develop a theory of the role of horse-human interactions in EAT/L from the views and experiences of people facilitating and participating in it. This is a qualitative study using semi-structured interviews with 13 YP and 6 staff, and observations of EAT/L sessions that they participated in.

Part three is a critical appraisal of the research process. It focuses on the ways in which the researcher's world view, experiences, preconceptions and intentions influenced the research process, and how the process of the research influenced the researcher's personal development and clinical and research practice.

Impact Statement

To the best of my knowledge, this is the first study to develop a theoretical framework of the role of horse-human interactions in Equine-Assisted Therapy and Learning (EAT/L) that is grounded in the experiences and views of participants and facilitators.

The research seems timely, as the field of EAT/L is expanding at an exponential rate, with research lagging behind. Practitioners in the US, Canada, Australia, the Middle East and Europe are developing models of practice and training programmes with little evidence on which to base their claims.

A considerable number of preliminary research studies have been conducted. Reviews of the literature have suggested that Equine Assisted Therapy may be engaging and beneficial for young people (YP) where other interventions are not. However they have also pointed to methodological weaknesses, including heterogeneous measures, and inadequate theoretical foundations. Nonetheless, the research is gathering momentum and there are calls for larger randomised controlled trials.

EAT/L research – qualitative and quantitative – has largely focused on outcomes, with relatively little attention to potential mechanisms of change. Studies have largely used methodologies developed for evaluating traditional talking therapies for adults, including self-report measures of psychosocial change. EAT/L for YP differs from talking therapies on several dimensions. Applying the same research methods without considering areas of similarity and divergence in practice, process, and outcomes risks obscuring potentially unique benefits, as well as potential harms.

Before investing in larger trials, it is therefore vitally important that EAT/L researchers consider areas of coherence and divergence in current practice and research and make a concerted effort to adequately outline theories of mechanisms of change. This

will enable greater transparency and standardisation and development of practice, as well as providing direction for future research, including appropriate methodology such as identifying appropriate comparators and outcome measures. The conceptual review, empirical paper and critical reflections presented in the current thesis represent a step in this direction. The researcher will seek to disseminate the findings more widely via publications in research journals, presentations at conferences, via EAT/L professional networks, and directly via email to other interested parties.

On a smaller scale, a better understanding of the role of horse-human interactions in psychosocial processes in EAT/L interventions delivered at this particular charity will also facilitate service development and evaluation. The researcher has disseminated findings to staff through a presentation and discussion group as part of staff training, and dissemination to clients is planned via a service user consultation group, an infographic to be sent to all stakeholders, and a blog on the service website.

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Part 1: Conceptual Review

The Theory and Practice of Equine Assisted Therapy and Learning for Disadvantaged

Young People: A Conceptual Review

Introduction

Young People, Adolescence and Mental Health

The concept and experience of adolescence and its parameters vary across cultures, socio-political contexts, and generations (Curtis, 2015). Adolescence has been characterised in Western psychology as between the ages 10-24 (Orben, Tomova & Blakemore, 2020) and “the period between the onset of puberty and the achievement of relative self-sufficiency” (Blakemore & Mills, 2014, p. 288). Despite differences in conceptualisation, adolescence is often considered as a sensitive period of particularly rapid neurological, physical, psychological and social growth (Dahl et al., 2018). Key developmental processes include hormonal and physical maturational changes, sexuality, increased risk-taking and exploration, coping with academic pressure and achievement, establishing and maintaining peer relationships, developing autonomy, control and identity while maintaining supportive relationships with adults, and finding one’s place in a changing social world (Orben, Tomova & Blakemore, 2020).

A vast array of adverse psychosocial, physical and socioeconomic outcomes are understood to originate in adolescence (Petrucelli, Davis & Berman, 2019). This phenomenon has been associated with multiple biopsychosocial factors that interrupt the key tasks of this developmental period.

Young People and Disadvantage

In this thesis, the term “disadvantaged young people (YP)” is used to describe children and adolescents aged 10-24 excluded from social, economic, or educational opportunities enjoyed by their peers due to factors beyond their control (Auerswalk, Piatt & Mirzazadeh, 2017) and/or facing significant challenges to their health and development (Sandu, 2019). These factors include Adverse Childhood Experiences (ACEs) and markers of

youth disadvantage recognised by the UK Government (Department of Education, 2011), including YP with emotional and behavioural difficulties or disabilities, homeless or incarcerated YP, those with low academic attainment, young carers, and YP not in education, employment, or training (NEET).

ACEs are particularly well established contributing factors to poor outcomes across the lifespan (Green et al., 2010; Metzler et al, 2017; Nelson et al., 2020; Petruccelli, Davis & Berman, 2019). ACEs are highly stressful events, situations or continuous negative experiences involving threat to a young person's safety or integrity (Bellis et al., 2014; Brennan et al., 2019; Lewis et al., 2019; McLaughlin et al., 2012; Johnstone et al., 2018). When used in this paper, the term ACEs is used to refer to a number of forms of adversity: maltreatment (abuse and neglect), prejudice (e.g., disablism, racism), violence and coercion (domestic abuse, gang membership, being a victim of crime), household adversity (substance misuse, intergenerational trauma, deprivation), inhumane treatment (torture, institutionalisation), adult responsibilities (e.g., child labour or caring responsibilities), and bereavement and survivorship (e.g., traumatic death, surviving life-threatening illness/accident) (Young Minds, 2018).

Young people growing up in marginalised communities in areas of high deprivation and low opportunities, and children with special educational needs are also more likely to be exposed to multiple ACEs (Royal College of Psychiatrists, 2017). For some YP, the cumulative impact of multiple ACEs in combination with limited access to resources amounts to significant disadvantage that has far-reaching effects on the developmental processes of adolescence (Schilling, Aseltine & Gore, 2008) and adult outcomes (Anda et al., 2006).

Young People and Resilience

The concept of resilience has been used to understand how many YP survive and thrive despite disadvantages. Resilience is increasingly understood in terms of access to resources from multiple systems, including secure early attachments, positive peer relationships, socially valued identities and belonging, information and education, material resources, and connections to cultural traditions, spirituality and the natural world (Domitrovich et al., 2017; Luthar & Eisenberg, 2017; Johnstone et al., 2018).

Young People and Mental Health Support: Access, Engagement and Efficacy

Young people are less likely than adults to access mental health services and are more likely to drop out of treatment (De Haan et al., 2012; 2013). Barriers to access include stigma and shame around seeking help, fear of being misunderstood or discriminated against by services for group membership (e.g., ethnic minority status or identification as LGBTQI) and a lack of choice and agency around treatment options (Brown, 2016; De Haan et al., 2012; Robards, Kang, Usherwood & Sanci, 2018).

Meta-analytic findings suggest that 50% fewer individual and school-based mental health interventions are effective for disadvantaged YP living in low socioeconomic status (SES) inner city neighbourhoods, and twice as many are ineffective, compared to general population adolescents (Farahmand et al., 2011). It has been suggested that talking therapies that were originally developed for White European adults may not account for diverse YP experiences, preferences or world views, or for the particular biopsychosocial capacities and processes of this developmental period (Bailey et al., 2018; Coffin et al., 2019). Furthermore, experiences of adversity are known to impact on engagement and outcomes in talking therapies (Tedeschi & Jenkins, 2019). ACEs can affect YP's relationships and capacity for hope as well as psychological, physiological and neurological functioning

(de Thierry, 2015). Talking therapies rely on cognition and depend upon the capacity to build a relationship with a stranger (Norcross & Lambert, 2018; Tedeschi & Jenkins, 2019), which may limit accessibility for YP who have adapted to adversity through hypersensitivity to interpersonal threat (Ewing et al., 2007). Furthermore, a YP's capacity for change through individual or school-based therapy may be limited in high-risk and low-resource environments. Findings suggest that interventions for disadvantaged YP are more likely to be effective if they work with one or more components of the young person's environment (Farahmand et al., 2011).

Young People and Mental Health Support: Recommendations and Future Directions

Emerging evidence suggests that YP may hold more positive attitudes towards alternative therapies (Wilkie, Germain & Theule, 2016; Jones, Rice & Cotton, 2019) and be more motivated to engage. The Royal College of Psychiatrists (2017) recommends creative, recovery-focused service design to meet the needs of “particularly vulnerable groups”, including YP with neurodevelopmental difficulties, young offenders, care leavers, those not accessing education or training, and survivors of sexual exploitation. Interventions using animals, including horses, are less reliant on cognitive processing, verbal communication, or the one-to-one therapeutic alliance than traditional talking therapies. They are therefore gaining recognition as an alternative approach to therapy and learning that may be particularly suited to the needs of disadvantaged YP (Adams et al., 2015; Coffin, 2019; Burgon, 2014, Wilkie, Germain & Theule, 2016).

Equine-Assisted Therapy and Learning (EAT/L): History and Definitions

The umbrella term Equine-Assisted Therapy and Learning (EAT/L) describes a growing number of psychosocial interventions in which clients and clinicians work with horses towards treatment goals. EAT/L is a type of Animal Assisted Intervention (AAI),

defined as “a goal-directed intervention in which an animal that meets specific criteria is an integral part of the treatment process” (Delta Society, 1996). The practice of EAT/L is based on the premise that incorporating horses in treatment can be of therapeutic benefit for people who experience difficulties engaging with more traditional interventions.

The healing power of animals has a long and rich cross-cultural history in literature and folklore, with many spiritual traditions honouring the interconnectedness between humans, non-human animals and the natural and spirit worlds (Serpell, 2006; Tadeschi & Jenkins, 2019). Scientific interest is more recent, emerging in the 1960s when psychiatrist Boris Levinson first reported on successfully engaging children in therapy with the help of his pet dog. It wasn't until the 1990s that the potential psychosocial benefits of equine-assisted activities started to gain recognition with the founding of Equine Assisted Therapy (EAT; Notgrass & Pettinelli, 2015). AAls, including EAT, have commonly been ridiculed, dismissed or sensationalised in public discourses, and practitioners and researchers have struggled to attract scientific attention and investment and establish credibility (Fine, 2010). The vast majority of AAl studies have been under-funded, and a large number of systematic reviews have concluded that the evidence is methodologically flawed and therefore inconclusive (Serpell, 2017; Stern & Chur-Hansen, 2019).

This paper focuses on Equine Assisted Therapy and Learning (EAT/L) targeting psychosocial processes among disadvantaged YP. EAT/L can be distinguished from therapeutic horseback riding and hippotherapy, which target physical treatment goals (e.g., postural control for people with physical disabilities). Two broad approaches have been identified, with key differences that may influence feasibility (e.g., the cost of facilitation) or outcomes (e.g., educational or psychological), although there is considerable overlap in practice (Lee, Dakin & McClure, 2015).

Equine-Assisted/Facilitated Learning (EAL/EFL) is described as an intervention that “promotes the development of life skills for educational, professional, and personal goals through equine-assisted activities” (Professional Association of Therapeutic Horsemanship International (PATH International, 2016)). Facilitators can be teachers, equine specialists, riding instructors, mental health practitioners or life coaches (Lee, Dakin & McClure, 2015).

Equine-Assisted/Facilitated Therapy/Psychotherapy (EAT/EFT/EAP/EFPT) is described as a treatment programme that incorporates “equine activities and/or the equine environment” to work towards rehabilitation goals informed by the client’s needs and the facilitator’s professional standards of practice (PATH International, 2016; EAGALA, 2018). EAT generally involves a mental health professional and an equine specialist working with horses and client toward psychotherapy treatment goals.

Equine-Assisted Therapy and Learning (EAT/L): Evidence Base

A number of reviews of EAT/L have been published in the last 20 years. Many suggest that interventions involving horses may improve psychosocial, behavioural (Kendall et al., 2015; Selby & Smith-Osbourne, 2013) and biological outcomes (heart rate variability; Garcia-Gomez et al., 2020) in diverse populations, including adults with mental health problems (Anestis et al., 2014; Jormfeldt & Carlsson, 2018) and children with autism spectrum conditions and ADHD (Wiese, Simpson & Kumar, 2016; Trzmiel et al, 2019; White, Zippel & Kumar, 2020).

At least 10 reviews have focused on or included studies of EAT/L for children and disadvantaged YP and social, emotional and behavioural difficulties (Anestis et al., 2014; Hoagwood et al., 2017; Kendall et al., 2015; Lee, Dakin & McClure, 2016; Lentini & Knox, 2009; Lentini & Knox, 2015; Selby & Smith-Osborne, 2013; Smith-Osborne & Selby, 2010;

Staudt & Cherry, 2017; Wilkie, Germain & Theule, 2016). Some conclude that findings are preliminary but promising in support of biopsychosocial benefits of EAT/L (Kendall et al., 2015; Lee et al., 2016; Selby & Smith-Osborne, 2013). Two reviews suggest EAT/L be considered an “alternative intervention strategy” for improving overall functioning among disadvantaged YP at risk of mental health problems (Wilkie et al., 2016) who do not engage with traditional therapies (Kendall et al., 2015). However, all reviewers caution against strong conclusions until methodological limitations are addressed, including small sample sizes and a lack of adequate control conditions, random assignment, and follow-up measures. Anestis and colleagues (2014) are more critical, advising that EAT/L should not be offered as a treatment for mental health problems until adequate evidence from robustly designed studies is available.

A fundamental criticism of the EAT/L field is that coherent theoretical frameworks are lacking (Nelson, Signal & Wilson, 2017). The focus of research so far has been on establishing efficacy, and the consequent focus on outcomes has prematurely diverted attention from process (Carlsson, 2016; Wilkie, Germain & Thuele, 2016). There have been repeated calls for qualitative studies to generate new theories, or for experimental studies to test mechanisms of change. However, to avoid reinventing the wheel and to identify fruitful avenues for future research, it seems prudent to explore first how EAT/L has been conceptualised over three decades of research and practice.

Critics have commented that it is unclear what actually happens in EAT/L (Lac, 2016). Some have concluded that intervention characteristics, outcomes and process measures are so heterogeneous that comparison across studies is almost impossible (Anestis et al., 2014), while others have highlighted shared assumptions and practices across EAT/L interventions (Carlsson, 2016; White-Lewis, 2019). There have been repeated calls for treatment manuals

and more detailed descriptions of interventions. However, without a shared understanding of key components it is unclear what kind of detail is needed.

Aims

The purpose of this conceptual review is to explore convergence and diversity in existing research and practice in EAT/L for disadvantaged YP, and to contribute to a consensus-based literature relating to key components and underlying conceptual frameworks in EAT/L that can inform future developments in research and practice. The review will address the following questions:

- 1) What is the current state of the evidence for EAT/L interventions for disadvantaged YP?
- 2) How are the key components of EAT/L interventions for disadvantaged YP described? What are the similarities and differences across interventions?
- 3) How are the processes in EAT/L for disadvantaged YP understood? What are the broad areas of agreement, disagreement, and where are the gaps in understanding?

Method

This conceptual review is informed by scoping reviews of the published, peer reviewed literature to identify relevant texts, supplemented by identifying further relevant work through the references of key papers. Only EAT/L interventions targeting psychosocial outcomes were considered; other equine-assisted activities such as hippotherapy and Therapeutic Horseback Riding were not included. Papers were included if they focused on YP aged 10-24 with one or more markers of disadvantage, defined as ACEs, emotional and behavioural difficulties or disabilities, homelessness or incarceration, low academic attainment, young carers, and YP not in education, employment, or training (NEET).

Interventions for children under 10, or for general population or neurodiverse YP, including autistic YP or those with ADHD, were not included in the review.

Following an overview of the current state of the evidence for EAT/L for disadvantaged YP, the review will use the “Approach-Method-Technique” framework (AMT; Burnham, 1992) to explore coherence in the field of EAT/L for disadvantaged YP while enabling diversity in practice and research.

An Overview of Current Evidence for EAT/L for Disadvantaged YP

A summary of the characteristics and outcomes of published studies of EAT/L for disadvantaged YP identified in the scoping review for this paper is presented in Table 1. The evidence base is at an early stage of development. The majority of studies use non-randomised quantitative designs and fewer than half of these compare EAT/L to (non-equivalent) controls. The few pilot randomised controlled trials comparing EAL to wait list control groups found that EAL lead to improvements in self-reported and physiological markers of mental distress, prosocial behaviours and hope. While these results are promising and support hypothesised benefits of EAL, wait list comparisons cannot isolate specific effects of the intervention from generic factors (Frederick et al., 2015; Gibbons et al., 2017; Pendry et al., 2014).

Results from non-randomised studies are mixed, with some finding significant improvements and others finding no change following EAT/L programmes of varying lengths in a number of outcome areas, including strengths-based constructs such as self-esteem, self-image and self-control; relational constructs including empathy, trust and loneliness; prosocial and challenging behaviour; and psychiatric symptoms of PTSD, depression and anxiety. Sample sizes are small and measures unreliable in some quantitative studies (e.g., Gibbons et al., 2017). Effect sizes were generally not reported, and it is unclear whether

significant results are meaningful or comparable across studies. Of the minority of studies reporting attrition, few reported reasons and just one included drop-outs in the analysis (Pendry et al., 2014). The majority excluded non-completers from the analysis without explanation, which may have inflated treatment effects. No harms were reported, although no papers included a statement in relation to adverse events.

The lack of adequate control conditions gives particular reason for caution in interpreting results, due to the importance of the passage of time for this age group and the particular validity threat of novelty effects in EAT/L. The lack of follow-up measures is also limiting in this regard. In light of these significant threats to validity and reliability, the evidence base is considered preliminary in this review. Interventions range widely from 5 to 26 sessions and from one hour to whole-day workshops, although the majority involve 8 to 12 weekly sessions of between one and two hours. It is not clear from the literature what constitutes an adequate “dose” of EAT/L, and this needs addressing in future studies.

Nonetheless, qualitative studies suggest that at least some participants perceived EAT/L to be of benefit, including increased confidence and self-efficacy, emotion regulation, and improved relationships. Taken together with significant results and positive trends in quantitative studies, these findings suggest that EAT/L may be engaging and potentially useful for at least some groups of YP who are less likely to engage with or benefit from more traditional forms of therapy.

Table 1

Table summarising reviewed studies

First author (publication year)	Aims and Design	Measures	Sample	Intervention	Outcomes
Randomised designs					
Frederick (2015)	<u>Aim:</u> examine impact of EAT/L on hope and depression <u>Design:</u> randomised controlled trial (RCT): EAL versus TAU + wait list control Qualitative interviews with YP and families	Adolescent Domain-Specific Hope Scale (ADSHS); Major Depression Inventory (MDI)	26 11-17 year olds with ACES at risk of academic failure in the US (14 EAL; 12 control)	5 weekly group EAL sessions (length not specified) facilitated by a counsellor, unmounted	<u>Significant:</u> improvements in hope and depression scores compared to control; treatment group scores same or higher at 6 month <u>follow-up</u> (n=8) <u>Non-significant:</u> none reported <u>Attrition/harms:</u> not reported <u>Follow-up:</u> 6 months
Gibbons (2017)	<u>Aim:</u> examine effectiveness of EAL on reducing aggressive behaviour and attitudes and leadership skills and role of emotion regulation as a mediator of change <u>Design:</u> RCT: EAL versus wait list control Qualitative focus groups with YP and families	Youth Leadership Life Skills Development (YLLSD); Transgression-Related Interpersonal Motivations Inventory (TRIM); Normative Beliefs about Aggression Scale (NBAS); Emotion Regulation Questionnaire (ERQ); Cognitive Emotion Regulation Questionnaire (CERQ); Child Behaviour Checklist (CBS)	40 YP with multiple ACEs including low SES, maltreatment and violence in Guatemala	14 hours over 2 days of group EAL workshops, unmounted activities facilitated by Intelligent Horsemanship instructors	<u>Significant:</u> improvements in aggressive behaviour , self-reported leadership ability <u>Non-significant:</u> emotion regulation <u>Qualitative themes</u> empowerment (interpersonal interactions, learning, future growth); emotion regulation (breathing, less fighting/anger, calmer, self- control), positive emotions (happy, less scared) <u>Attrition/harms:</u> 3 (7.5%) dropped out after pre-test and excluded from analysis (no explanation given) <u>Follow-up:</u> none reported
Pendry (2014) ¹⁰	<u>Aim:</u> determine impact of EAL on Hypothalamic Pituitary Adrenal (HPA) axis <u>Design:</u> RCT: EAL versus wait list control	Salivary cortisol sampling; Devereux Student Strength Assessment (DESSA) of child social competence	113 "5 th -8 th grade" YP with emotional and behavioural issues in the US	11 weekly 1.5 hour individual/ group combined EAL sessions facilitated by counselling psychologists, PATH instructors and university students	<u>Significant:</u> improvements in cortisol levels and parent-rated social competence <u>Attrition/harms:</u> 18 (16%) dropped out (withdrawal; moved away, allergy, schedule conflicts) but included in intent-to-treat analyses <u>Follow-up:</u> none reported

First author (publication year)	Aims and Design	Measures	Sample	Intervention	Outcomes
Non-randomised designs, non-equivalent control groups					
Bachi (2012) ^{1,2,3,6,10}	<p><u>Aim</u>: test hypothesis that self-image, self-control, and general life satisfaction would improve following EAT relative to control group</p> <p><u>Design</u>: non-equivalent groups pre-test/post-test (matched comparison group)</p>	<p>Offer Self-Image Questionnaire (OSIQ); Self-Control Schedule (SCS); Children's Interpersonal Trust Scale; Student Life Satisfaction Scale</p>	29 "at-risk adolescents" with ACEs at a residential facility in Israel	7 months of weekly 1-hour individual EAT sessions, mounted and unmounted activities, or leisure only control group	<p><u>Significant</u>: none</p> <p><u>Non-significant</u>: self-image, self-control, trust, & general life satisfaction (authors note positive trends). Higher numbers of the control group dropped out, acquired new police records and used drugs at 1 year follow-up.</p> <p><u>Attrition/harms</u>: not reported</p> <p><u>Follow-up</u>: none reported</p>
Boshoff (2015) ^{2,3}	<p><u>Aim</u>: investigate the influence of EAT on subjective wellbeing, problem-focused coping, emotion-focused coping and reducing dysfunctional behaviour</p> <p><u>Design</u>: non-equivalent groups Solomon 4 group design; EAT versus TAU.</p>	<p>Satisfaction with Life Scale (SWLS); Coping Orientations to the Problems Experienced Scale (COPE)</p>	39 YP aged 14-18 with behaviour that challenges living in custodial care in South Africa	8 weekly manualised EAT group sessions (length not specified)	<p><u>Significant</u>: improvements in subjective wellbeing, problem-focused coping, emotion focused coping</p> <p><u>Non-significant</u>: dysfunctional coping unchanged</p> <p><u>Attrition/harms</u>: none reported</p> <p><u>Follow-up</u>: none reported</p>

First author (publication year)	Aims and Design	Measures	Sample	Intervention	Outcomes
Ewing (2007) ^{1,5,7,8}	<p><u>Aim:</u> test prediction that EAT/L would increase YP sense of self-worth, self-esteem, interpersonal empathy, and internal locus of control, and decrease feelings of depression and loneliness</p> <p><u>Design:</u> non-equivalent groups pre-test post-test crossover design (wait list control)</p>	Self-perception Profile for Children (self-esteem measure); Empathy Questionnaire; Locus of Control Scale; Children's Depression Inventory (CDI); Children's Loneliness Questionnaire	28 Inuit YP 10-13, low SES, household adversity, with learning and behavioural difficulties in the US	18 bi-weekly 2-hour group EAL (PATH) sessions facilitated by therapeutic riding instructors	<p><u>Significant:</u> none</p> <p><u>Non-significant:</u> self-esteem, empathy, locus of control, depression, loneliness</p> <p><u>Qualitative:</u> improved life satisfaction, trust, self-concept, support seeking;</p> <p><u>Attrition/harms:</u> not reported</p> <p><u>Follow-up:</u> none reported</p>
Holmes (2012) ⁶	<p><u>Aims:</u> Exploring the impact of EAL without a therapist on self-esteem and anxiety in YP with subclinical emotional or behavioural difficulties, and their association with horse-human interactions</p> <p><u>Design:</u> Pre-test post-test, within-subjects control (live horse versus model horse)</p>	Spence Children's Anxiety Scale (SCAS); Rosenberg Self-Esteem Scale Behavioural data (interaction frequency)	11 YP aged 12-14 with emotional, behavioural or learning difficulties in the UK	4 3-hour group EAL sessions over 4 days involving a live horse compared to EAL using a model horse	<p><u>Significant</u> improvements in trait anxiety (authors note positive trend in association between anxiety and approach/avoidance behaviours towards live horse, not model horse)</p> <p><u>Non-significant:</u> self-esteem</p> <p><u>Attrition/harms:</u> none reported</p> <p><u>Follow-up:</u> none reported</p>
Mueller (2017)	<p><u>Aim:</u> Investigate effectiveness of EAT on PTSD symptoms in disadvantaged YP and the association with the human-animal bond</p> <p><u>Design:</u> non-equivalent groups pre-test post-test (EAT vs CBT)</p>	Revised child impact of events scale-13 (CRIES-13); Human-animal bond scale (HABS)	68 (36 treatment, 32 control) disadvantaged YP (maltreatment, violence) & PTSD symptoms in the US	10 2-hour group CBT or group EAT sessions – EAT facilitated by a social worker and PATH instructor; mounted and unmounted activities	<p><u>Significant:</u> improvements in PTSD symptoms in both groups</p> <p><u>Non-significant:</u> human-animal bonding (ceiling effect due to immediate strong bond noted)</p> <p><u>Attrition/harms:</u> 14 (20%) dropped out and excluded from analysis (allergies, scheduling issues, discharge)</p> <p><u>Follow-up:</u> none reported</p>

First author (publication year)	Aims and Design	Measures	Sample	Intervention	Outcomes
Roberts (2020)	<p><u>Aim:</u> test the hypothesis that EAT would significantly decrease negative affect and increase positive affect compared to traditional therapy among “adolescents with severe emotional disturbances”.</p> <p><u>Design:</u> pre-test post-test, within-subjects control (EAT vs TF-CBT)</p>	Positive and Negative Affect Scale (PANAS)	37 YP aged 12-17 in a therapeutic group home in the US with trauma-related, depressive, anxiety, conduct, and substance-related disorders	8 weekly 1.5-2 hour group EAT sessions alongside 8 weekly Trauma-Focused group CBT (TF-CBT) sessions (length not specified), facilitated by equine specialists, PATH instructor and therapists	<p><u>Significant:</u> greater positive affect before and after EAT sessions vs TF-CBT sessions. Improvements in positive and negative affect in both EAT and TF-CBT</p> <p><u>Non-significant:</u> no pre/post group differences</p> <p><u>Attrition/harms:</u> 91% of participants completed 6 or more weeks. 9% (n=3) completed 2 weeks or less</p> <p><u>Follow-up:</u> none reported</p>
Trotter (2008) ^{1,2,3,4,5,7,10}	<p><u>Aim:</u> test the hypothesis that EAT would have a more positive impact than a classroom-based program on YP at risk of academic and social failure</p> <p><u>Design:</u> non-equivalent groups pre-test-post-test (EAT vs classroom psychoeducation (PED) control)</p>	Behavioural Assessment System for Children (BASC)	205 at-risk students; 126 included in analysis (classroom control of 38) in the US	12 weekly 2-hour EAT sessions or 1 hour classroom-based PED sessions, non-mounted with activities designed by EAGALA	<p><u>Significant:</u> improvements on 17 of 32 subscales of self- and parent-report measure of behaviour in treatment group, compared to improvements on 4 areas among control group (multiple t-tests)</p> <p><u>Attrition/harms:</u> 41 (20%) dropped out and excluded from analysis (no explanation offered)</p> <p><u>Follow-up:</u> none reported</p>
Non-randomised one-group designs					
Bowers (2001) ^{5,7}	<p><u>Aim:</u> examine impact of EAT on depression symptoms among YP survivors of abuse</p> <p><u>Design:</u> one-group pre-test-post-test</p>	Children’s Depression Inventory (CDI)	10 YP survivors of abuse aged 14-18 in the US	7 weekly 1.5 hour group EAT sessions	<p><u>Significant:</u> none</p> <p><u>Non-significant:</u> depression symptoms</p> <p><u>Attrition/harms:</u> 4 (40%) dropped out.</p> <p><u>Follow-up:</u> none reported</p>

First author (publication year)	Aims and Design	Measures	Sample	Intervention	Outcomes
Chaplin (2010) ⁶	<u>Aim:</u> evaluate effectiveness of EFL in bringing about changes in social and emotional functioning of “at-risk adolescents”. <u>Design:</u> one-group pre-test post-test	Rosenberg Self-Esteem Scale; General Wellbeing Schedule (GWBS); Index of Empathy for Children and Adolescents (IECA); (Non-standardised: Perceived functioning at school)	3 “at-risk” YP with ADHD, substance use, and anger issues in the UK	6 weekly 1.5-hour EAL sessions	<u>Significant:</u> none <u>Non-significant:</u> self-esteem, wellbeing, empathy, perceived school functioning. <u>Qualitative data</u> suggested short-term improvements in school functioning and behaviour improvements not maintained at 2 month follow-up <u>Follow-up:</u> qualitative interviews at 2 months post-intervention
Drinkhouse (2012) ⁶	<u>Aim:</u> examine the correlation between human and horse heart rates to better understand hypothesised change mechanisms in EAT <u>Design:</u> one-group repeated physiological measures (horse and human heart rates)	Human and horse heart rates; observations of external stimuli	4 “at-risk” YP (unspecified risk) in the US	12 sessions EAT group therapy (length not specified) facilitated by a EAGALA mental health professional and equine specialist	<u>Significant:</u> none <u>Non-significant:</u> no association between horse/human heart rate variation (both coincided with external stimuli in uncontrolled environment) <u>Attrition/harms:</u> not reported <u>Follow-up:</u> none reported
Kemp (2014) & Signal (2013) ^{6 10,9}	<u>Aim:</u> test hypothesis that EAT would lead to reduced trauma, internalised and externalised behaviours, anxiety and depression <u>Design:</u> one-group (double) pre-test - post-test: pre-test 1, 6 weeks’ counselling, pre-test 2, 6 weeks’ EAT, post-test	Children’s Depression Inventory (CDI), Child Behaviour Checklist (CBCL), Trauma Symptom Checklist (TSCC), Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI)	30 disadvantaged YP (childhood sexual & physical abuse, neglect) aged 8-17 in Australia	6 weekly 1.5-hour multi-family group EAT sessions facilitated by counsellors, within subjects control	<u>Significant:</u> improvements time 2-3 on internalising/ externalising behaviour, anxiety, depression, and trauma symptoms (medium-large effect sizes) non-significant or no change time 1-2 <u>Non-significant:</u> none reported <u>Attrition/harms:</u> not reported <u>Follow-up:</u> none reported

First author (publication year)	Aims and Design	Measures	Sample	Intervention	Outcomes
Kendall (2015); Maujean (2013) ⁶	<u>Aim:</u> to examine the impact of EAL: on self-esteem, self-efficacy, and social behaviour for disengaged YP <u>Design:</u> one-group pre-test-post-test; qualitative interviews with YP and case managers	Rosenberg Self-Esteem Scale (RSES), General Self-Efficacy Scale (GSE); Non-standardised: social behaviour observation form	16 YP, mean age 15, who had not benefitted from traditional interventions in Australia	10 weekly group EAL sessions facilitated by psychologist & intelligent horsemanship instructor, unmounted.	<u>Significant</u> improvements in self-esteem, self-efficacy among completers <u>Non-significant:</u> positive trend in general attitude to life post-intervention <u>Qualitative:</u> psychological/social benefits, enjoyment, engagement, self-control, problem solving, self-awareness, motivation, concentration, patience ; Mechanisms of change: human/horse connection; multisensory experiences; inclusive social & natural environment <u>Attrition/harms:</u> 4 (25%) dropped out (2 unknown, 2 personal reasons) <u>Follow-up:</u> none reported
McCullough (2015)	<u>Aim:</u> investigate change in PTSD symptoms and association with human-animal bond over course of EAT <u>Design:</u> One-group pre-test-mid-test- post-test	Children's Revised Inventory of Events Scale (CRIES-13); Human-Animal Bond Scale (HABS)	11 YP aged 10-18 with ACEs (maltreatment) & PTSD symptoms in the US	8 weekly 1.5-2 hour group EAT sessions	<u>Significant:</u> improvements on PTSD symptoms, human-animal bonding at post-test <u>Non-significant:</u> no association between human-animal bond and PTSD symptoms <u>Attrition:</u> 1 drop-out (no reason given) <u>Follow-up:</u> none reported
Pendry (2018)	<u>Aim:</u> examine associations between adolescents' diurnal and momentary HPA axis activity and responses to an EAL activity <u>Design:</u> momentary cortisol and experience sampling during one session of EAL embedded within RCT	In-home salivary cortisol sampling, momentary salivary cortisol sampling, Experience Sampling Method (ESM); Non-standardised: Animal-Assisted Therapy-Psychosocial Session Form	59 "at-risk" adolescents (risk factors unspecified), mean age 11 in the US	11 weekly 1.5-hour sessions of group EAL facilitated by psychologists, equine specialists, PATH certified instructors in the US	<u>Significant:</u> Individual variation in positive/negative emotions during mounted EAL activity; increased observed negative behaviour associated with increased negative emotion before riding, decreased self-reported positive emotion and increased cortisol activity after riding. <u>Non-significant:</u> none reported <u>Attrition/harms:</u> not reported <u>Follow-up:</u> none

First author (publication year)	Aims and Design	Measures	Sample	Intervention	Outcomes
Schultz (2007) ^{1,4,5,7,8}	<u>Aims:</u> to test the efficacy of EAT in a cross-sectional group of YP referred to one EAT therapist for emotional and behavioural issues. <u>Design:</u> one-group pre-test-post-test	Global Assessment of Functioning (GAF) scale	63 children 4-16 with ACEs (experiences of intra-family violence) – all children treated by one EAT therapist in 18 month period in the US	1 – 116 sessions of individual EAT (mean 20 sessions) - facilitated by EAGALA certified social worker + equine specialist	<u>Significant:</u> improvements in GAF scores; greater improvement for younger children who experienced neglect & abuse <u>Non-significant:</u> none reported <u>Attrition/harms:</u> 22% completed fewer than 6 sessions and were excluded from analysis (no explanation given) <u>Follow-up:</u> none reported
Whittlesey-Jerome (2016)	<u>Aim:</u> test the hypothesis that EAT would lead to increased resilience among marginalized students <u>Design:</u> non-equivalent groups pre-test-post-test, (EAT vs psycho-education control)	Resiliency scales for Children and Adolescents (RSCA)	12 "marginalised and vulnerable" (risk factors unspecified) YP attending a charter high school in the US	4 weekly 2 hour sessions - EAT (n=5) facilitated by EAGALA mental health professional and equine specialist or psychoeducation (PED) facilitated by researcher and student (n=7)	<u>Significant:</u> none reported <u>Non-significant:</u> positive trends noted in EAT group on mastery, relatedness and emotional reactivity , compared to a negative trend in PED group. <u>Attrition/harms:</u> not reported <u>Follow-up:</u> none reported
Qualitative designs					
Burton (2011) ^{1,3,6}	<u>Aim:</u> to explore the experiences of "at-risk" YP participating in an EAT/L programme <u>Design:</u> qualitative (ethnography)	Qualitative interviews and observations	7 YP aged 11-21 in foster care with a variety of diagnosis/ perceived disadvantages in the UK	6 weeks to 2 years of weekly EAT individual sessions (mode 3 months; length not specified), facilitated by a social worker	<u>Qualitative themes:</u> developing confidence and self-esteem , gaining a sense of mastery and self-efficacy , developing empathy (feeling the horses needed them, able to nurture horses); opening up positive opportunities <u>Attrition/harms:</u> none reported <u>Follow-up:</u> none reported
Carlsson (2014)	<u>Aim:</u> explore the meaning of EAT/L for young women who self-harm and their staff <u>Design:</u> qualitative	In-depth interviews with YP and staff	9 YP aged 15-21 in residential treatment centre for eating difficulties in Sweden	Weekly 1-hour individual EAT facilitated by a social worker (programme and session length not specified)	<u>Qualitative themes:</u> horse mirroring emotions - an opportunity for emotional communication, emotional awareness/regulation through presence in the moment, and authentic relationships <u>Attrition/harms:</u> not reported <u>Follow-up:</u> none reported

First author (publication year)	Aims and Design	Measures	Sample	Intervention	Outcomes
Carlsson (2015)	<u>Aim</u> : examine facilitators and barriers to the horse's capacity to facilitate "authentic" relationships <u>Design</u> : qualitative	Qualitative interviews, analysis of video-recorded horse-human interactions	4 YP who self-harm, aged 15-21, and 3 staff in a residential treatment centre in Sweden	Weekly 1-hour individual EAT sessions facilitated by a social worker, mounted & unmounted activities (programme and session length not specified)	<u>Qualitative themes</u> : suggest that the "horse's ability to facilitate authentic relationships " was enabled when clients mentalized horses as subjects , but not when they saw horses as objects. <u>Attrition/harms</u> : not reported <u>Follow-up</u> : none reported
Dell (2011) ^{4,6}	<u>Aim</u> : to understand the experiences of indigenous YP participating in an EAL programme <u>Design</u> : qualitative	Qualitative interviews with YP, YP's journals, researcher observations, staff reflections	15 Inuit YP aged 12-17 in a residential program for solvent misuse in Canada (all residents but one)	12 weekly 1-hour EAL sessions adapted to needs of First Nations YP, non-mounted	<u>Qualitative themes</u> : YP healing was aided by spiritual exchange and authentic, complementary communication with horses <u>Attrition/harms</u> : not reported <u>Follow-up</u> : none
Hemingway (2015)	<u>Aim</u> : identify potential processes of learning and development in EAL through analysis of YP and horse behaviour <u>Design</u> : one-group post-test only; qualitative observations and interviews with prison staff and YP	Interviews with YP, prison staff and course facilitator. Observations of behaviour using a behaviour observation schedule	20 YP aged 18-21 incarcerated in a young offenders prison in the UK	7 2.5-hour group EAL sessions - unmounted intelligent horsemanship activities, facilitated by an Intelligent Horsemanship instructor	<u>Qualitative themes</u> : development of calm assertiveness, confidence, & focus <u>Attrition/harms</u> : not reported <u>Follow-up</u> : re-offending rates reduced by 27% compared to predicted rates (The Horse Course Evidence Review, 2015)
Saggers (2015)	To explore experiences of EAL among students "at-risk" of school failure	Qualitative case study (interviews & observations over 6 months)	11 YP aged 10-13 at risk of primary school failure (low SES, socio-emotional difficulties) in Australia	8 weekly EAL group sessions (length not specified) facilitated by PATH instructors	<u>Qualitative themes</u> : horsemanship (developed skills & connection with horses); resilience (developed skills in coping, perseverance), gaining confidence, communication skills, emotional regulation , coping with bullying; enhanced engagement at school <u>Attrition/harms</u> : not reported <u>Follow-up</u> : none reported

Note. N/A = Not Applicable; EAL = Equine assisted or facilitated learning; EAT = Equine assisted or facilitated therapy (including counselling, social work, psychotherapy); EAGALA = Equine Assisted Growth and Learning Association; PATH = Professional Association of Therapeutic Horsemanship International; TAU = Treatment as usual; CBT = Cognitive Behaviour Therapy; TF-CBT = Trauma-Focused Cognitive Behaviour Therapy

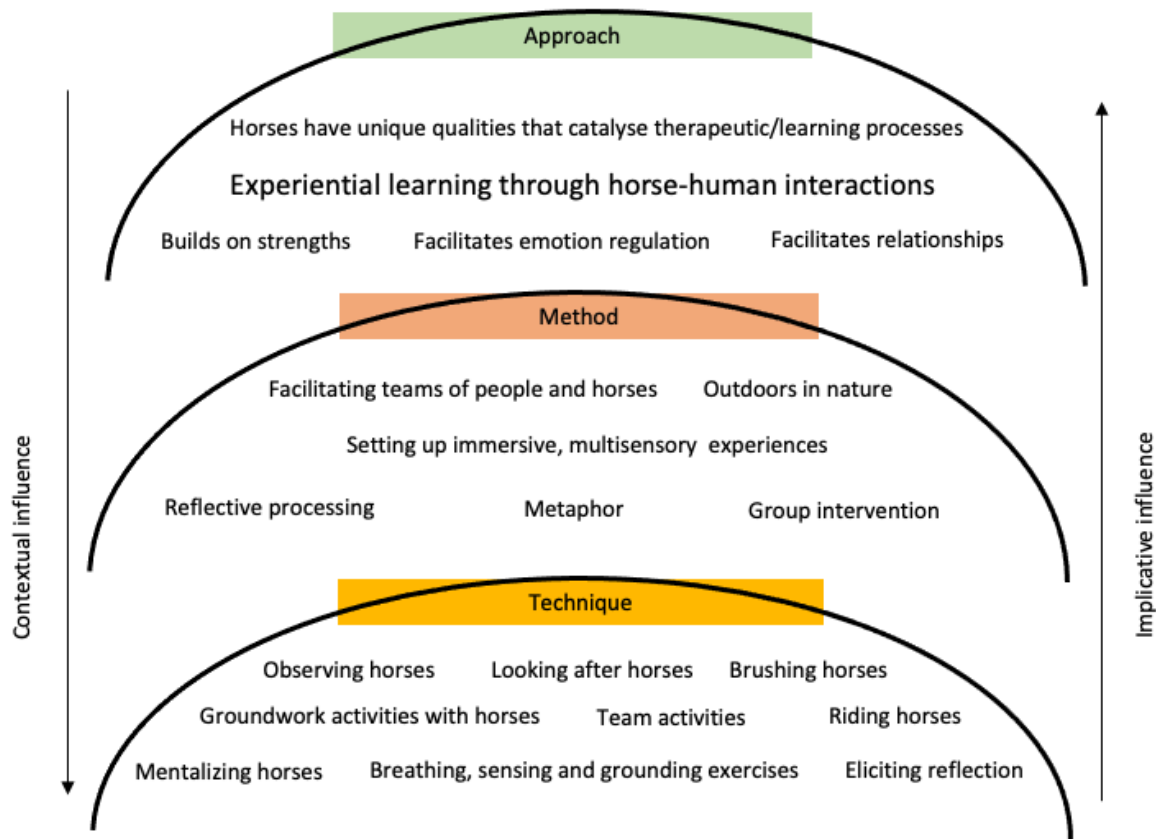
Note. Study inclusion in the following reviews are denoted in superscript: 1 = Anestis et al. (2014); 2 = Hoagwood et al. (2017); 3 = Kendall et al. (2015); 4 = Lee, Dakin & McClure (2016); 5 = Lentini & Knox (2009); 6 = Lentini & Knox (2015); 7 = Selby & Smith-Osborne (2013); 8 = Smith-Osborne & Selby (2010); 9 = Staudt & Cherry (2017); 10 = Wilkie, Germain & Theule (2016)

An Application of the Approach, Method, Technique Framework to EAT/L

Systemic therapist John Burnham developed AMT to help organise the multifarious models and practices of systemic therapy (Burnham, 1992). The *Approach* refers to the orientation of a practice, including the theories, values, assumptions and working ideas. The *Method* describes different ways of practising the approach, and the *Techniques* are specific, observable practice activities and tools. The concepts of *contextual and implicative influence* enable exploration of the ways in which ideas and practices at one level influence the others, and will be used to identify conceptual coherence and discontinuities in EAT/L for adolescents. The framework is represented graphically in Figure 1.

Figure 1

Graphical representation of an application of the Approach, Method, Technique Framework to EAT/L for disadvantaged YP



Method

Despite considerable variation in EAT/L practices, all EAT/L sessions share several structural features. They are generally facilitated by a team of two or more people whose role is to set up immersive experiences involving interactions with horses, generally outdoors in nature (Lac, 2016; Notgrass & Pettilini, 2015; Trotter, 2012). They include facilitated reflective processing of equine-related activities and the use of metaphor, which many argue is a key mechanism through which clients generalise their learning to other relationships and life challenges (Chandler, 2005; Notgrass & Pettilini, 2015; Trotter et al., 2008).

Outdoors in Nature

The outdoor, “rural” or “natural” settings of EAT/L interventions for YP are widely considered an important aspect of the experience. Many propose that less stigma is associated with the non-traditional settings of EAT/L interventions, and that being in nature can be stimulating, motivating, and calming, which promotes YP engagement (Bachi, Terkel & Teichman, 2012; Johansen, 2014; Maujean et al., 2013; Trotter et al., 2008). Existing safely on a farm, ranch or equestrian centre requires following well-defined rules that protect against visible hazards and this is understood to facilitate boundary setting (Bachi, Terkel & Teichman, 2011; Wilson et al., 2017). Evidence for the relative contribution of the environment is lacking. Only non-randomised studies have compared EAT/L to classroom or clinic-based controls (e.g., Trotter et al., 2008; Whittlesey-Jerome et al., 2016). Therefore the unique features of the EAT/L environment are confounded by factors including the presence of horses or novelty more generally and their interaction with group characteristics.

Facilitating Teams

People: Despite considerable diversity in professional background and training – from equine behaviourists and riding instructors to teachers, social workers and psychologists – there are three broad similarities in facilitation across interventions. First, there is a broad agreement that the facilitating team must have expertise in both human and horse psychology and behaviour (Bachi, 2013). The facilitating team most commonly includes at least one equine specialist and one mental health professional and most interventions also involve additional staff and volunteers (e.g., Brooks et al., 2008; Hemingway, Meek & Gill, 2015; Signal et al., 2013; Whittlesey-Jerome et al., 2016). A minority of individual EAT/L interventions are facilitated by one professional with expertise

in both areas (e.g., Bachi, Terkel & Teichman, 2012). Second, there is a strong consensus that facilitators are responsible above all else for maintaining physical and emotional safety in interactions between people and horses. Third, facilitators are understood to play a crucial role in “setting the stage” for learning or therapeutic processes through interactions with horses, through setting up experiences and facilitating interpretation and reflection (Bachi, Terkel & Teichman, 2012; Carlsson, Nilsson Ranta & Traeen, 2014; Pendry & Roeter, 2013; Johansen, 2014; Signal, 2013).

A number of programmes align themselves with EAT/L organisations’ professional standards and accreditation programmes, including the Equine Assisted Growth and Learning Association (EAGALA, 2018) and the Professional Association of Therapeutic Horsemanship International (PATH Int, 2014). However, variation in facilitators’ preferred methods and practices has been reported, even among practitioners who align themselves with the EAGALA model (McNamara, 2017).

The only reviewed study to explicitly address facilitation suggested that EAL without a trained therapist was associated with pre-post reductions in anxiety for YP with emotional, behavioural and learning difficulties (Holmes et al., 2012). More research is warranted to further understand and justify the relative costs and benefits of different types and levels of facilitator expertise.

Horses: Perhaps the least disputed defining feature of EAT/L is the inclusion of one or more horses in the facilitating team. There is a broad agreement that the presence of horses catalyses therapeutic or learning processes, although they are variously positioned as objects, such as therapeutic tools or mirrors, or as subjects – for example, as “co-facilitators”, “co-therapists”, “co-teachers” (Bachi & Paris-Plass, 2017; Ewing et al., 2007; Saggars & Strachan, 2015; EAGALA, 2018). However, few researchers or practitioners

describe their equine co-facilitators' characteristics at all. Those that do provide details claim to make choices about which horses to use based on the qualities they bring to client-horse interactions. For example, some use well-trained horses with quiet, calm temperaments to foster security (Klontz, 2007); others choose semi-wild horses for their reactivity to clients' behaviours (Burgon, 2011). Some work with the same client-horse pair throughout to promote attachment (Carlsson, 2017; Ewing, 2007); others encourage working with different horses to promote flexibility to others' needs (Saggers & Strachan, 2015). Further evidence is needed to determine best practice in selecting appropriate horses for EAT/L work.

Individual, Group and Systems work

Group interventions (usually with known peers) far outnumber individual EAT/L interventions for disadvantaged YP. A few interventions describe their approach as systemic (Bachi, Terkel & Teichman, 2011), involve family members (Goodkind et al., 2012; Kemp et al., 2014; Pendry & Roeter, 2013; Schultz, Remick-Barlow & Robbins, 2007), or include YP's wider network, including teachers, case managers, or others involved in a YP's care (Dell et al., 2011; Saggers & Strachan, 2015; Kendall et al., 2015). Further detail or rationale for treatment decisions regarding individual, group and systems work is generally lacking.

Setting Up Immersive, Multisensory, Non-verbal, Concrete experiences

Many EAT/L proponents define their methods as experiential, in opposition to traditional talking therapies. There is broad agreement that facilitating teams in EAT/L interventions use treatment or learning goals to design concrete activities with horses that involve "doing" and multisensory experiencing.

In line with the client-led approach, the majority of interventions are tailored to participants' needs and goals (e.g., Bachi, Terkel & Teichman, 2012; Schultz, Remick-Barlow

& Robbins, 2007). A minority of interventions are manualised, with EAL interventions following a set protocol more often than EAT. Goals tend to centre around similar themes: respect, trust, communication, leadership, boundaries, overcoming challenges, building confidence, and self-regulation.

Reflective Processing

While some proponents describe EAT/L as a “non-talk” therapy (e.g., Dunlop & Tsantefski, 2018), all interventions in this review include techniques to promote personal and group reflection on concrete experiences in EAT/L. Although the focus of reflection is often not specified and varies according to approach, many authors report employing comparable techniques to more traditional therapies such as the use of therapeutic questioning and metaphor (e.g., Kemp et al., 2014; Schultz, Remick-Barlow & Robbins, 2007). Many cite Kolb’s (2015) cycle of experiential learning which involves active experimentation coupled with reflection and abstract conceptualisation (e.g., Whittlesey-Jerome, Schultz & Tomaka, 2016).

The Use of Metaphor

Across different theoretical approaches, horse behaviours and herd dynamics are understood to be relatable to human behaviours and relationship dynamics. Many EAT/L approaches set up interactions with horses to become a living, moving metaphor for clients’ patterns of thinking, behaving, and relating. It is thought that this enables YP to become aware of patterns of behaviour, experiment with doing things differently, and receive immediate, non-judgmental feedback from horses (EAGALA, 2018; Kendall et al., 2014; Kemp et al., 2014; Klontz et al., 2007; Signal et al., 2013;).

Since horses are not subject to human social norms or shame, it is proposed that the use of metaphor in EAT/L – for example through observing relational dynamics in the herd –

opens up therapeutic conversations around sensitive, “hot” topics like rejection and sex (Bachi, Terkel & Teichman, 2012; Dell, 2011). Metaphor is argued to facilitate therapeutic processes including projection and abstraction. For example, observing and talking about an angry horse allows expression of repressed emotion (Bachi, Terkel & Teichman, 2012), and keeping a horse out of one’s personal space enables concrete experience of abstract concepts like boundaries (Wilson et al., 2017; Saggars & Strachan, 2015; Whittlesey-Jerome, Schultz & Tomaka, 2016). Metaphor is also used to facilitate the transfer of experiential learning from interactions with nature and horses to other contexts (Schultz, Remick-Barlow & Robbins, 2007; Klontz; 2007).

Technique

Similar techniques are used across interventions – with the exception of riding, which is excluded from many interventions. Finer details, such as the focus of reflective processing or methods of teaching, and a rationale linking techniques to outcomes are generally missing from reports. Where they are reported, variation in how techniques are used is evident. For example, in some interventions brushing horses is used as a fun, relaxing, rewarding activity for both clients and horses at the end of a session (e.g., Boshoff et al., 2015) while in others it is used for emotion regulation and bonding at the beginning of a session (Bachi, Terkel & Teichman, 2012). Dismantling and experimental studies are needed to outline and test the role of EAT/L techniques in change processes. Techniques reported in reviewed interventions are summarised in Table 2.

Table 2*Key EAT/L techniques used in interventions for disadvantaged YP*

Technique	Examples/descriptors
Observing horses	Learning about and discussing horse behaviour and psychology by observing a herd and/or relating observations to human relationships, life-cycle processes, emotions and behaviours. For example, a client might observe a horse biting another and interpret this as bullying, the facilitator may use questions and observations to open up a discussion about peer relationships.
Looking after horses' basic needs	Learning safe behaviour around horses. Learning how to care for and respect horses' needs, including foot care, cleaning stables and giving food and water.
Brushing, stroking, massaging horses	Brushing, washing or massaging horses or platting horses' manes. Facilitators may encourage clients to attend to sensation, muscle tension, and breathing through interacting with the horse.
Mentalizing horses	Eliciting reflections on horses' mental states, including moods, thoughts, feelings, and intentions.
Groundwork activities with horses	Catching a horse from a field with a halter; using body language to build a relationship with a horse so that the horse follows the client unattached to a lead rope; using body language or pressure (negative reinforcement) to move horses backwards, forwards, sideways, in a circle or through obstacles; desensitising horses to feared objects. Working with metaphor (e.g., building an obstacle course that represents a real-life situation)

Technique	Examples/descriptors
Team activities	Groundwork activities in pairs (e.g., one person verbally instructs their partner who is blindfolded and leading a horse), or as a group (e.g., a group works together to move a loose horse over an obstacle).
Riding horses	Learning to ride in the arena or the countryside, sometimes without saddle or reins, with or without a leader & side walker, learning to communicate with the horse using body language and balance.
Breathing, grounding, sensing, and relaxation exercises	Learning to use mindfulness techniques to stay present in the here and now during activities with horses; engaging in breathing exercises or progressive muscle relaxation exercises and observing the effect on the horse.
Eliciting reflection	Eliciting reflections on the clients' experiences and learning in the session - for example what techniques they tried to move a horse, what worked and what didn't, and what the experience was like (including eliciting emotional experiences). Eliciting links to participants' broader lives including what obstacles we face, what helps, what motivates us, what protects us, what resources are available and how we can mobilise them, and so on.

Approach

Despite considerable variation across approaches, methods and techniques, the review identified some common ground from which EAT/L practitioners and researchers orient themselves to their work. This level in EAT/L includes an understanding that change happens in EAT/L through experiential learning and relational processes, and that horses act

as catalysts of these processes due to their unique sensitivity, responsivity, and physicality (EAGALA, 2018; Kendall et al., 2014).

Experiential

There is a strong consensus that the experiential approach is one of EAT/L's defining features (Lac, 2016; Wilson et al., 2017). Practitioners align themselves with a wide variety of experiential approaches, including Gestalt Therapy (Coffin, 2019; Lac, 2016), Psychodrama (Klontz, 2007), Emotion-Focused Therapy (Johansen, 2014) and Somatic Experiencing (Schultz, Remick-Barlow & Robbins, 2007). However, there is a shared understanding that people learn through continuous interactions with their environment and that the world is experienced holistically through mind, body, emotions and spirit.

A number of authors have argued that experiential, non-verbal mediums of expression, communication and change may be more accessible for YP than talking-based therapies – particularly those with limited verbal skills, or who experience hyperarousal, dissociation or distrust in adults (Dell et al., 2011; Wilson et al., 2017). Others view experiential learning as particularly suited to YP as it encourages experimentation rather than following instructions and so facilitates the development of autonomy (Wilson et al., 2017).

Strengths-Based

EAT/L approaches share a person-centred, strengths-based, and solution-focused orientation to working with YP (e.g., EAGALA, 2018; Whittlesey-Jerome, Schultz & Tomaka, 2016). The experiential approach of EAT/L offers a shift in context and focus away from deficits in behaviour, mental health, or skills, towards focusing on using assets and strengths to complete tasks in a new and challenging environment (Frederick, 2015; Wilson et al., 2017; Coffin, 2019). Many EAT/L proponents also emphasise the importance of positive

emotions and having fun in EAT/L (Coffin, 2019; Johansen et al., 2014; Roberts & Honzel, 2020; Saggars & Strachan, 2015). Qualitative findings suggest that enjoyment is a feature of YP's experience of EAT/L, although further research is needed to understand which aspects are fun and for whom (e.g., Ewing et al., 2007; Roberts & Honzel, 2020; Saggars & Stachan, 2015).

A strengths-based orientation is thought to be crucial in reducing stigma and engaging disadvantaged and marginalised YP. It is also proposed to promote resilience through opening up different perspectives, developing skills and connections, developing self-esteem, self-confidence and self-efficacy, and instilling hope (Coffin, 2019; Selby-Smith & Osborne, 2013). Evidence so far is mixed. A number of qualitative studies have described the development of a sense of mastery, self-confidence, self-efficacy, self-esteem and resilience (Hemingway et al., 2015; Saggars & Strachan, 2015). Quantitative evidence found that EAL led to significant increases in hope compared to wait list control in a pilot RCT (Frederick et al., 2015), positive affect (Roberts & Honzel, 2020), and subjective wellbeing (Boshof et al., 2015). One study found significant increases in self-esteem and self-efficacy among disadvantaged YP (Kendall et al., 2015) but several did not (Ewing et al., 2007; Holmes et al., 2012; Chaplin 2010). Further research is needed to establish a theory of change capable of generating testable hypotheses regarding the influence of EAT/L on strengths-based outcomes, to improve the reliability and validity of studies.

Horses are Perceived to Have Unique Qualities

It is argued that horses have a unique set of qualities that enables them to facilitate experiential processes. These include their present-moment awareness, sensitivity, reactivity, non-verbal communication, and physical presence.

There is a strong consensus in the EAT/L for YP literature (as in EAT/L more broadly) that horses elicit and react to human emotions and behaviours in a way that facilitates awareness, understanding and change (Klontz, 2007). As prey animals, horses are hypervigilant to signs of threat, including fear and predatory behaviours or intent, such as frightened, controlling or aggressive behaviour in humans (Gibbons et al., 2017; Mandrell, 2006; Lentini & Knox, 2015). Recent findings that horses discriminate between photographs of angry and happy human faces and that horses' behaviour and heart rates change in response to humans in experimentally induced states of calm, fear, or arousal lend some support to these claims (Keeling, Jonare, & Lanneborn, 2009; Merkies et al., 2014; Smith, et al., 2016).

A founding principle of the intelligent horsemanship approaches (Parelli, 2002; Roberts, 2004) underlying many EAT/L interventions is that horse herds are held together by clear non-verbal communication, strong social bonds and a cooperative way of living (e.g., Bachi, Terkel & Teichman, 2012; Gibbons et al., 2017; Pendry, Carr & Vandagriff, 2018; Johansen et al., 2014). Horses depend upon calm and confident leadership for the survival of the herd, and sensitive, calm and assertive behaviour from humans helps them to feel safe (Roberts, 2004; Johansen et al., 2014; Saggars & Strachan, 2015).

Horses are often described as "genuine" and "non-judgmental" in the EAT/L literature, due to their immediate reactions to environmental cues, unfiltered by human social norms or language (McCullough, Risley-Curtiss, & Rorke 2015; Trotter, 2012, Saggars & Strachan, 2015). Several authors have suggested that YP are therefore better able to accept feedback from a horse than an adult because it comes without human judgment or confrontation (Mueller & McCullough 2017; Wilson et al., 2017). Horses may also be experienced as powerful and intimidating and therefore demand YP's attention and respect

(Ewing et al., 2007; Lentini & Knox, 2009; Roberts & Honzel, 2020; Saggars & Strachan 2015; Trotter et al., 2012; Wilson et al., 2017). A number of theories have been put forward to understand horses' particular qualities and how they may contribute to therapeutic and learning processes in EAT/L.

Horse-Human Interactions Facilitate Emotion Regulation

It is widely suggested that affiliative interactions with horses – especially those involving touch – may lead to improved emotion regulation through facilitating awareness of physical and emotional experiences (van der Kolk, 2014) and targeting neurobiological pathways underlying overactive stress responses in YP (Adams et al, 2015; Yorke, 2010; Naste et al., 2017; Mueller & McCullough, 2017).

Interactions with horses are thought to promote self-awareness due to horses' sensitivity and reactivity to human physical and emotional states and behaviour. Horses are frequently likened to a “mirror” (Gibbons et al., 2017; Whittlesey-Jerome, Schultz & Tomaka, 2016) or a “biofeedback machine” (Bachi, Terkel & Teichman, 2012; Johansen et al., 2014). Co-regulation, touch, and the associated release of the hormone and neurotransmitter oxytocin are known to play a central role in moderating stress and promoting bonding in both horses and people (Beetz et al., 2012; Olmert, 2009; Powell et al., 2019; Uvnas-Moberg, Handlin, & Petersson, 2014). It is argued that focusing on sensation, muscle tension, and breathing through interacting with the horse may help anchor YP in the present, improve emotional awareness and regulation of emotional states, aid the integration of trauma memories, and reduce dissociative experiences (Adams et al, 2015; Yorke, 2010; Johansen et al., 2014; Naste et al., 2017). Interactions with horses may provide opportunities for experiencing safe and appropriate touch where traditional

therapies cannot due to social norms or for those who find human touch aversive (Mueller & McCullough, 2017).

Findings from the EAT/L literature are mixed. Several qualitative studies have suggested that participants experience improved self-awareness, emotion regulation and self-control through EAT/L (Carlsson, 2017; Kendall, 2015; Saggars & Strachan, 2015). Quantitative evidence is so far lacking. A recent randomised controlled trial found qualitative, but not quantitative, evidence for the role of emotion regulation as a mechanism of change in EAL among Guatemalan YP (Gibbons et al., 2017). The authors noted that the Emotion Regulation Questionnaire (ERQ; Gross & John, 2003) was developed in the US and had poor reliability in their sample, consistent with reports that participants had difficulty understanding the concepts. A study investigating the relationship between horse and human physiological arousal was inconclusive due to difficulties controlling environmental variables (Drinkhouse et al., 2012). Future research could build on qualitative findings to develop more reliable and valid measures of emotion regulation processes through EAT/L.

Horse-Human Interactions Facilitate Relationships

Despite differences in conceptualisation, there is a broad consensus in the EAT/L literature that many YP have experienced adversity in their relationships and find it difficult to connect to others, and that horse-human interactions may lead to beneficial outcomes through facilitating connection. Some suggest building a relationship with a horse may fulfil similar needs to human and peer relationships, such as bonding, intimacy, and socialising, leading to direct benefits including increased perceived social support (Bachi, 2013; Carlsson, 2017; Hauge et al., 2014; Mueller & McCullough, 2017). Others have investigated the bond between YP and horses as a mediator of the effects of EAT on PTSD symptoms

among disadvantaged YP (McCullough et al, 2015; Mueller & McCullough, 2017). However, a failure to specify mediating pathways between EAT/L, human-animal bonding and PTSD symptoms, ceiling effects and small sample sizes may have resulted in inadequate power to detect any effect.

Most commonly in the EAT/L for YP literature, it is proposed that horse-human interactions lead to positive outcomes through their effects on YP's interpersonal relationships. However, the mechanisms through which interactions with horses translate to gains in YP's wider relationships and broader contexts are poorly understood. Most current theories relate to the impact of EAT/L on the attachment processes and/or prosocial behaviour and communication skills, particularly for YP who have experienced adversity in interpersonal relationships (Dell et al., 2011; Bachi, 2013; Naste et al., 2017; Carlsson, 2016).

Attachment processes Experiences of attunement, trust, safe touch, and other aspects of secure attachment are hypothesised to be more easily available to disadvantaged YP in interactions with horses than with people. This is consistent with research findings that people with insecure attachment patterns seem to be more open to trusting, touching and other affiliative behaviours associated with secure attachments in interactions with animals than with humans (Johansen et al., 2014; Kurdek, 2009). More research is needed into attachment processes with horses, although Mueller and McCullough's (2017) finding that the majority of YP with PTSD reported an immediate strong bond with their horse in their first EAT session is consistent with this claim.

It has been noted that the horse-human size ratio is similar to that of mother and infant, and that tactile, non-verbal interactions with a sensitive and responsive horse may mimic those with a "good enough" primary caregiver (Bachi, 2013). The relationship with the horse may provide a "secure base" or "holding environment" that enables the client to

manage distress, explore, take risks, and build confidence (Bowlby, 1973; Johansen et al., 2014; Winnicot, 1960; McCullough & Mueller 2017; Bachi, 2013; Karol, 2007).

Horse-human interactions may enable clients to manage interpersonal distress and build trust in the therapeutic alliance with EAT/L facilitators, and then with other people (Bachi, 2013; Carlsson, 2015). Connecting with horses has been associated with increased positive affect before and after sessions in both clients and therapists (Roberts & Honsel, 2020) and with increased intrinsic motivation to engage in sessions (Mueller & McCullough, 2017). Communicating with facilitators through horses may be less confronting and cognitively demanding for YP than building a therapeutic alliance in traditional talking therapies (Johansen et al., 2014; Vincent & Farkas, 2017; Wilkie, Germain & Theule, 2016). Interacting with a large, powerful animal may catalyse the therapeutic process through evoking feelings that YP may otherwise suppress, such as fear and vulnerability (Bachi, Terkel & Teichman, 2012; Klontz, 2007; Roberts & Honzel, 2020). At the same time, observing horses' reactions in interactions with YP may help facilitators to tune into the client's inner experience rather than reacting to their external behaviour (Lentini & Knox, 2009; Roberts & Honzel, 2020; Wilson et al., 2017). Interactions with horses may therefore provide opportunities for the facilitator to provide safety, "re-parent" and earn clients' trust (Bachi, Terkel & Teichman, 2012; Schultz, Remick-Barlow & Robbins, 2007; Carlsson, 2017). For example, a young person may find that they cannot force a horse to pick up its hoof, which may elicit fear or feelings of inadequacy or frustration. This provides facilitators an opportunity to develop the young person's emotional awareness and expression, and to scaffold a calm and assertive approach, which is likely to be rewarded in the moment by co-operation from the horse (Bachi, 2013).

Another recent hypothesis is that interactions with horses enable YP to develop capacities that are translatable to human relationships, including empathy, reflective function (the capacity to reflect on one's own and others' mental states) and non-verbal communication (Carlsson et al., 2014). However, evidence suggests that this translation is unlikely to be direct and may require facilitation. Ewing and colleagues (2007) found qualitative results that suggested YP experienced considerable empathy for horses through EAL, but no quantitative evidence that this was associated with increased empathy for humans. More recent observational findings suggest that therapeutic insight and improved reflective function through EAT/L is mediated by the extent to which facilitators encourage clients to mentalize horses' internal states (relating to horses as thinking, feeling subjects) and to notice, understand, and regulate non-verbal communication (Carlsson et al., 2015; Johansen et al., 2014).

A few authors have drawn upon non-Western understandings of connectedness to make sense of relational processes between horses and indigenous disadvantaged YP (Adams et al. 2015; Dell, 2011; Coffin, 2019). Inuit and Aboriginal world views see individuals as part of an interconnected web of being, and "connecting with all of creation" as fundamental to healing (Dell et al., 2011). Dell (2011) and colleagues argue that from an Aboriginal world view, horses' sensitivity and responsiveness enables YP to experience a connection between the natural and spiritual world via a connection between the spirit of the young person and the spirit of the horse. This connection is considered central to healing intergenerational trauma that has resulted from the actions of colonising governments.

Communication skills and prosocial behaviour A number of studies have found significant improvements on measures of behavioural difficulties after EAT/L, including

significant improvements in aggressive behaviour in a recent RCT of EAL (Gibbons, 2017) and internalising/externalising behaviour in non-randomised trials of EAT among disadvantaged YP (Kemp et al., 2014) and YP at risk of school failure (Trotter, 2008).

Some practitioners suggest that interactions with horses may offer valuable opportunities for marginalised YP to practise and gain confidence in social skills without fear of social rejection (e.g., Wilson, 2017; Roberts & Honsel, 2020). Since YP cannot direct a 700 kg animal through force, they must learn to elicit desired behaviours. It has been argued that even a little insight into communicating with horses can result in the horse looking to a young person as a leader, rewarding sensitivity, assertiveness and other prosocial behaviours with connection and co-operation (Saggers & Strachan, 2015). This is thought to challenge clients' habitual interpersonal behavioural styles and facilitate new patterns of interaction with both horses and humans (Boshoff et al., 2015; Burgon, 2014; Coffin, 2019; Dell et al., 2011; Gibbons et al., 2017; Hemingway, Meek & Gill, 2015; Kendall & Maujean, 2015; Johansen et al., 2014; Saggers & Strachan, 2015).

Further research is needed to theorise and investigate the role of horse-human interaction, communication skills, and prosocial behaviour. For example, Pendry and colleagues (2014) found that 11 weekly group sessions of EAL led to improvements in parent-rated social competence compared to a wait list control, but did not attempt to predict or test whether or to what extent these changes were related to interactions with horses, reduced stress or participating in group activity. Qualitative findings suggest that having learned to change their behaviour to communicate with horses through body language, YP were better able to practise calm emotion regulation strategies (e.g., breathing exercises), teamwork and leadership skills rather than aggression or passivity – not only in group tasks with peers, but also in their wider institutional or family contexts (Dell et al.,

2011; Gibbons et al., 2017; Hemingway, Meek & Gill, 2015). These findings may offer a foundation for future experimental studies to examine the association between learning effective communication with horses, improved interpersonal skills, and other potential benefits (e.g., self-confidence, self-esteem, and self-efficacy).

Contextual and Implicative Influence: Identifying Conceptual Coherence and Discontinuities

Contextual Influence

Contextual influence describes the way in which values, assumptions, theories, and working practices at one level of the AMT framework create a context for conceptual understanding and for selecting methods and techniques at the next level (Burnham, 1992). In this way, the model can be used to demonstrate coherence in an EAT/L intervention. For example, some practitioners describe working with an attachment perspective as their highest context marker to select other theories or ideas (e.g., Vincent & Farkas, 2017) and work to establish emotional safety by choosing activities that promote bonding and co-regulation between horses and clients such as brushing and looking after horses.

The model can also be used to highlight gaps between theory and practice. Most studies fail to provide a rationale linking approach, method and technique, leaving a gap between theory and practice. For example, Kemp and colleagues (2014) set out a coherent rationale from an attachment perspective at the level of approach for using EAT/L with childhood sexual abuse survivors, but fail to explain how this context influenced their choice of methods or techniques.

AMT is also helpful for examining the influence of values, assumptions and practice cultures. For example, a core assumption is that EAT/L is more accessible to at-risk YP due to the fact that horses are oblivious to the dimensions of social, cultural, linguistic, and physical

differences between people along which YP are commonly marginalised, and that equestrian settings are less stigmatised than traditional services (Kemp et al., 2014). These assumptions are largely unchecked, with little acknowledgement in research or practice of the social processes in rural equine settings that may marginalise some YP. For example, equine activities are generally financially prohibitive and difficult to access by public transport. White privilege and systemic racism in the equestrian world and in the countryside more broadly is increasingly publicly acknowledged (Horton, 2020; Kallstrom, 2020), but its impact on the experiences of the ethnically diverse YP participating in EAT/L has not been explored.

Implicative Influence

The concept of implicative influence describes how the introduction or reconstruction of a technique or method might be incongruent with pre-existing theories or assumptions, and prompt a reconfiguration of ideas or practices at the other levels. For example, one EAT/L intervention for young offenders took place within a prison, which is inconsistent with the prevailing assumption that the natural and de-stigmatised setting is central to engagement with the therapeutic process and might prompt creativity in how EAT/L is delivered (Hemingway, Meek & Gill, 2015).

The review identified several areas of incongruence across the EAT/L for YP literature. First, there is currently a conceptual mismatch between the number and complexity of interspecies relationships involved in the majority of EAT/L methods, and the dominance of attachment-based theories of dyadic relational processes. One research group's attempt to understand the triadic relationship between horse, client and therapist as multiple shifting dyadic "constellations" within a single EAT/L session is already difficult to follow (Carlsson et al., 2017). Expanding the model to include multiple horses, facilitators,

and intervention group members would make it too complicated to be practically useful. Many authors recognise that relationships with peers and family are crucial for YP wellbeing (Ewing, 2007; Johansen et al., 2014). Some also recognise the importance of addressing broader systemic factors to enable YP to generalise benefits from EAT/L to their daily lives (Bachi, Terkel & Teichman, 2011). Greater use of group and systemic theories may be helpful in addressing these processes in EAT/L.

Second, there is an incongruence between the assumption that horse-human interactions are integral to EAT/L and the positioning of horses as co-facilitators, and the predominance of ideas from human psychology, sociology and behaviour in attempts to make sense of interspecies relationships in the EAT/L literature. Theories of equine ethology and training techniques including intelligent horsemanship approaches have been criticised for lacking an evidence base but are presented in the EAT/L literature as fact, undermining the scientific endeavour in EAT/L (Birke, 2008). For example, a number of authors claim that horses are always on the look-out for a leader without acknowledging that this is a contested theory of horse behaviour (Rees, 2017).

At the level of method and technique, relatively rich detail is given about mental health professionals' background, training and experiences compared to details of equine specialists or horses. This anthropocentric bias may be masking diversity among equine specialists and horses, limiting replicability and generalisability of findings and opportunities for development of theory and practice. It has also been associated with negative consequences including a lack of consideration for horses' welfare in EAT/L methods and techniques (Matamonasa-Bennett, 2015). There is some evidence that interactions with at-risk children may lead to increased distress in horses (Kaiser, Heleski, Siegford & Smith, 2006) but the impact of EAT/L on the stress response and welfare of horses remains under-

researched (Evans & Gray, 2012; Malinowski et al., 2018). Whether horses are positioned as sentient subjects or as therapeutic objects has a contextual influence on methods and techniques. For example, EAGALA (2018) positions horses as co-facilitators, and allows activities on the ground only with loose horses, giving them a choice to interact or not.

Finally, there is a conceptual gap in relation to the relative benefits of experiential learning in interactions with horses and being physically active outdoors in nature in EAT/L activities. Recent research found an association between spending 120 minutes or more in nature per week (the average length of an EAT/L session) and good physical and mental health (White, et al., 2019). Research is needed to justify the added benefits of interacting with horses.

Discussion

This conceptual review sought to summarise the current state of the evidence for EAT/L interventions for disadvantaged YP, and to provide an overview of how EAT/L content and process is understood in research and practice. In line with other recent reviews, several studies were identified that suggest EAT/L may be engaging and lead to increased prosocial behaviour and reduced distress for those disadvantaged YP who complete the intervention, although results were difficult to interpret due to multiple threats to the studies' reliability and validity. The EAT/L literature has also faced criticism for lacking a coherent theory, systematic accounts of the clinical practices implemented, or a rationale linking the two (Anestis et al., 2014; Frewin & Gardiner, 2005; McNamara, 2017). This conceptual review attempted to contribute towards addressing these limitations using the "Approach, Method, Technique" framework (Burnham, 1992) to identify areas of coherence and divergence within and across EAT/L interventions for YP. Several broad areas of consensus were identified despite apparent heterogeneity (see Figure 1). At the level of

approach, EAT/L is understood to lead to beneficial educational or therapeutic outcomes through experiential learning in interactions between horses and humans, to which horses bring unique qualities. Theories of human relationships and horse psychology and behaviour – most notably attachment and intelligent horsemanship theories – have been used to understand relational processes and identify mechanisms of change. At the level of method, EAT/L approaches involve facilitating teams setting up experiences with horses that both establish physical and emotional safety and promote risk-taking and experimentation. Metaphor is widely used to facilitate reflection and translation of experiential learning to wider contexts. This review noted, in line with previous research (Wilkie, Germain & Theule, 2016), that similar techniques were used across all EAT/L programmes, where they were reported, and included observing, looking after, bonding with, and training horses, in addition to emotion regulation and team-building activities. Finally, the review found a broad consensus that the strengths-based, experiential approach and incorporation of human-animal interactions might make EAT/L particularly suited to the needs of at-risk YP through reducing social pressures and facilitating positive experiences and safety in relationships.

The model also helped identify significant conceptual gaps at each level, including a lack of understanding of interspecies and group processes, little attention to environmental and contextual factors, and a lack of detail about specific techniques. Considered together, these areas of consensus and uncertainty may help guide practice, research and the development of theory.

Implications for Practice and Research

Coherence at each level was found despite significant areas of diversity including in the training, background and theoretical orientation of facilitating teams and between

protocol-driven and individually tailored interventions. As with the original AMT model, the framework may enable practitioners to use a variety of methods and techniques, and work from different theoretical standpoints, while still maintaining coherence within an EAT/L framework (Burnham, 1992). For example, practitioners working within an experiential learning frame could introduce reflective processing practices, such as reflecting teams from systemic practice, to open up different perspectives on group processes with horses in a non-judgmental way.

On a methodological level, a better understanding of the essential components of EAT/L is needed. For example, establishing the relative benefits of being in nature in general and being with horses in particular is important, because horses make EAT/L expensive, and rural settings present geographical barriers to access.

At the level of technique, the review found that similar techniques were used across all EAT/L programmes, where they were reported, which may engender greater confidence in the overall coherence of the approach than previous reports (Lac, 2016). However, there are currently inadequate details of methods or techniques to replicate interventions in research or practice. This may be partly due to the difficulty of capturing experiential methods and techniques in words. Future work could consider alternative presentations – for example via video links.

Future research may benefit from greater integration of research and theory from human and horse psychology and behaviour and human-animal interaction (e.g., Brandt, 2004). For example, in order to understand the role of the environment in improving behavioural outcomes in EAT/L, theoretical models could draw upon overlapping ideas from the equine ethology literature and social models of distress in humans, both of which understand problem behaviour as a meaningful response to stressful environments (Dunlop

& Tsantefski, 2017; Johnstone et al., 2019; Rees, 2017; Roberts, 2004). Drawing on concepts from wider disciplines might help develop theories of change. For example, the concept of anthropomorphising – a process through which humans make sense of the actions of non-human beings using internal working models based on human behaviour – has been well developed in evolutionary psychology and anthropology and may help researchers to connect YP's horse-human interactions with improvements in interpersonal skills (Goleman, 2006).

Finally, while there was a broad consensus that EAT/L might be particularly suited to the needs of at-risk YP, in line with previous research (Wilkie, Germain & Theule, 2016), there was little evidence of interventions being tailored to the developmental tasks of adolescence, or to the particular challenges faced by at-risk YP, at the levels of approach, method or technique. For example, a better theoretical understanding of peer group processes and how they operate in EAT/L might enable facilitators to structure group activities to work with key concerns in YP peer groups such as victimisation, status and influence (Santos & Vaughn, 2018). Both quantitative and qualitative research has been outcomes-focused, with less evidence relating to how YP understand the assumptions, values, key components, and core processes in EAT/L.

The evidence for the effectiveness of EAT/L for disadvantaged YP is so far preliminary and equivocal, even when only short-term effects for those who choose to engage are considered. Outcomes and views for those YP who choose not to engage in EAT/L are currently absent from the literature, as are longer-term effects. Further research is needed to better understand whether, how, for whom and for how long EAT/L is beneficial. In line with the person-centred ethos of EAT/L, research and practice methods should seek to include YP's voices in the construction of cultures of research and practice –

for example through grounded theory studies investigating social and psychological processes of change in EAT/L.

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Part 2: Empirical Paper

From the Horse's Mouth: A Grounded Theory Study of Client and Staff Views and Experiences of the Role of Horse-Human Interactions in Equine-Assisted Therapy and Learning for Disadvantaged Young People

Abstract

Introduction Psychosocial interventions for young people (YP) with Adverse Childhood Experiences (ACEs) that include horses may promote engagement and positive change where others have failed. Yet research into Equine Assisted Therapy and Learning (EAT/L) is methodologically flawed and lacks an underlying theory to promote coherence in practice and research.

Aims This study aimed to explore the psychosocial processes underlying the role of horse-human interactions in EAT/L.

Method Qualitative data – transcripts of semi-structured interviews with YP clients (n=13) aged 12-18 and staff (n=6), and field notes of participant observations of EAT/L sessions at a UK-based charity – was collected and analysed using constructivist grounded theory (GT) methodology.

Results The GT describes a journey through EAT/L. Connecting with people and their own bodily experience through co-regulating and attuning with horses – in the social sanctuary of the stables – creates a safe enough space for YP to try responding differently to adversity. YP develop capacities in managing emotions, perspective-taking and communication through interacting with horses that transfer to their relationships with people. YP develop a valued identity through stories told about their interactions with horses that emphasise agency and prosocial qualities rather than deficits.

Conclusion The GT complements and extends existing research in EAT/L, offering a framework for generating testable hypotheses in future research and developing theory-based and person-centred EAT/L interventions.

Introduction

Young People and Risk of Adverse Outcomes

Adolescence is considered to be a sensitive period for social and psychological development, a time of increased risk of adverse social and psychological outcomes, and a window of opportunity for improving the wellbeing of future generations of adults (Sawyer et al., 2016; Dahl et al., 2018; Orben, Tomova & Blakemore, 2020). The Lancet Commission on Adolescent Health and Wellbeing (Patton et al., 2016) marks a recognition that investment in adolescents' mental health is crucial to meeting the United Nations Sustainable Development Goals.

Resilience to stressors among adolescents has been associated with access to key resources including positive relationships and identities, education, material resources, and the natural world (Johnstone & Boyle, 2018). The term "young people" (YP) in this paper refers to those between the ages of 10 and 24, defined as the period of adolescence (Orben, Tomova & Blakemore, 2020). The term "disadvantaged" is used to describe YP excluded from social, economic, or educational opportunities enjoyed by their peers due to factors beyond their control (Auerswalk, Piatt & Mirzazadeh, 2017) and/or facing significant challenges to their health and development (Sandu, 2019). These factors include Adverse Childhood Experiences (ACEs) and markers of youth disadvantage recognised by the UK Government (Department of Education, 2011), including YP with emotional and behavioural difficulties or disabilities, homeless or incarcerated YP, YP with low academic attainment, young carers, and YP not in education, employment, or training (NEET). Disadvantages that limit YP's access to resources, increase their exposure to ACEs and threaten their safety or integrity are associated with increased risk of adverse physical, psychological and socioeconomic outcomes across the lifespan (Johnstone & Boyle, 2018).

Young people (YP) are less likely to access or engage with mental health services than adults (De Haan et al., 2012), and disadvantage is known to impact further on engagement and outcomes in talking therapies (Tedeschi & Jenkins, 2019). Barriers include stigma, a lack of choice or control over intervention, and the negative impact of ACEs on a young person's ability to experience safety and agency in their relationships, their communities, or their own bodies (Tedeschi & Jenkins, 2019; Johnstone & Boyle, 2018). Therefore, traditional therapies that require YP to build a trusting relationship with a professional, in an institutional setting, while regulating the body's stress response to allow verbal communication and cognitive processing, may be poorly attuned to their needs.

Interest in the use of alternative therapies for YP with ACEs is growing (Das et al., 2016). In particular, experiential, somatically-oriented and relationship-focused approaches are gaining recognition (van der Kolk, 2014). Mind-body and behavioural techniques include biofeedback, mindfulness, yoga, and animal-assisted interventions, including those using horses (Blaustein & Kinniburg, 2010; O'Haire, et al., 2015; Naste et al., 2017; van der Kolk, 2014). This project concerns a specific example of the latter approach, namely Equine-Assisted Therapy and Learning.

What is Equine-Assisted Therapy and Learning (EAT/L)?

The umbrella term Equine-Assisted Therapy and Learning (EAT/L) describes a growing number of psychosocial interventions in which clients and clinicians work with horses towards treatment goals (EAGALA, 2018). The practice of EAT/L is based on the supposition that incorporating horses in treatment can be of therapeutic benefit for people who experience difficulties engaging with more traditional interventions.

The Evidence Base for EAT/L

Early findings reported in a number of systematic reviews suggest that EAT/L interventions may lead to improvements in a range of outcomes including anxiety, depression, social skills, emotional and behavioural difficulties, motivation, self-esteem, self-regulation, and quality of life (Kendall et al., 2015; Lee et al., 2016). There has been a particular research focus on YP broadly described as “at-risk” (of poor social, psychological, or educational outcomes) and with emotional and behavioural difficulties who face barriers to accessing or engaging with more traditional psychosocial interventions in healthcare settings (Lentini & Knox, 2009; Kendall et al., 2015; Wilkie et al., 2017).

However, reviewers highlight a number of limitations in the evidence base that preclude firm conclusions (Stern & Chur-Hansen, 2019). These include variable and poorly described intervention content and structure, a lack of manualisation or fidelity checks, small sample sizes, a lack of adequate control conditions or random assignment (Anestis et al., 2014), and heterogeneity of measures (Charry-Sanchez et al., 2018). Importantly, authors have noted that existing EAT/L interventions and research rest on poorly described theoretical foundations. Therefore it remains unclear whether or how EAT/L might lead to improved outcomes, and for whom.

Development and Application of Theory in EAT/L for Disadvantaged YP

There is a consensus in the literature that EAT/L leads to benefits via experiential learning through horse-human interactions, and that EAT/L may be particularly well suited to the needs of disadvantaged YP. The following section explores these claims. Different

theoretical approaches will be considered in relation to the core developmental tasks for disadvantaged YP.

Attachment and Mentalization

The application of theory in EAT/L has largely involved applying attachment theory to describe the relationship between the client and the horse. Several authors suggest that the client's experience of building a trusting relationship with a horse forms a foundation for developing greater trust in the therapeutic alliance with the EAT/L facilitator, and then in other human relationships (Dell et al., 2011; Signal et al., 2013; Johansen et al., 2014). Researchers have proposed that clients may develop trust with horses more quickly than with humans due to horses' particular sensitivity to human non-verbal communication and oblivion to human socio-cultural norms (O'Haire et al., 2015; Lentini & Knox, 2015). Beyond this, there is a lack of clarity in the attachment-based literature about how these relational processes lead to beneficial outcomes (Vincent & Farkas, 2017). Attachment-based theories fail to address how a horses' size, strength, and apparent unpredictability might set them apart from other pets and make them a potential object of human fear, or how this might affect the attachment relationship.

The role of horse-human interactions beyond dyadic client/horse and client/therapist attachment relationships is under-theorised. Few authors have considered the therapist's role in catalysing the relationship between horse and client (Bachi, 2012; Johansen et al., 2014); fewer still have considered the role of the therapist-horse relationship (Wilson et al., 2017). The Animal-Assisted Therapy (AAT) literature suggests human-animal interactions may be beneficial for YP through eliciting caregiving behaviour but this process is poorly understood in EAT/L (Beetz, 2017; Burgon, Gammage & Hebden, 2018).

Recent evidence suggests learning from interactions with horses in EAT/L may be transferable to human relationships through promoting the development of mentalization (Carlsson, Ranta & Traen, 2015; Carlsson, 2017). Mentalizing has been proposed as a social-cognitive and affective process, developed through attachment relationships, through which we come to understand our own and others' behaviour by reflecting on mental states, leading to improved emotion regulation and reduced interpersonal threat (Fonagy & Allison, 2014).

Self-regulation of Emotions, Behaviours and Affect

Self-regulation is the capacity to manage inner states in order to respond adaptively to stressors, in line with valued goals (Baumeister, Schmeichel & Vohs, 2007), and is a key developmental task for YP. Greater emotion regulation capacity has been linked to peer acceptance, reduced risk of bullying, prosocial behaviour, and academic attainment (Compas et al., 2017). Emotion regulation is aided by attachment relationships and cognitive strategies for managing distress, to which disadvantaged YP may have reduced access. Working with horses may provide opportunities for developing emotional awareness through direct, non-verbal feedback; motivation for regulating emotions in order to stay safe (at least) and connect (at best) with the horse; and access to means of regulating emotions that do not rely on cognitive capacities or relationships with people, such as touch (Naste et al., 2017; Yorke, 2010).

Identity Development and Belonging

Developing autonomy and a positive sense of self may be particularly difficult for disadvantaged YP. EAT/L interventions may provide opportunities to step out of disempowering and stigmatising labels such as "youth", "patients" or "offenders" and

experiment with alternative, prosocial identities (Bachi, Terkel, & Teichman, 2012; Hemingway, 2015).

A sense of belonging – defined as feeling part of one or more social groups (Baumeister & Leary, 1995), or “the experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment” (Hagerty et al, 1992, p.173) – is crucial to YP development and wellbeing and can mitigate the association between ACEs and poor outcomes (Baumeister & Leary, 1995; Cashmore & Paxman, 2006; Moses & Villodas, 2017). YP are hypersensitive to social risks (any decision or action leading to peer exclusion or reduction in status) and for disadvantaged YP, social threat can be debilitating (Blakemore, 2018). It has been argued that animals may act as “social facilitators” (Fine, 2019; Mueller & McCullough, 2017), and the presence of horses may enable opportunities to increase perceived social support through facilitating peer relationships (Beetz, 2017; Hauge et al., 2014; Mueller & McCullough, 2017).

Complex Thinking

Complex thinking skills (formal operations; Piaget, 1972) including abstract thinking, reasoning, perspective-taking, and thinking about thinking (King & Kitchener, 1994) are still developing during adolescence, and can be interrupted by ACEs (Cook et al., 2017).

Metaphors have been found to facilitate understanding, remembering, and recall of abstract concepts for YP in therapy through making them more concrete, emotionally valent and personally salient (Fuggle, 2012). The horse is often used as a metaphor in EAT (Carlsson, 2017), which may help scaffold development from concrete to abstract thinking.

Risk-taking, Mastery and Empowerment

Heightened susceptibility to peer influence and hypersensitivity to social rejection in adolescence leads to both increased risk-taking and prosocial behaviour in social situations, depending on personal, relational and contextual factors (Andrews, Ahmed & Blakemore, 2020; Duell & Steinberg, 2019). Negative risk-taking is the leading cause of death in adolescence and has predominated in societal discourse and research, particularly in relation to disadvantaged YP (Duell & Steinberg, 2018). However, the experience of taking risks in relatively safe situations is important for developing neural connectivity, a sense of agency, and skills in managing riskier situations (Giedd, 2015), strengthening a capacity to cope in the face of challenges. EAT/L may offer positive risk-taking opportunities for YP that they cannot access in their daily lives (Duell & Steinberg, 2020). For example, it is suggested that working with a big and powerful animal can lead to a sense of mastery and self-confidence in EAT/L (Kemp et al., 2014; Frederick, Hatz & Lanning, 2015; Burgon et al., 2011).

Summary

Research into EAT/L is still in its infancy, but accumulating evidence suggests that it may be of benefit for disadvantaged YP. Researchers in the EAT/L field have called for the development of the theoretical underpinnings of EAT/L, specifying its key ingredients and mechanisms of action. Broadly, psychological perspectives in the literature propose that the inclusion of horses in therapy enables clients to overcome challenges in their relationships with themselves, with the therapist, and with other people.

While there have been attempts to apply established psychological theories to relational processes in EAT/L, there has been little development of theory that takes into account the potentially unique role for horse-human interactions in therapeutic processes in

EAT/L for disadvantaged YP. Authors of systematic reviews and leaders in the EAT/L field have called for research that seeks to understand the complexities of the relationships between the horse, the EAT/L practitioners, and the client (Bachi, 2012; 2013; Kazdin, 2017).

Aims and Objectives

The study aims to explore YP and staff experiences and views on the role of horse-human interactions in EAT/L for disadvantaged YP. A better understanding of the role of horse-human interactions in EAT/L may help to facilitate research into change processes in EAT/L and improve clinical practice.

The objectives are to:

- (i) Explore YP experiences and views of interacting with horses and people in EAT/L
- (ii) Explore staff experiences and views on the role of horse-human interactions in EAT/L
- (iii) To use YP and staff experiences and views to generate a preliminary model of the role of horse-human interactions in EAT/L

Methods

Constructivist Grounded Theory

Grounded theory (GT) is a qualitative methodology developed for the study of social and psychological processes or action. GT asks, “How do people interact?” (Sbraini et al., 2011). The goal of GT is to generate data-driven theories of social and psychological processes (Tweed & Charmaz, 2012). It was therefore considered appropriate for the exploration of how the horse-human interactions in EAT/L are experienced by YP and EAT/L facilitators, and the generation of an initial model of the social and psychological processes involved. This study will use a Constructivist GT Approach (Charmaz, 2014) as it explicitly

acknowledges the active role of the researcher in the process of constructing a theory through the process of data collection and analysis (Charmaz, 2014).

Setting

The research took place at a charity (“the stables”) offering EAT/L to YP with emotional, behavioural, and learning difficulties. The stables are located on the outskirts of a large city and are comprised of stables, paddocks, an arena, and an office/classroom space. They are home to a herd of six horses – Peanut, Spirit, Blaze, Treacle, Britney, Tilly and Cookie – who vary in size, age, and life experience. The staff team comprises a yard manager, mental health professionals (clinical psychologists and psychotherapists), equine specialists (equine behaviourists and instructors), programme assistants and volunteers.

Participants

Participants were 6 EAT/L staff aged 30-50 and 13 YP aged 12-18. Five staff identified as White British, 1 as Asian British. Four YP identified as White British, 2 White British and Black Caribbean, 5 White non-British, and 2 Turkish and White British. All YP had Special Educational Needs, 2 were autistic, 2 were diagnosed with ADHD, 1 with an Intellectual Disability, and 6 with psychiatric diagnoses including emotionally unstable personality, post-traumatic stress, major depression and anxiety disorders. Participant and intervention details are provided in Table 1.

Inclusion criteria for YP participants were parental/carers capacity to give informed consent, aged 11-25 years, completion of at least 4 EAT/L sessions, and sufficient language and cognitive ability to consent and take part in an interview in English. Inclusion criteria for staff participants were being 18 or older and currently facilitating EAT/L sessions.

Table 1*Participant characteristics*

YP					
ID	Pseudonym	Age	Gender	Intervention	Number of sessions attended
P1	Skyler	15	F	EAT	12
P2	Ivan	13	M	EAL	12
P3	Maya	14	F	EAL	12
P4	Jasmine	14	F	EAL	12
P5	Ryan	13	M	EAL	10
P6	Natalie	13	F	EAL	12
P7	Hasan	13	M	EAL	12
P8	Carly	18	F	EAL	12
P9	Alice	15	F	EAT	12
P10	Liam	12	M	EAT	6
P11	Casper	12	M	EAT	6
P12	Jacob	12	M	EAT	6
P13	Kevin	15	M	EAT	12
Staff					
				Role	
S1	Aspen	35-44	F	MH	
S2	Heather	25-34	F	MH	
S3	Hazel	25-34	F	ES	
S4	Poppy	25-34	F	MH	
S5	Ivy	45-54	F	ES	
S6	Fern	35-44	F	ES	

Note. Role refers to Mental Health Professional (MH) or Equine Specialist (ES). Intervention refers to Equine Assisted Learning (EAL) or Equine Assisted Therapy (EAT).

Intervention

The charity offers individual sessions, 6-session one-hour EAT groups and 12-session two-hour EAL groups of 6 YP. Interventions are informed by the Equine Assisted Growth and Learning Association (EAGALA) model, a leading global association for EAT/L (EAGALA,

2018). The EAGALA model comprises a code of ethics and a set of three standards (see Table 2).

Table 2

Standards of the EAGALA Approach

Team Approach	Ground Based	Solution Oriented
All sessions involve a registered Mental Health Professional, Equine Specialist and a horse/horses working together with the client.	All interactions with horses are on the ground and set up as metaphors for challenges in the client's life, to facilitate experiential learning.	Clients are believed to have the best solutions. Interventions aim to facilitate discovery, solving problems, and overcoming challenges.

The basic structure of all interventions is given in Table 3.

Table 3*Intervention structure*

Week(s)	Key focus/activities
1-2	Safety briefing Observations of horse behaviour Headcollar and brushing demonstration & practice Set individual therapy/learning goals
3-4	Moving a horse out of personal space, leading, stopping, moving backwards
5-12	Lunging and loose work with horses Desensitising - exposing horses to feared objects Group tasks – for example, YP construct an obstacle course from a range of objects (e.g., barrels, crates) and direct a loose horse through it without physical contact
1-12	<i>Additional EAL focus/activities:</i> Employability & Horsemanship Skills AQA Unit Award
1-12	<i>Additional EAT focus/activities:</i> formulation-driven, more active facilitation of insight into experiences in their wider lives
Final session	Activity chosen by YP; review therapy/learning goals; staff feedback, certificates/rosettes

Data collection

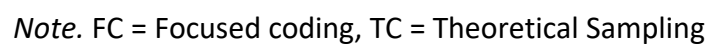
Data was collected between April 2019 and April 2020. Sensitising concepts suggested horse-human interactions in EAT/L were likely to involve complex, non-verbal processes, so data was collected from multiple sources: semi-structured interviews, and

field notes written after interviews and during and after observations of EAT/L sessions (see Appendix B).

Sampling methods As illustrated in Figure 1 and in line with GT methodology, data collection and analysis were conducted concurrently, using the analytic processes of comparison and memo-writing to highlight gaps in the existing data (see Table 3). Theoretical sampling was used to develop nascent processual concepts, including participant observation of a 6-week EAT programme and interviews with 3 participating YP and 2 staff. Full theoretical saturation of concepts would require comparison across dimensions of difference including age, gender and ethnicity, but these were confounded in the data set and further recruitment was limited by the study scope and participant pool. It was agreed in consultation with staff participants that the analysis produced a GT that was deemed useful and resonant with data from 19 participants and over 25,000 words of field notes, and recruitment was stopped at this point.

Recruitment procedures Staff responded to the recruitment email (see Appendix A), and following obtaining written informed consent, participated in a semi-structured interview via telephone, videoconferencing, or in person at the charity. YP were recruited through staff, and written informed consent obtained from YP and their legal guardians. Interviews were in person at the charity or at the YP's school. YP were given a £10 voucher for participation. Consent to observe EAT/L sessions was obtained for all participants. To build rapport, I attended each group as an assistant prior to engaging YP in interviews. To support YP to express themselves, I gave reassurance, control over the Dictaphone, time to respond, and encouraged non-verbal communication including body language or drawing (O'Reilly & Dogra, 2016).

Diagram illustrating concurrent data collection and analysis procedures



Interviews were audio recorded and transcribed. Transcripts and field notes were analysed using NVivo software. Strategies used to aid the development of substantive GT are outlined in Table 4.

Table 4

Description of grounded theory methods and techniques employed in different stages of the study

Stage	Method/Technique	Description
1	Developing sensitising concepts	A scoping review and consultation with facilitators informed the study design and interview topic guide via “sensitising concepts” (Charmaz, 2006)
1-2	Purposive sampling	Initial recruitment aimed to give voice to a wide range of YP across dimensions of age, gender, and ethnicity (Charmaz, 2014)
1-2	Immersion	Transcribing interviews and repeated reading of transcripts to develop familiarity with the data (Charmaz, 2014)
2	Initial coding	Line-by-line coding with gerunds involves giving each line a short label that captures the researcher’s interpretation of what is happening. The researcher tries to remain open to theoretical directions suggested by the data and to follow “leads” to facilitate inductive analysis (Charmaz, 2014)
1-4	Memo-writing	Making written notes on the process of data analysis, including ideas about codes and categories, comparisons with other data, and questions/ directions for subsequent data collection and analysis (Charmaz, 2014)
2-4	Constant comparison	Data is continually compared with other data between and across data sources for similarities and differences (Charmaz, 2014)
2-4	Theoretical sampling	Identifying data sources and collecting data to develop and test categories (Charmaz, 2014)

3	Focused coding	Sorting initial codes into categories; defining category properties (common characteristics of concepts in the category) and dimensions (variations of a property); using the most frequent or otherwise salient categories in the earlier data to code subsequent data (Charmaz, 2014)
3-4	Selecting a core category	Identifying a central phenomenon around which all other categories are integrated (Birks & Mills, 2015)
3-4	Diagramming	Building visual representations of categories and the relationships between them (Birks & Mills, 2015)
3-4	Storyline	Building a narrative about the core category that connects all categories through a set of theoretical propositions (Birks et al., 2009)
4	Theoretical coding	Specifying relationships and processes that connect the categories, refining the core category, using diagrams, memos, constant comparisons, and storyline (Chun Tie, Birks & Francis, 2019)

Data Quality and Credibility

Auditing An independent peer trainee clinical psychologist with GT experience but no knowledge of EAT/L surveyed the initial open coding. The study supervisor acted as an inquiry auditor (Fassinger, 2005), monitoring the overall process of data analysis. Initial open codes were refined following discussion until consensus was reached with peer and inquiry auditors.

Bracketing To maximise transparency, researcher subjectivity was processed and documented throughout the research process through bracketing interviews with a trusted

colleague (see Appendix C), a reflexive journal, and memo-writing (Fassinger, 2005; Tufford & Newman, 2010; Tweed and Glazer, 2012).

Resonance and relevance YP participants declined to take part in the analysis. Codes and category development were refined through discussion with a staff participant and a working GT was presented for discussion to the broader staff team. Staff broadly reported that the model resonated with their experience, with one commenting that the model was a good representation of “*what we know we do*”.

Reflexivity and Researcher Positioning

Reflexivity refers to the researcher’s attempts to make their influences on the research process explicit to themselves and to their audience (Charmaz, 2014; Gentiles et al., 2014). In line with GT methodology and through the bracketing procedure listed above, I (the researcher) have sought to understand how my experiences, assumptions and positions shaped the research. My own conceptualisation of reflexivity is rooted in my undergraduate anthropology degree, which taught me to make sense of my own and others’ realities as constructed through interaction and to attend to power in research relationships (e.g., Gupta & Ferguson, 1997).

Some of my experiences position me as a relative “insider” (Bergen, 2015) in relation to different participants and aspects of the research. I have lived experience of ACEs and I believe I developed resilience as an adolescent through my relationships with horses and people at a local stables. I later benefitted personally from attending an EAT/L course as a paying, adult client. I volunteered as an EAT/L programme assistant before starting the doctorate and completed a clinical psychology training placement at the EAT/L charity. While I remain critical of the evidence base for EAT/L, I acknowledge that I have developed a belief through my personal and professional experiences that EAT/L may be beneficial for at

least some YP and an assumption that the potential benefits of EAT/L are attributable – at least in part – to horse-human interactions.

I have been careful in my interactions with and reflections on the research to pay attention to power imbalances: even as I reflect on my “insider knowledge”, I have foregrounded the privileges I embody as a cisgender, heterosexual, middle class, White British trainee Clinical Psychologist and doctoral researcher (e.g., whiteness, age and class privilege). These experiences and positions have influenced the research question, my choice to adopt a GT approach, my interactions with staff and YP participants and the data I collected, the paths taken in analysis, and the structure and content of the write-up (Gentiles et al., 2014). In recognition of my subjectivity, I offer this analysis as one of many possible explanatory accounts of EAT/L. Part 3 of the thesis offers a more detailed exposition of my influence on the research process, and its influence on me.

Ethics

Ethical approval was granted by University College London (UCL) Research Ethics Committee (see Appendix A). Particular care was taken to ensure each YP’s continued capacity to give fully informed consent and to ensure anonymity since there are few UK EAT/L centres. All data was uploaded immediately to a secure server at UCL, deleted from other devices, transcribed, anonymised and imported to NVivo.

Results

The analysis resulted in 6 categories and 12 subcategories, which were integrated through their relationships to each other and to the core category “finding a safe enough space to try something different” to construct a GT. The results are presented in two sections. Reflecting the GT process, the first section provides detailed descriptions of the categories and subcategories outlined in Table 5, with direct quotes to exemplify

participants' experiences of theorised concepts. The second section presents the resulting GT model in the form of a diagram (Figure 2) and accompanying storyline of the core category.

Table 5

Table showing subcategories of the model and their relationship to categories

Category	Sub-category
A. Problem saturated stories	
B. Being part of a social sanctuary	1. Entering a different world
	2. Rules and boundaries that make sense
	3. Having a valued role
	4. Sharing experience
C. Connecting with my body	5. Bringing emotions online
	6. Co-regulating
	7. Learning to manage emotions
D. Connecting (attuning) with horses	8. Communicating with bodies
	9. Understanding another point of view
E. Connecting with other people	10. People buffering physical threat
	11. Horses facilitating social interaction
F. Developing a valued identity	12. Telling a different story

Category A: Problem Saturated Stories

Liam (YP): [at school] most of the times you have tests. And I mostly don't do it because I know I'm going to fail.

YP told problem saturated stories about themselves as incapable, others as threatening, and the world as confusing and unsafe in many aspects of their lives. Many described difficulties with feeling motivated, connecting to others, and managing intense emotions. These stories left them feeling stuck in limiting patterns of behaviour and interactions: *“when you got anxiety, it's a lot harder to face stuff and that. Like you're worried about basically anything you do” (Ryan, YP).*

Category B: Being Part of a Social Sanctuary

The stories YP told about the stables centred on how different the social and physical environment was to anything they had experienced before. Rules and boundaries were clearly there to protect them from harm, making them easier for YP to respect. They experienced the people as friendlier than at school or in other services. Dimensions along which they felt judged in other contexts such as grades, appearance or (dis)ability had less impact on inclusion than being respectful and kind to each other, the environment and the horses. YP were responsible for looking after and training horses, giving them a sense of purpose and value. Young people described getting to know people and horses through working with them and developing a sense of shared experience. Over time, this developed into a sense of belonging through being part of a *“social sanctuary” (Heather, MH/ES).*

Entering a Different World

YP's fears about entering an unfamiliar environment and meeting new people and animals at the stables were contained by the friendly and informal social environment.

Maya (YP): [Arriving for the first time] I was like little bit nervous because I don't know these people and everything, but they was very like very good, very nice with me.

Staff acknowledged that equine environments tend to be white, privileged, and exclusive and highlighted the importance of being as inclusive and *“welcoming as possible”* (Heather, MH/ES). This was reflected in YP’s descriptions of staff as *“so friendly”* (Kevin, YP), and *“really, really nice”* (Alice, YP) people who *“always have a smile on their face”* (Hasan, YP). Some contrasted this to how people respond to them in other contexts, including psychiatrists *“staring you down”* (Carly, YP) and teachers who *“shout when you’re not doing the right thing”* (Ivan, YP).

Hasan (YP): And now I've seen people, like, stare at me like dirty, like, who are you? Like, what you doing in my store? Sometimes that makes me nervous. It gives me frustration...[at the stables] they were more like chilled with me. Just the staff like they've just been really happy and like all that and have made everyone, like, really happy and want to go even more.

Several participants described an informal environment at the stables. Staff and YP wore informal clothing, and engaged in informal conversations. Staff described actively avoiding the expert position, which was reflected in YP’s descriptions of staff as a *“normal set of people who weren’t there as professionals”* (Carly, YP). This softening of social hierarchies enabled YP to feel *“closer to staff”* (Ryan, YP) and more open to trusting them.

Hazel (ES): we're all just looking down at the poo that we're picking up or we're looking at the horses we're working with. And I think that opens up conversation a lot more than a more formal setting.

Boundaries and Rules that Make Sense

Rules and boundaries apply to both staff and YP and their role in keeping each other safe in a hazardous environment is immediately obvious. This leads to a shift in YP’s

perceptions of rules and boundaries from being punitive and non-sensical in other contexts to providing safety and being worthy of respect at the stables.

Alice (YP): [at school] they have their little laws that are ridiculous like - teachers can't hug you or touch you if you're feeling scared....[at the stables] there are aren't really any. Don't get kicked by a horse by being really stupid. That's a very sensible rule.

Having a Valued Role

Jacob (YP): [We] like attempted to guide [the horses] around and that could help them later. So like, if there's a new staff member, they could trust them, maybe, a bit more, now they've had people around.

Looking after and training horses is constructed as a shared task at the stables. This means that horses, rather than YP, occupy the bottom rung in the social hierarchy. YP have the opportunity to help and care for horses and other people. Staff talk about every YP having something useful to contribute, and this resonated with YP's sense that staff believed in them: *"like they're always confident and like show you can do it"* (Hasan, YP). Having a valued role helped people feel *"included in everything"* and a *"part of something"* (Skyler, YP) and contributed to a sense of belonging at the stables.

Sharing Experience

Sharing experiences with people and horses over time also facilitated a sense of belonging through being *"part of [the] herd"* (Aspen, MH) at the stables. All YP described *"getting to know"* and *"making friends"* with horses, staff, and peers, defined as establishing shared characteristics and experiences and feeling closer to them as a result. Horses became living, breathing metaphors, providing a visible, concrete representation of complex situations and relationship dynamics and a way of expressing their own experience:

Hasan (YP): I chose Blaze cause he gets bullied, like by all the other animals. And it's kind of like me. I got bullied at primary cause I don't know why they just bullied me for fun. And so like, it reminded me of me when I was younger.

A sense of shared emotional experience seemed to facilitate YP's empathy towards horses and – through validating their own experiences – towards themselves: *"it's usually because they're scared. And I can relate to that. Very easily."* (Alice, YP).

Horses provided a shared, external point of focus in interactions between people, which created a safer space for strong emotions in the staff-client relationship: *"seeing the YP get very cross with the horse is easier to work with because we are removed"* (Aspen, MH). Staff were able to share aspects of their own emotional experience with YP through telling *"stories about their experiences with horses and stuff and how it's made them feel"* (Skyler, YP). This facilitated attunement between staff and YP, with YP feeling *"like [staff are] closer to us so they understand what we're going through"* (Skyler, YP). Young people described making friends through sharing experiences with horses – both at the stables and at school.

Ryan (YP): ...that could be a way that would start conversations in the playground like say, if I didn't know how to start conversation with them, I could just like talk about horses and they'll talk back to me. And it's basically something that just helps me speak up a lot.

Category C. Connecting With My Body

This different world is further defined by its sensory features and the emotions they evoke. For example, YP comment on the smells – *"it stinks of poo"* (Casper (YP), field note entry) – and the sounds – *"I was like, is it going to attack me?"* (Carly (YP), in response to a neigh, field note entry). These strong sensations bring embodied

emotional experience into awareness, offering opportunities to try different ways of responding. This is the first step towards YP creating safety in their own bodies.

Bringing Emotions Online

Ryan (YP): obviously horses, they could like kick you, could headbutt you, they could bite you. And I think that's why it's a little bit more nerve wrecking when I went to the stables for the first time.

Horses are experienced as novel and awe-inspiring, potentially dangerous, and affectionate and endearing. Therefore interacting with horses elicits and/or heightens strong emotions and urges, not only fear and safety-seeking but also excitement and thrill-seeking, affection and attachment. Interactions with horses activate the YP's fear system while at the same time providing motivation to overcome their fears through the potential for fun – *"it's more fun to play with the horses"* (Liam, YP) – and for soothing – *"they is furry animals and I just have comfort with them"* (Natalie, YP).

Horses are understood to be – and are experienced as – sensitive to human emotions, and staff support YP to interpret horse behaviour as a reflection of their own internal worlds. YP and staff described horses' ability to *"read that energy of [human] emotion very well"* (Ivy, ES) and to *"tell when you're scared [or] sad"* (Kevin, YP). Therefore, horse-human interactions both bring emotions online and make them visible, helping people to notice, understand, and respond to them.

Co-regulating

Carly (YP): they're like such calm and like easy animals, like my whole nature around them just changes...I don't know what it is it's like I'm calm and I think there's much more of a connection.

When they experienced horses as sensitive and responsive, YP felt noticed, valued and understood – for example Casper (YP) described how a horse *“acknowledges us, from the first time [and] I think he had good think of me”*, and Skyler (YP) explained that horses *“just get you”*. The analysis identified an implicit process of co-regulating whereby horses and humans respond to each other’s physiological states, leading to an overall decrease in arousal and greater sense of connection. Physical touch seemed to play an important role in co-regulation. All YP found stroking and brushing horses *“relaxing”* (Jacob, YP) and many reported that it *“gives more of a bond with the horses”* (Skyler, YP).

Co-dysregulating occurred when YP and horses reacted fearfully to each other’s threat responses, resulting in increasing levels of arousal and disconnection. Staff monitored for signs of co-dysregulation, using the horses’ responses as information about YP internal worlds. This process facilitated attunement between staff and YP (see subcategory 10).

Ivy (ES): we're thinking "why is Treacle being really weird?" Because that kid looks like, you know, he's not doing anything. And it's because Treacle is picking up that there's a whole heap of anger in there.

Learning to Manage Emotions

Poppy (MH): the kids find out that the horses need reassurance from us...and in order to help the horses, they need to think about what they’re doing to remain calm.

Staff supported YP to experiment with different strategies to regulate their arousal levels, for example using physical exercise to *“run off energy”* (Fern, ES) or demonstrating how to slow their breathing. Horses reward successes by visibly calming down or connecting with the YP, accelerating the learning process.

Ivy (ES): ... the horse will go, oh, look that person's breathing out – that person is looking really slow and quiet, and I'd like to be near to that – and the horse will copy and model what the human was doing.

Over time, YP experience an increasing sense of responsibility for the horse's physical and emotional wellbeing. This motivates them to try out strategies that help them to stay calm and connected – *"when they are worried, we need to be calm because they feel when someone is worried"* (Maya, YP). Through horse-human interactions, YP create a sense of safety in their own bodies that extends into their wider lives. Ryan (YP) noticed that *"ever since I've spent time with those horses, I've managed to keep myself under control"*.

Category D: Connecting with Horses

Heather (MH/ES): ...a constant process of gaining their trust, gaining their respect through how you handle them and how you interact around them with your body.

Through the process of co-regulating with horses and learning to manage their emotions, YP create a safe enough space to experiment with different ways of interacting with horses. YP experience horses as sensitive and non-judgmental – horses *"don't care what you look like"* (Carly, YP) or *"how smart you are"* (Alice, YP). They therefore felt better understood, more accepted and more tolerant of feedback from horses than people. Horse-human interactions therefore created a safer space to try out different ways of relating, including attuning to another's body movements and moment-to-moment experience.

Communicating with Bodies

YP develop sensitivity to horses' energy levels and body language and use their own bodies to communicate. Field notes document the process of attunement through body movement:

I noticed as they walked around the arena side by side the horses legs moved in the same rhythm as Jacob's, in contrast to the first session where Jacob sat fearfully in one corner and the horse nibbled at a bush in the other (field note entry, EAT session 6).

Staff supported YP to be increasingly directive with their body language, for example asking a loose horse to move out of their personal space or over an obstacle by *"bringing up energy levels in a joyful way"* (Fern, ES). Most YP were unfamiliar and apprehensive about using their bodies to communicate, but described learning to *"have that little bit of assertiveness in me"* (Ryan, YP) even when they felt nervous. *"Gaining the horse's respect"* (Jacob, YP) through sensitive, clear, assertive body language lead to a greater sense of safety in the relationship. For many YP, the experience of influencing a large, powerful animal through using your body was a *"hugely empowering experience"* (Hazel, ES) that lead to a sense of agency.

Jasmine (YP): So it's all bluff, but you just kind of like put your arms out and you're like, move out my way ...It was a bit strange at first because I've never done it before...but then as it progressed, I was better at it and they just moved.

Understanding Another Point of View

Jacob (YP): Cause now I feel like I've been able to like listen to other people's opinions. And yeah. Then maybe I could understand – I feel like I can understand someone else's point of view.

YP experience horses as honest – “horses can’t lie” (Alice) – and so find it easier to link their behaviour to their feelings and intentions than humans. Interactions with horses therefore enable YP to practice mentalizing through interpreting horse behaviour in terms of mental states. This enabled YP to attune to horses’ emotional needs and to try responding differently. Successful mentalizing was immediately rewarded with a sense of connection.

Alice (YP): Animals don't not like you for no reason...Peanut's reason was she was scared because she's small... So I know now that I've got to make myself quite small. Walk slowly. And now she's good with it. Now, people never tell you that.

Others described how attuning to horses through interpreting body language and inferring mental states enabled them to attune and respond to other people’s emotional needs, leading to increased safety and trust in their human relationships.

Jasmine (YP): I realized that humans actually use body language a little bit to kind of imply things that they don't want to say...I didn't notice this before, but after equine...like, [my friend] was looking down a lot and she wasn't making eye contact with anyone...so I was like, OK, there's something wrong with you. What's going on?... I think she has a lot more trust in me now because she realized that I noticed like that what was wrong with her and no-one else did (Jasmine, YP)

Staff actively support YP to transfer capacities in mentalizing horses to human relationships through the use of metaphor. This facilitated the process of attunement between YP, staff and horses and lead to greater empathy for other people and compassion towards themselves.

Skyler (YP): [staff] try to relate different scenarios with horses to things on the ward...so when a horse is acting shy or whatever...and you relate it to a person, you kind of take yourself out of the situation and you actually think about it and you're like hmm that person might be going through some shit right now...

Category E: Connecting with Other People

Liam (YP): It was scary at first. Then when I get to when I get to know everybody. It's really fun.

This category describes the processes through which interactions with horses contribute to creating a safe enough space to try different ways of relating to others.

People Buffering Physical Threat

Heather (MH/ES): to have someone by your side who's...helping you make it safe enough for you to be there and to regulate – help you regulate those emotions is already a big step in therapy.

The physical threat inherent in horse-human interactions seemed to outweigh the social threat inherent in human interactions, leading YP to seek safety in connections with others. Staff constantly monitored safety, and YP experienced staff as supportive and helpful, always “*being there*” (Natalie, YP), which increased YP’s tolerance for fear and frustration. At the same time, staff tried to “*fade into the background as much as possible*” (Hazel, ES), and YP described how staff “*helped us develop our own answer*” (Jacob, YP), encouraging YP to learn through trial and error.

Jasmine (YP): I knew I could talk to them if I needed...I knew that they would show me things I didn't know, or that they would help me. It was nice to know that.

YP's relationships with staff quickly became a secure base they felt they could explore from and a safe haven they could return to. Staff supported YP to expand this secure base to include peer relationships, including setting team tasks where *"they've got a massive couple of horses in the arena. If they want to stay safe, they have to look out for each other"* (Poppy, MH). This resonated with YP's experiences of receiving and giving support with peers.

Interviewer: What helped you to work through things when it was hard?

Casper (YP): My friends.

Horses Facilitating Social Interaction

Horses rewarded and therefore elicited caregiving behaviour in staff and YP, providing opportunities to witness each other and experience themselves being caring and trustworthy. This provided a safe enough space for staff to relate differently to YP – for example to ask *"even the most distrustful YP or the most, or you know, the ones that we distrust"* (Aspen, MH) to take responsibility for a horse.

Ivy (ES) I'll just give a rope to one young lad who is effing and blinding and I'll say, 'oh – could you just look after Peanut for me for a minute?' And he will just stop...and take Peanut off and then he'll tell his teacher off or the person he's having an argument with, saying "Oh keep your voice down, you're worrying – you're bothering Peanut".

Working with horses gave YP a shared purpose, and since horses rewarded sensitivity and assertiveness with co-operation, this contributed to the development of prosocial peer group norms and collaborative behaviour. YP described gaining skills

and confidence and making new friends through working with previously unknown or disliked peers. They talked about team problem-solving, *“listening to another person’s ideas”* (Liam, YP) and *“being a leader”* (Ivan, YP) and feeling rewarded for effective teamwork by greater connection to both horses and peers.

Ryan (YP): there was quite a few people in there that I didn't actually get along with at the start and I think when I worked with them with the horses and that I think we just basically not only did I create a bond with the horses but I created a bond with a couple of people in there too.

Equally important was the experience of *“getting it wrong”* (Carly, YP) and receiving immediate non-judgmental feedback from horses and encouragement from staff and peers to try something different. This strengthened a sense of themselves as capable, and others as supportive.

Alice (YP): it would work, or it wouldn't and we would we try something else and keep going... But you know, [people and horses at the stables] don't make me feel stupid when I don't know things.

Many YP described how their experiences with horses gave them confidence in social situations in other parts of their lives, including at school. Natalie (YP) remembered *“before I started equine I used to just be in one corner by myself...then once I started equine I've just been in a group of other people speaking to them”*. Several YP described developing the confidence to risk their own social status to help others:

Hasan (YP): Ethan was getting bullied...and it's kind of like Blaze. He got bullied as well. And then I was kind of like I stood up for Blaze [the horse] ...I was just like, heads up, shoulders up, like showing that I was confident...And like Ethan I stood

up for him and I was showing them like, Ethan's just not like someone that you can pick on. I was just like showing people that I can stand up for people. ... I literally moved him out the areas so like he didn't, like, get told. Then we started to make friends.

Category F: Developing a Valued Identity

Ryan (YP): I've faced my fears with the horses. Obviously I'm a lot braver than I thought...ever since the horses and that I think I've come this far, like, why give up now? I just want the best for me in the future.

Through their interactions with horses and people at EAT/L, YP developed a sense of themselves as more capable of making friends, facing their fears, and deserving of a better future.

Telling a Different Story

Liam (YP): The horses helped me achieve my goal in school by turning my behaviour around, going to lessons and doing my work.

Telling stories was identified as a key process for identity change through EAT/L. YP told stories about their experience at EAT/L in which they had agency in facing and overcoming fears of horses and people. The stories identified new resources for meeting challenges in YP's lives, including supportive others and personal qualities including creativity, kindness, and bravery. YP described feeling able to draw on these resources in different contexts and in the future, leading to a sense of competence and hope.

Ryan (YP): I don't think I'd be as confident right now like speaking to you if it wasn't with the horses - I think I'd be sort of be like struggling to get these words in my mouth. But I've spent those times with the horses and that is just basically a long term

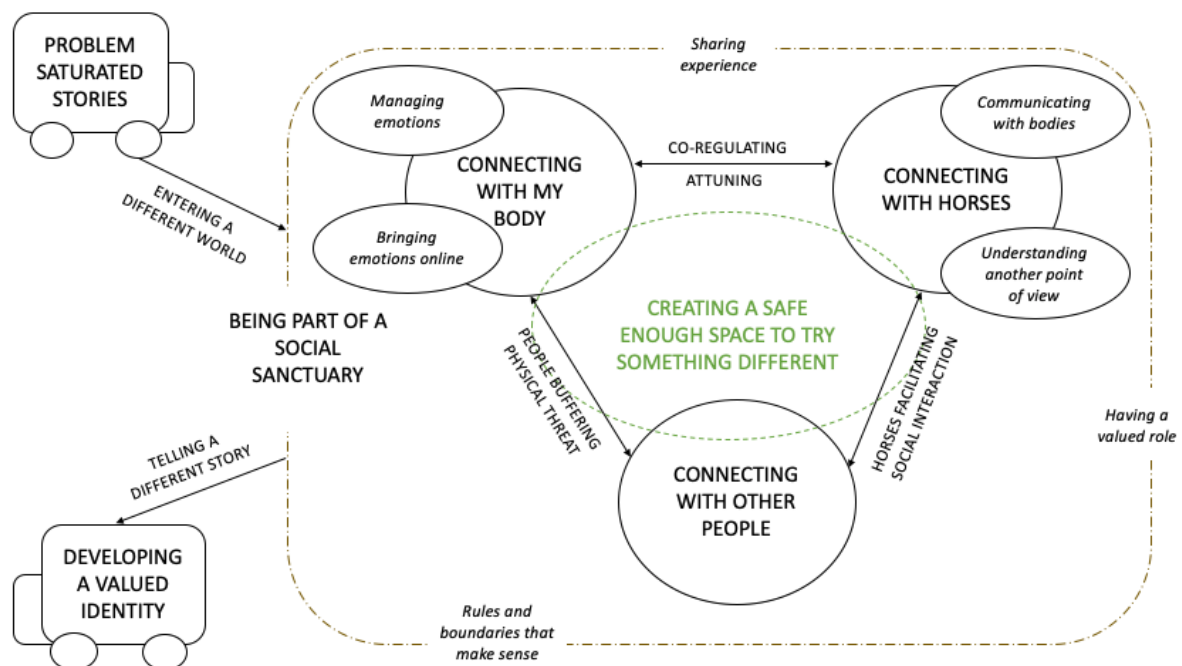
experience. When I'm going for a job interview or something, I think I'd find it easier to speak and I'd not let the nerves get to me.

Core Category: Creating a Safe Enough Space to Try Something Different

This section outlines a storyline of the core category, representing the YP's journeys through EAT/L. Categories and subcategories are integrated through a series of theoretical propositions specifying the processes through which horse-human interactions in EAT/L create a safe enough space to try something different. The resulting model is shown diagrammatically in Figure 2.

Figure 2

Diagrammatic representation of a grounded theory of the role of horse-human interactions in EAT/L



YP are limited in other contexts by *problem saturated stories* that dominate their lives, in which they lack the resources to navigate a threatening social world and become stuck in restrictive patterns of behaving and relating. At the stables, the physical threats are

greater than in other contexts, while the social threats are reduced, giving YP the experience of *entering a different world*.

Being part of a social sanctuary describes how the physical and social environment at the stables is structured through interactions between people and horses and how this context shapes YP's experiences of interactions. Physical and social *rules and boundaries that make sense* enable YP to navigate the unfamiliar stables environment. People work together to look after and train horses, and over time YP develop a sense of belonging through *sharing experience* and *having a valued role* at the stables. The physical boundaries and social inclusivity create a safe enough space for YP to tolerate the strong emotions that are initially evoked by the unfamiliar stables environment (*creating a safe enough space to try something different*).

Connecting with my body describes both the process of strong emotions being activated by horses (*bringing emotions online*) and the process of *co-regulation* in interactions with horses through which YP become aware of what is happening in their bodies and appreciate that their emotions and behaviours have an impact on others. Supported by staff and peers (*people buffering physical threat*) and reinforced through feedback from horses, YP develop skills and a sense of agency in managing their internal worlds (*learning to manage emotions*). YP feel safe enough in their environment and bodies to start to experiment with different ways of interacting with horses (*creating a safe enough space to try something different*).

Connecting with horses describes the processes through which YP learn to develop trust and respect in their relationships with horses through *attuning* (noticing, understanding and responding) to horses' behaviour and mental states (*understanding another point of view*) and how to use this understanding to communicate with them using

their bodies and energy (*communicating with bodies*). Feeling safe enough in the environment, in their own bodies, and increasingly in their relationships with horses, YP develop agency and confidence to try out these new skills in perspective-taking and communication in relationships with people, thereby *creating a safe enough space to try something different*.

Connecting with other people describes the processes through which YP's experiences with horses make it more necessary (*people buffer physical threat*) and easier (*horses facilitate social interaction*) for them to experiment with different ways of relating to other people (*creating a safe enough space to try something different*). Experiencing successes in their relationships with horses and people at the stables, and having these witnessed by others, enables YP to *develop a valued identity* through *telling a different story*. These stories - in which they have the confidence and agency to overcome their fears and make friends - create opportunities for trying different responses to challenges at home and at school.

Discussion

This study used qualitative methods to construct a tentative theory of the role of horse-human interactions in EAT/L for disadvantaged YP. The proposed model captures the interactional processes between YP, staff, horses and the social and physical environment of the stables that create a safe enough space for YP to develop different ways of responding to social and emotional challenges. In line with constructivist ideology, the model is offered as one possible interpretation of the role of horse-human interactions for YP who engaged in EAT/L, which is applicable in other settings to the extent that it is found to be useful and

relevant. This section will position the study in relation to relevant literature, before considering clinical implications, limitations, and suggestions for future research.

Positioning the Study in the Context of Relevant Literature

The current study findings offer an holistic framework. The use of theory in the EAT/L literature has been criticised for lacking coherence – for example, applying different models to relational processes and skills acquisition, with little attempt at integration (Bachi, 2013; Vincent & Farkas, 2017). In the current model, previously differentiated therapeutic and learning processes are conceptualised as different levels of a broader process of connecting. The model therefore both compliments and extends the application of attachment (Bachi, 2013; Bowlby, 1982), mentalization-based (Carlsson, Ranta & Traen, 2015) and experiential learning theories (Notgrass & Pettilini, 2015), which have dominated the EAT/L field thus far. It offers a framework, grounded in YP and staff experiences, for developing coherence within and across interventions, while creating possibilities for integrating new approaches, methods and techniques. Crucially, the model offers direction for developing and adapting EAT/L for the particular needs of disadvantaged YP.

Attachment and Peer Relationships

The model shares its triangular structure with previous conceptualisations of a triadic horse-therapist-client relationship (Carlsson, 2016, Naber et al., 2019) and extends the explanatory power of previous models to more complex horse-human interactions in group EAT/L, the predominant intervention for YP. The current model allows for YP to experience threat and seek security in different relationships at different times in EAT/L (seeking support from people to buffer physical threat posed by horses, or interactions with horses to buffer social threat posed by people). This helps move the debate beyond questioning whether the horse is an object of fear or of security, or whether the clients'

primary attachment is to the therapist or the horse (Vincent & Farkas, 2017). The broad categories of “connecting” and “creating a safe enough space to try something different” illustrate the way in which relationships with horses, multiple staff members, peers and the environment contribute to the experience of a secure base, rather than relying on one primary relationship. This opens possibilities for exploring the role of EAT/L horse-human interactions in attachment processes that are particularly relevant to disadvantaged YP, including relationships with professionals and peers (Laible, 2007; Murphy, Laible & Augustine, 2017).

Previous research has identified features of an attachment bond in human-dog dyads (Hoagwood, 2017), but research into attachment processes in horse-human relationships is lacking. Building on the model in the current study, future research could use behavioural observations to examine attachment criteria – proximity maintenance, safe haven, secure base, and separation distress – between horses and humans and whether and how these are associated with the development of relationships with professionals and peers during EAT/L sessions. The current findings suggest that developing a caregiving role in relation to horses may facilitate therapeutic change for YP. Future research could explore the extent to which horses display attachment behaviours towards YP and whether these behaviours influence physiological, psychosocial or behavioural outcomes – for example cortisol levels or prosocial behaviour.

Emotion Regulation and Embodied Experience

Unlike previous conceptualisations of the horse as a mirror or therapeutic tool, co-regulation and attunement describe relational, reciprocal processes that lead to greater connection to one’s own embodied experience *through* connecting with others. The model aligns with recently developed trauma-informed EAT/L approaches which propose dynamic

physiological and emotional horse-human interactions as potential mechanisms of change (Shultz-Jobe, McFarland & Job, 2018; Scopa et al., 2019).

A recent pilot mixed-methods study (Hemingway et al., 2019) using measures of skin conductivity response, video playback, and interviews found that student participants initially learned to manage emotions (initial fear of horses) at an emotional and bodily level (calm body language and reduced emotional arousal) in EAT/L, with cognitive awareness and processing coming later (recognising a feeling of power and calm) (Hemingway et al., 2019). This lends some support to the primacy of bodily processes in the model.

The model proposes that YP increasingly take an active role in emotion regulation, attunement and communication, motivated by a sense of responsibility for the horse. This is consistent with observations of human caregiving behaviour in horse-human interactions (Burgon et al., 2011; Naste et al., 2017). While the therapist traditionally takes on the caregiving role and initiates co-regulation in talking therapy (Koole & Tschacher, 2017), the model suggests that activating YP's caregiving system may catalyse self-regulation and behaviour change in EAT/L.

Socioemotional and Socio-Cognitive Development

The model proposes that interactions with horses facilitate the development of YP's capacities in emotion regulation, communication, and perspective-taking and that these are transferrable to human relationships. This finding speaks to a gap in the existing literature relating to the mechanisms through which building relationships with horses in EAT/L lead to more positive human relationships. In a recent qualitative study, YP with ACEs described a similar process of developing "communication competencies" (Craig, 2020, p. 1) through EAT/L that transferred to peer, family and teacher relationships, lending support to this proposition.

The findings also suggest that horse-human interactions elicited prosocial peer group norms in EAT/L, leading to an increased sense of connection and belonging with peers, a safe enough environment to further develop social skills, and increased positive risk-taking both at the stables and at school. These findings align with a body of research suggesting that improving prosocial behaviour, mentalizing/perspective-taking and emotion regulation abilities may enable YP to better navigate the social environment, leading to reduced risk of poor mental health (Andrews, Ahmed & Blakemore, 2020). The current GT model offers a theoretical rationale for evaluating EAT/L as one such intervention.

Identity Development and Belonging

The conceptualisation of developing a valued identity is similar to the Narrative Therapy construct of the narrative self (White & Epston, 1990): that the stories people tell and are told about who they are guide meaning-making, actions, and identity development. It fits with previous qualitative and quantitative findings that EAT/L leads to feelings of mastery, self-confidence (Dunlop & Tsantefski, 2018; Hemingway et al., 2015) and positive identity development (Craig, Nieforth & Rosenfeld, 2020).

The model proposes that emotionally salient experiences in interactions with horses in EAT/L – such as directing a 600kg animal using only body language – might generalise to broader positive change via the stories that YP tell about themselves and the stories others tell about them. The model suggests that the sense of being part of the community at the stables may have helped make these shared experiences and stories a meaningful source of identity material. This proposition is consistent with Kolb's (2014) experiential learning model, which comprises experience plus reflection and abstraction, and upon which many EAT/L approaches are founded. However, it extends existing approaches by providing a rationale for integrating experiential and narrative approaches in EAT/L, thereby

opening the door to a body of evidence-based theory and practices that foster positive identity development and a sense of belonging – crucially important processes for YP (Denborough, 2008; Epston, 2011; Adler, 2012; White, 2007).

Clinical Implications

The model highlights several aspects that are of central importance to the YP and staff participating in and facilitating EAT/L and therefore may provide direction for the development of practice. For example, it underlines the importance of including the environment in EAT/L development and delivery, such as designing environments (with YP consultation) that are inclusive, elicit prosocial peer group norms, and offer opportunities to take on valued roles.

The model offers a conceptual framework for understanding how interactions with horses may lead to positive outcomes in clinical practice. This may enable formulation-based tailoring of methods and techniques to individual or group needs, and selection of outcome measures. In addition to commonly employed measures of emotion regulation, agency and self-confidence, the model suggests that greater use of measures of non-verbal communication and physiological processes might increase precision in clinical evaluation and future quantitative studies (Malinowski et al., 2018).

The framework provides a rationale for integrating techniques from other approaches, for example narrative practices such as definitional ceremonies to strengthen preferred identity narratives or the use of relaxation techniques to support YP to initiate co-regulation with horses. The complementarity between EAT/L and body-oriented interventions has been noted previously, and there are examples of their integration – for example interventions combining mindfulness approaches (Burgon, 2013) or dance/movement therapy (Ford, 2013) with EAT/L.

The grouping of emotional experiences around fear, excitement and calm/connection in interactions with horses evokes the threat, motivation/drive and affiliative/soothing systems proposed by CFT to organise mammalian behaviour (Gilbert, 2009). According to CFT, overactive threat and/or drive systems and an under-active soothing system leads to distress; balancing the systems leads to greater wellbeing (Gilbert, 2009). This resonates with EAT/L processes which involve reducing perceived social and physical threats, and developing the YP's motivation and capacity to soothe horses and themselves. The three systems apply to both horses and humans and may be a useful psycho-education tool to help normalise, understand, and balance fear responses.

Since it describes mechanisms for developing non-verbal emotion regulation and communication skills, the model may have utility for facilitators of EAT/L interventions for neurodiverse YP, which are similarly lacking in theoretical underpinnings (Trzmiel et al., 2019). For example, training therapists in sensitivity to horses' responses may help them attune to YP needs without relying on language.

Limitations and Directions for Future Research

The study used robust qualitative methods and included multiple data sources, allowing tentative identification of implicit processes. The first author joined sessions as a participant observer, and has lived experience as both an EAT/L client and as an EAT/L facilitator. This aided recruitment and the collection of rich data; it was also a potential source of bias as the researcher was personally and professionally invested in EAT/L. Bracketing the researcher's experience was less feasible and their connection to the stables was more obvious, potentially precluding participant disclosure of negative experiences. The sample was self-selecting – participants chose to engage in both EAT/L and the study. Experiences of participants who drop out are missing from the account. The model was

confirmed through staff consultation, but YP views were unavailable during analysis and this should be redressed in future research. Data collection was limited to one centre, producing rich data but limiting applicability of findings in other settings. Nonetheless, comparability with similar themes in existing research lends support to the wider relevance of the results. For example, Kendall et al.'s (2015) qualitative analysis of YP interviews identified horse/human connection, multisensory experiences, and an inclusive social environment as mechanisms of change in EAT.

The study was necessarily limited in scope. Further data would be required to make meaningful comparisons across participant age, gender and ethnicity, since these categories were confounded in this study. Future research should attend to the interaction between protected characteristics and experiences of EAT/L, with a view to promoting inclusion, particularly given recent discussion around systemic racism and gender inequality in the equine profession (Weathersbee, 2019). Future research could include follow-up data, to test the model's hypotheses that narrative practices facilitate positive change in YP's wider lives. Using visual data (e.g., photos/videos) to aid recall in interviews and observations is recommended.

Future research could use the model to build upon research investigating physiological processes in EAT/L (García-Gómez et al., 2020), the use of biofeedback in therapy (Tonlin et al., 2020), and the role of synchronizing in the therapeutic relationship (Koole & Tschacher, 2017). For example, exploring processes of co-regulating and attunement through investigating synchronicity of human and horse movement, physiology and subjective experiences of change. Exploring the association between emotionally salient experiences, and changes in narrative identity in EAT/L is another interesting possibility.

While this study contributes to the EAT/L evidence base, important questions remain. The participants in this study reported overwhelmingly positive experiences of EAT/L. This is likely to have been influenced by several sources of bias, including the researcher's personal and professional experience of EAT/L and the lack of representation in the study sample of YP who dropped out of EAT/L or chose not to take part in the first place. Further research is needed to better understand which groups of YP are likely to benefit from EAT/L, and which groups are not, and to identify any barriers and facilitators to engagement.

The model proposes that horse-human interactions are a key mechanism of therapeutic change. However, similar processes and outcomes have been identified in other alternative therapies. For example, synchronous processes between yogis, mindfulness practitioners, dance or drama partners may also lead to therapeutic benefit via co-regulation (Rousseau et al., 2005; van der Kolk, 2014). Interacting with the natural world without horses may also foster connection to self and others and the development of a valued, agentic self (Conlon et al., 2018; Corazon, Schilhad & Stigsdotter, 2011; Fernee et al., 2019). Further research should seek to isolate the role of the horse, to examine whether the expense of including horses in interventions is proportionate to therapeutic benefit.

Conclusions

This study is the first to answer the call for EAT/L theory development by using GT methodology to theorise the role of horse-human interactions in EAT/L. The model builds on previous research and theory, and may support the development of testable hypotheses about socio-psychological processes in EAT/L, enabling greater precision in future efficacy studies.

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Part 3: Critical Appraisal

Constructivist grounded theory (GT) assumes that multiple social realities are possible and can exist at the same time and in the same place. GT proposes that action and meaning shape each other. GT views data as co-constructed through the patterns of action and meaning-making that characterise interactions between research participants and researchers. From a GT perspective, the researcher's subjectivity is integral to the research. Rather than viewing this subjectivity as necessarily problematic and trying to minimise the researcher's influence on the data, GT considers it to be a potential resource, to the extent that it is made visible and understandable. Constructivist GT calls for "methodological self-consciousness" (Charmaz, 2017). This involves examining the researcher's world view, language, meaning-making processes, and actions in the research process. It includes attending to unearned privileges that the researcher carries and identifying intersections, differences and shifts in relationships with power, identity and marginality for participants and researchers (Charmaz, 2017).

This section will follow a framework set out by Gentles, Nicholas and McKibbin (2014) for reflexively considering the construction of a GT study. I will consider the reciprocal processes of meaning-making and action involved in methodological decisions, participant interactions and data collection, analysis and writing, and finally the influence of the research on me.

Positioning Myself in Relation to the Research

I open this chapter with a positioning statement, in the form of a summary of reflections from reflexive research diary entries and bracketing interviews spanning two years (Tufford & Newman, 2010).

I am a Clinical Psychology trainee in my mid-thirties. I also identify as a White British, middle class, heterosexual woman, and I grew up in a relatively affluent, rural area. I recognise these aspects of my experience as unearned privileges from which I have benefited and that have shaped my experience of life in different ways to some of the study participants.

I also experienced several Adverse Childhood Experiences that resulted in a period of disengagement from school in early adolescence. I started attending a local stables after school and at the weekends, and I believe my relationships with the horses and people there were key resources that enabled me to re-engage with school and to develop resilience for later life. There may be aspects of these experiences that bear some similarity to those of the YP in this study.

I have continued to turn to nature and the outdoors to find calm, joy and strength to manage life's big and little stressors. I hold a belief that interactions with horses and the natural world can help buffer the effects of adversity through providing a sense of connection and meaning. I attribute this to familial and societal discourses and lived experience.

I have felt a sense of connectedness to the YP's experience. There are several instances in my research diary where I felt moved almost to tears during a YP interview. I have come to understand this feeling as an emotionally valent sense of connection to my own adolescent experiences. This realisation was helpful as it allowed me to prepare for the potential emotional impact of interviewing participants, and prompted me to actively make time and space outside of the interviews to process "my stuff". It also allowed me to fully recognise that my perspective is the product of a specific set of circumstances that have structured my experience in many different ways to those of the YP accessing the charity.

Over the past four years, I have participated in several Equine Assisted Therapy and Learning (EAT/L) programmes, both as a client and a facilitator. As a client, EAT/L gave me valuable insight into my own relationship patterns and a belief that the work could be beneficial for others. As a facilitator, I have felt energised by working with others outdoors (having spent much of my working life in an office or clinic) and inspired by witnessing what seemed to be a transformational experience for many YP.

I also hold a strong commitment to and affiliation with the idea that healthcare should be based on the best available research evidence, reified through several years working as a researcher developing, implementing, and delivering evidence-based psychosocial interventions. While training in the Equine Assisted Growth And Learning Association (EAGALA) model (EAGALA, 2018), I felt uncomfortable that people could claim to be “Certified Practitioners” of EAT/L after 5 days’ training. This concern originates in my observation that facilitating EAT/L programmes requires considerable skill, but is also influenced by having dedicated many years of my life to training and therefore having a vested interest in attributing worth to certain types of expertise. In addition, the mismatch between the enthusiasm and conviction of proponents of EAT/L (and I include myself in this camp) and the poor state of the evidence base sits uneasily with my academic training. My motivation for conducting research in EAT/L has grown from this combination of passion and scepticism.

Situating My Position in a (Brief) Historical Context

When Dr Boris Levinson presented his first case studies reporting on the use of animals to facilitate therapeutic processes at the 1961 Annual Meeting of the American Psychological Association, he was met with laughter and ridicule. The healing potential of

animals has since been either written off as “quack” (excuse the pun) or popularised through sensationalised stories in the media (Fine, Beck & Ng, 2019). Against this backdrop, practitioners and researchers have struggled to establish Animal Assisted Interventions (AAI; including EAT/L) as a credible, complementary intervention with clearly defined therapeutic processes. The vast majority of studies have been under-funded, and a large number of systematic reviews have concluded that the evidence is methodologically flawed and therefore inconclusive.

More recently, as AAI research has gained momentum and captured the public imagination, better-funded, more rigorous studies, and more sensible claims, have been possible. Nonetheless, fundamental questions remain unanswered, including what makes AAI worth investing in over and above more traditional therapies (Serpell, 2017). The origins of EAT are generally attributed to Olympic dressage rider Liz Hartel. Hartel was paralysed below the knees, and after winning the Olympics in 1952, she founded Europe’s first riding centre for people with physical disabilities. Hippotherapy and therapeutic horseback riding have since been established as a complementary therapy with a focus on physiological benefits, although the field has struggled to move beyond early-phase research (Wood & Fields, 2019). The potential psychosocial benefits of equine-assisted activities started to gain recognition with the founding of EAT in the 1990s (Notgrass & Pettinelli, 2015). In the last decade EAT/L practice and research seems to have grown exponentially, accompanied by similar discourses to those surrounding earlier AAI.

Narratives that sensationalise or ridicule EAT/L frequently shape my day-to-day interactions with others. For example, several friends and colleagues sent me a video of a horse visiting palliative care patients in a hospice, accompanied by heart and tears emojis and praise for the work I do (North Devon Hospice, 2017). Friends, family and colleagues

tend to either be fascinated, enthusiastic, and sometimes moved by my work in EAT/L, or to see it as a bit silly – a career choice made by a girl who wanted a pony. Depending on the context, this can lead me to feel that the work I am doing is either potentially miraculous, or to doubt its utility and my motivation entirely.

Considering Power, privilege, and Social Graces

The point about girls and ponies might seem trivial, but it is a concept with an important history that I did not fully appreciate when I started this research project. EAT/L is rooted in Western psychology and social work and in the Western equestrian tradition, both of which have an inadequately examined colonial history. Horses have long been recognised as symbols of power and wealth, and research suggests that horse ownership facilitated wealth inequality in early agricultural societies (Kohler 2017), and later, European colonization and conquest (Mitchell, 2016). This legacy persists in the widespread inequality and white supremacy in the Western equestrian world that makes it particularly inaccessible to people whose identities are minoritised.

My awareness of these issues grew during the research process, prompted by observations (in person and via the literature) that people with minoritised ethnicities tend to be overrepresented in the target populations for EAT/L, and under-represented in the equestrian environments in which they take place, and by my own professional and personal development. While I have attempted to write social graces into my research, I developed a sensitivity to the role of “isms” too late to adequately address them in data collection and analysis. I hope that future research will pay more attention, at an earlier stage, in order to explore the role of social graces on YP access to and experiences of EAT/L.

Considering the Evidence Base for EAT/L for Disadvantaged YP

As noted in Part A, there has been little attention in the evidence base to the experiences of YP for whom EAT/L is not engaging or beneficial. In addition, the longer term effects of EAT/L are poorly understood. Several potential barriers or harms seem possible. Barriers might include difficulties accessing rural locations by public transport, being allergic to horses or feeling too fearful of them to engage. Many disadvantaged YP face multiple individual and contextual challenges, and evidence suggests that high contact, long term, and multi-component interventions are most likely to provide the support needed to make lasting changes in their lives (Mawn et al., 2017). The majority of interventions reviewed in Part 1, and the EAT/L interventions studied in Part 2 are short term and far removed from the YP's everyday contexts. It may be that novelty effects of being in a different and more enabling environment are inflated for disadvantaged YP, and that any improvements are short lived. It is not inconceivable that EAT/L may cause longer term harms – for example through the impact of losing a meaningful activity or valued identity. This study, and others in the EAT/L field, would benefit from follow-up interviews and measuring outcomes in different contexts – for example peer relationships and engagement in community activities – to explore these possibilities and prevent unintended harm.

Constructing a Research Question and a GT Methodology

In constructivist GT, the literature review is delayed until after data collection and analysis, to avoid forcing the data into preconceived ideas (Charmaz, 2014). The conceptual argument from the GT research findings is used to frame, integrate and assess the literature (Charmaz, 2014). In this study however, an initial scoping review of the literature was necessary to fulfil UCL departmental and REC requirements that the research proposal provide context and justification for the research question and methodology.

The challenge of navigating the competing demands of GT methodology and research institutions has been previously noted by GT researchers (Ramalho et al., 2015). I attempted to ground the research proposal in the experience of potential participants, rather than extant knowledge, by developing the research question through informal discussions with stakeholders at the EAT/L charity. These identified horse-human interactions as a central but elusive “essential ingredient” of EAT/L.

In line with GT, I delayed my conceptual review until after data collection was complete and theoretical coding was underway, used my data to inform my evaluation of the literature, and used the literature to inform further refinement of concepts in the model (Charmaz, 2014). Although I was not naïve to the research area nor free of preconceived ideas, *feeling* relatively uninformed about the literature forced me to remain curious about the data rather than making shortcuts by fitting it to ready-made concepts.

Nonetheless, staying close to the data proved more challenging than I had anticipated. A particular sticking point was my interest in the use of mentalization-based theory in EAT/L. I eventually traced this to having felt grateful, and slightly surprised, that UCL had agreed to support a relatively maverick research project. Gratitude quickly gave way to a heady mix of overinflated sense of responsibility to do justice to the opportunity to raise the profile of EAT/L, and imposter syndrome over whether I was up to the job. These were strong motivators to find an application for mentalization-based theory in the data, as it would align the research with departmental interests and expertise. I found it difficult not to “see” mentalization-like processes in the data from early on, despite using reflexive methods and GT methodology. This serves as a reminder that the model presented in this thesis is a product of a particular set of interactions in a particular context.

Researcher-Participant Interactional Influences During Data Collection

Several aspects of my experience potentially gave me “insider knowledge” in the research area (Berger, 2015). Like many YP participants, I had experienced ACEs in childhood and disengagement in adolescence and I had experience of being an EAT client (albeit a paying adult client – a different position to many YP participants). Like many staff participants, I had trained in EAT/L and had experience of facilitating EAT/L sessions (although as an assistant with experience amounting to hours, rather than a lead facilitator with years of experience) and my experience as a volunteer with the charity gave me insider knowledge of the charity from a staff perspective.

As noted in Part 2, insider experience can give a “head start” in the research process, sensitising the researcher to participants’ lived experience. It can also increase the risk of the researcher privileging their own views over those of the participants. I noted several instances where I assumed shared experience and meaning or over-identified with a research participant (Berger, 2015) during data collection and analysis. Increasingly, I appreciated the importance of ongoing work – beyond GT methods – to develop an awareness and understanding of my subjectivity and its influence on others (e.g., through peer supervision, reflective practice and a social graces group during training).

I used Burnham’s (2011) concepts of visible-invisible and voiced-unvoiced to develop curiosity within and about my interactions with participants. For example, what aspects of difference and identity did I notice about them? Why did I notice them? What aspects of my identity were visible to participants, and what aspects of my identity should I voice? I positioned myself in research interviews as both a volunteer at the stables, and as a trainee clinical psychologist conducting research at a university to find out about people’s experiences of EAT/L. My experience as an EAT/L facilitator was visible and voiced, my

experience as a client was invisible and unvoiced. None of the YP participants had met a researcher before, and few had a ready working model of what a researcher or trainee clinical psychologist did to help them make sense of the encounter. On the other hand, I had worked with many of the staff participants as an assistant, and I was aware that this might lead them to see me as a peer and to assume a shared language and understanding of concepts. I attempted to mitigate this potential barrier to the collection of rich data by explaining at the beginning of the interview that my role was as a researcher and I was interested in their personal experience and views, and that I would ask clarifying questions that might seem obvious for this reason (Chew-Graham, May & Perry, 2002). However, I can only remain curious about how participants perceived me, and how these perceptions shaped the stories they told me.

Despite taking several measures to address power imbalances in encounters with participants (as detailed in Part 2), I noted several dissimilarities in intersections of difference and power in interactions with staff and YP participants that had implications for the study findings. Visible, voiced differences included age and ethnicity, with all staff, but only one YP, being over 18 and 83% staff, but only 31% YP, identifying as a UK ethnic majority. Staff had 2-10 years' experience of EAT/L, relatively well-formed ideas about the processes involved, and an established language for talking about them, with a person they knew. The power imbalance between researcher and participant was less clear-cut. YP had much less experience – 6-24 hours – on which to build an understanding of what happens and less access to the conceptual, linguistic and social resources required to convey their ideas in words in front of a relative stranger. The power imbalance was unavoidable, no matter how many silly voices we recorded on the Dictaphone, or whether the interview was in a field or a classroom.

I took several analytic steps to further mitigate power imbalances during the analysis. I conducted the majority of YP interviews before the first staff interview and spent longer immersing myself in the transcripts. For several weeks this became a literal immersion while a prominent wall in my flat was covered from ceiling to floor with post-its of YP quotes and codes. In the write-up, I tried to use quotes from all participants, rather than following a temptation to use quotes that more completely or eloquently expressed a concept.

I was particularly attentive to the impact of my subjectivity on my observations. With groups of 6-8 YP, 2-3 EAT/L staff, 2-4 horses, 2-4 school teachers and support staff and a couple of dogs, all doing, saying and feeling different things in an ever-changing environment, it was a challenge not only to direct attention, but to know where to direct it. In these conditions of high sensory and cognitive load, I was likely to have relied on cognitive heuristics, and therefore left an imprint of my implicit biases on the observational data (Kahneman, 2011). Indeed, it was through comparing field notes and reflexive diary entries that I uncovered my confirmation bias in relation to mentalization-based processes.

A Note on Verbal versus Non-Verbal Communication

Language is the primary medium of qualitative research, and little attention is generally paid to non-verbal processes such as body language (Denham & Onwuegbuzie, 2013). I came to realise that an over-reliance on semi-structured interview data was particularly problematic among at-risk adolescents. Language and knowledge are power, and YP participants seemed to feel this acutely. For many, feeling unable to express themselves in words was associated with feeling out of control, punished or rejected (e.g., being ridiculed for getting an answer wrong in class). For these YP, part of EAT/L's appeal

was that it was “not talking”, and so qualitative interview methodology seemed ill-equipped for giving expression to their experiences.

Given that the study identified non-verbal processes as key in EAT/L, and with a little more confidence and time to explore, I might have followed GT theorists’ recommendations to step out of my semi-structured interview comfort zone and find alternative ways of approaching the data. For example, methods for measuring non-verbal communication (Mannusov, 2014), group processes (Rubel & Okech, 2017), physiology (Garcia-Gomez et al., 2020), or even the well-established methodology of ethology (Hosey & Melfi, 2018) – the study of animal behaviour in an animal’s natural environment – could be adapted for studying interspecies, group processes in EAT/L.

Researcher Influence on Analysis

Applying constant comparative methods to my own research diaries, memos, and diagrams, highlighted the dynamic influence of my current interests and concerns on the analysis development of the GT model. This became particularly apparent while I was on placement at the stables in the final stage of analysis and write up, and I couldn’t help but draw constant comparisons between my model and the work I was doing. It was challenging to ensure I didn’t “overwrite” the experiences of the YP research participants with my own. Keeping a reflective diary was invaluable for interrogating new ideas and conceptualisations, as was constantly going back to the initial raw data to make sure the empirical paper remained grounded in the data but informed by my broader experiences. In recognition of this interaction between researcher and data, constructionist GT assumes that any GT represents just one of many possible perspectives on a phenomenon. In this section, I

contextualise the model through giving a brief history of its construction and factors impacting on its development.

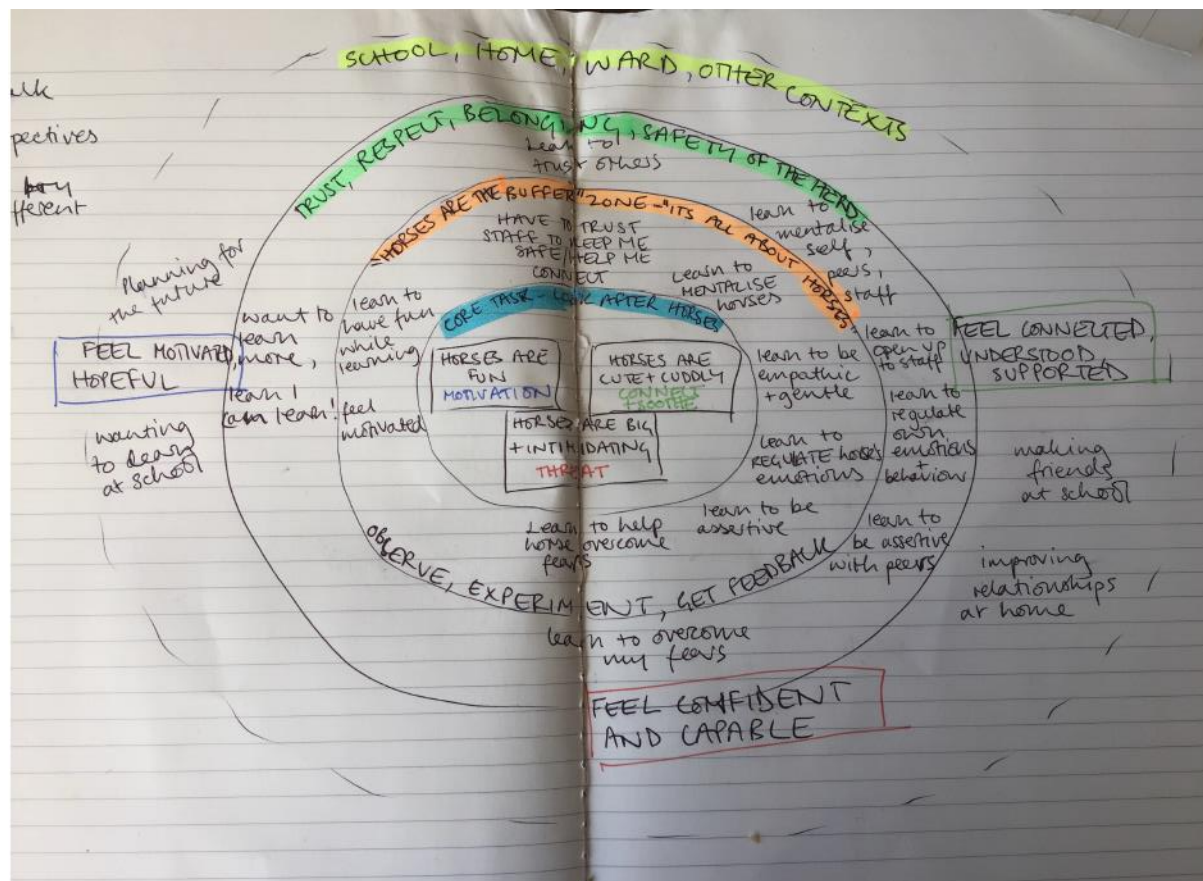
The Construction of Theory

Taken together, my research diary and several iterations of the model document the influences of my shifting theoretical orientations over the course of 5 terms of university teaching and 5 clinical placements. I developed a sensitivity to socio-political context through my undergraduate degree in anthropology, and was drawn to Brofenbrenner's Ecological Model when I converted to psychology. I used the model to reflect on context in EAT/L, and its influence is clear in the concentric circle structure I used to draw out tentative relationships between categories in the first diagram (see Figure 1).

In discussion of initial findings with my supervisor, we noted a parallel between how YP participants were experiencing and talking about horses as fun, scary and cuddly and the Compassion Focused Therapy (CFT) "three systems" model (Gilbert, 2010). I had developed an affinity for CFT during my first year placement, and so this made immediate sense to me (and perhaps shaped my decision making in raising initial codes to categories in the first place). The imprint of this co-construction of meaning between participants, researcher, supervisor, can be seen in the representation of emerging categories in the centre of Figure 4.

Figure 1

Diagramming during stage 3 – raising codes to categories and identifying tentative relationships



Staff feedback suggested that the model in Figure 3 assumed a high level of psychological knowledge and training in abstract conceptualisation, indicating poor resonance and relevance and that I had moved too quickly to abstraction (Charmaz, 2014). One staff member commented that it wasn't clear where to begin. This chimed with parts of the YP experience that I had not felt able to capture – a sense of development – and brought to mind the idea of a journey. Following GT storyline methodology (Birks et al., 2009), I went back to the raw data to compare across categories and cases from this new perspective of a passage through EAT/L. Using theoretical sampling, I conducted participant observations of a full 6-week programme as an assistant and recruited Liam, Jacob, Casper,

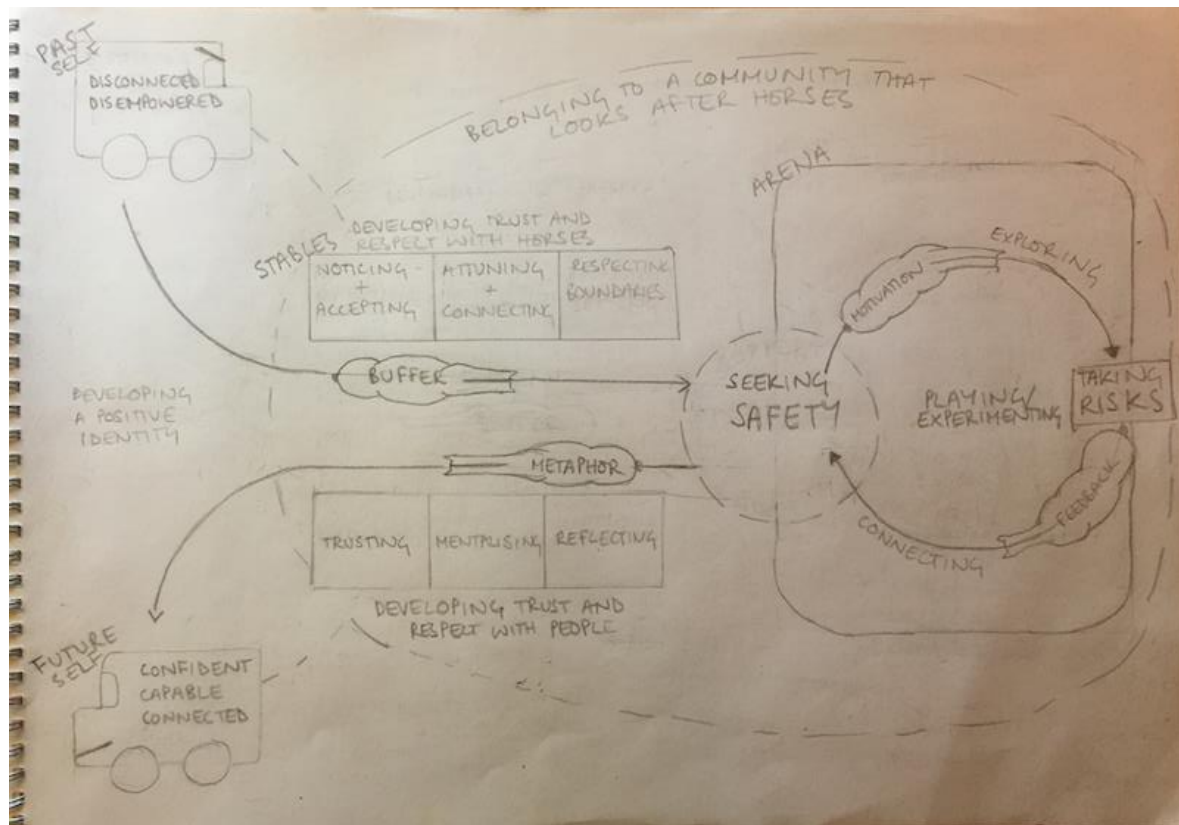
and Aspen and Heather to interviews, exploring and further defining the categories “feeling confident and capable”, “feeling hopeful and motivated”, and “feeling supported and understood”. In these interviews and observations, I was more attentive to movement and shifts – in relationships, through space, and over time.

The next iteration of diagramming was at the final stage of constructivist GT analysis: sorting and integrating memos. I was motivated by upcoming consultations with YP and staff research participants, strongly influenced by my clinical placement, where I was using Narrative Therapy (NT), and inspired by conversations with my brother, who is a gifted story teller. The YP cancelled the consultation for personal reasons and it never took place, but they remained in the front row of my imaginary audience for the diagram and this motivated me to make it visual, concrete, and jargon-free. I was also keen to “give back” to staff participants by providing them with something relevant and useful.

This time, I started with a map of the stables and the arena, reflecting the importance of the stables context in participants’ experiences. I wrote my memo titles on post-its and arranged these on the map. I started to see an evolving metaphor of a journey that seemed to represent the stories that participants told me about their experiences of the relationships between people, horses, actions and meaning-making at the stables, and how these developed over the course of EAT (see Figure 2).

Figure 2

Diagramming in the initial phase of stage 4 – conceptualising a journey through time and space



Staff fed back that the model had resonance with their experience of horse-human interactions in EAT/L. However, while this original model included all of the concepts defined in my analytic memos, the relationships between them were difficult to specify and write coherently about in the draft paper. For example, I had constructed a core category of “belonging to a community that looks after horses”, but this did not adequately capture risk-taking and safety-seeking, and it seemed too static to capture the movement and development that was characteristic of people’s experiences, and too specific to the stables to capture the impact of EAT/L on YP’s wider lives.

I realised I had become attached to aesthetics of the model, and in this way risked constructing an “ungrounded” model based on it being pleasing to the eye rather than adequately capturing the process. I went back to sorting memos, and to comparison of concepts with the raw data. At the time, I was reading about psychological approaches to the body (Levine, 2010; van der Kolk, 2014) and about experiential approaches to learning (Kolb, 2014). I integrated these ideas in free-written memos exploring the concepts of building relationships with people and with horses, and about experimenting, risk-taking, and safety-seeking. This led to the integration of memos into broader processes of connecting, and the construction of a core category that linked connection, safety, risk and identity development through “creating a safe enough space to try something different”.

A Note on Service User Involvement

There is a part of me that is still reluctant to let go of the diagram in Figure 2, and I wonder if this is partly because I constructed it with YP so clearly in mind, and I suspect it may have greater resonance for them. I cannot know without further consultation. However, constructing the model prior to the consultation reminded me of an early trainee case where I presented to a client what I hoped would be an “accurate” CFT-based formulation diagram of their difficulties. I was surprised when she blocked my attempts at collaboration, telling me that it was “very good” and she had “nothing to add”. It transpired that she didn’t want to hurt my feelings by saying it was wrong and that I (the clinician) knew best anyway. In retrospect, consulting YP on an already-made diagram might be perceived as similarly tokenistic. Co-construction of a GT methodology and model with a peer researcher, properly paid and trained in GT, although beyond the scope of this study, would have improved the quality of the current study, and should be considered in future research.

The Influence of the Research on Me

Revisiting my research diaries and writing up this project has lead me to reflect not only on how my subjectivity has influenced the research, but also on the ways in which the study has influenced me as a researcher and a clinician on my journey through training.

The study and the work through EAT/L has initiated an interest in embodied experience, both my own and those of the people around me. Observing YP co-regulating with horses left a lasting impression on my personal and professional life and I have since learned and incorporated a greater range of breath and body-work techniques into my personal life and clinical practice. The YP participants also directed my attention to the central importance of friendships, which I feel sometimes get overlooked in individual or family work in psychology. Their stories have helped me appreciate the role friendships play in fostering belonging, overcoming adversity and finding meaning in life, both personally and in my clinical and research work.

Perhaps one of the most prominent influences of the study was on my awareness of how context shapes relationships, including those that I built with clients and research participants over training (see Appendix C). I had an opportunity to see YP considered “at-risk” and “risky” in institutional settings managing risk, being kind, and having fun at EAT/L and this influenced my interactions with them – for example encouraging greater positive risk-taking.

EAT/L is unlikely to be appealing or beneficial for all YP, and even less likely to be accessible for all those who might benefit. However, the project has motivated me to think more broadly about how mental health services might be made more engaging and empowering for YP by considering the impact of the social and physical environment in which mental health services are delivered. For example, the British Psychological Society

recently issued guidelines on outdoor talking therapies, which might offer opportunities for connection through sharing embodied experiences in individual and group therapy for YP that are not possible in the clinic (BPS, 2020). In mental health services, establishing a culture of inclusion through involving YP and providing opportunities for them to take a valued role might capitalise on the current findings. The study also resonates with community psychology approaches that engage disadvantaged groups through community-based projects. It may offer a lens through which to explore facilitators and barriers to connection (e.g., finding activities that buffer social threat and necessitate reliance on others to stay physically safe).

In addition, my experiences with YP at the stables have given me the hope and motivation to tell a different story when I notice myself getting immersed in a problem saturated narrative about a YP or group of YP. I hope this resource of stories and experiences will help me to be a better researcher and clinician.

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Appendix A: Ethical Approval with Consent Forms and information Sheets

Letter Confirming Ethical Approval

1st April 2019

Dr John King
Research Department of Clinical, Educational and Health Psychology
UCL

Dear Dr King

Notification of Ethics Approval with Provisos

Project ID/Title: 6710/002: From the horse's mouth. A grounded theory study of client and practitioner experiences and views of the role horse-human interactions in Equine Assisted Therapy and Learning

Further to your satisfactory to the Committee's comments, I am pleased to confirm in my capacity as Joint Chair of the UCL Research Ethics Committee (REC) that your study has been ethically approved by the UCL REC until 1st October 2020.

Ethical approval is subject to the following conditions:

Notification of Amendments to the Research

You must seek Chair's approval for proposed amendments (to include extensions to the duration of the project) to the research for which this approval has been given. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing an 'Amendment Approval Request Form'

<http://ethics.grad.ucl.ac.uk/responsibilities.php>

Adverse Event Reporting – Serious and Non-Serious

It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator (ethics@ucl.ac.uk) immediately the incident occurs. Where the adverse incident is unexpected and serious, the Joint Chairs will decide whether the study should be terminated pending the opinion of an independent expert. For non-serious adverse events the Joint Chairs of the Ethics Committee should again be notified via the Ethics Committee Administrator within ten days of the incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Joint Chairs will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

Final Report

At the end of the data collection element of your research we ask that you submit a very brief report (1-2 paragraphs will suffice) which includes in particular issues relating to the ethical implications of the research i.e. issues obtaining consent, participants withdrawing from the research, confidentiality, protection of participants from physical and mental harm etc.

Office of the Vice Provost Research, 2 Tavillon Street
University College London
Tel: +44 (0)20 7679 8717
Email: ethics@ucl.ac.uk
<http://ethics.grad.ucl.ac.uk/>

In addition, please:

- ensure that you follow all relevant guidance as laid out in UCL's Code of Conduct for Research: <http://www.ucl.ac.uk/srs/governance-and-committees/resgov/code-of-conduct-research>
- note that you are required to adhere to all research data/records management and storage procedures agreed as part of your application. This will be expected even after completion of the study.

With best wishes for the research.

Yours sincerely

Professor Michael Heinrich
Joint Chair, UCL Research Ethics Committee

Cc: Puffin O'Hanlon

Letter Confirming Ethical Approval of Amendments

APPROVED Amendment request - Project ID 6710/002 - Inbox

Message

Delete

Archive

Reply

Reply to All

Forward

Move

Junk

Rules

Move to Other

Read/Unread

Categorise

Follow Up

Send to OneNote

APPROVED Amendment request - Project ID 6710/002

V

VPRO.Ethics

Tuesday, 23 July 2019 at 11:12

To: O'Hanlon, Puffin; Cc: King, John

190627 Amendment...

104.5 KB

Download All

Preview All

You replied to this message on 23/07/2019, 11:31.

Dear Puffin,

The REC Chair has approved your attached amendment request. Please take this email as confirmation of that approval.

IMPORTANT: For projects collecting personal data only

You should inform the Data Protection Team – data-protection@ucl.ac.uk of your proposed amendments to include a request to extend ethics approval for an additional period.

With best wishes for your ongoing research, Helen

Helen Dougal

UCL Research Ethics Administrator

Office of the Vice-Provost (Research)

University College London

2 Taviton Street, London, WC1H 0BT

Email: ethics@ucl.ac.uk

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Recruitment Materials: Study Advert and Information for Schools

CLINICAL, EDUCATIONAL & HEALTH PSYCHOLOGY



Would you like to take part in our research study?

A study looking at the role of relationships between horses and humans in Equine-Assisted Therapy and Learning



Equine-assisted therapy and learning may be helpful for young people. We want to find out about young people's and staff members' experiences of interacting with horses in Equine-Assisted Therapy and Learning. This will help us understand how Equine-Assisted Therapy works and how it could be improved.

We are looking for:

- Young people aged 11-25 years who have taken part in Equine-Assisted Therapy and Learning who are able and willing to talk to a researcher about their experiences of Equine-Assisted Therapy and Learning.
- AND paid or voluntary staff who have been involved in delivering Equine-Assisted Therapy and Learning for young people...
- If you agree to take part, you will meet with a researcher to talk about your experience of Equine-Assisted Therapy and Learning. Taking part in the study should take no more than 1.5 hours of your time in total.



Young people who complete the study will receive a **£10 amazon voucher** as a thank you for their time and effort



If you would like to know more please talk to a member of staff at the Equine Assisted Therapy and Learning Centre or contact the study researchers:

Puffin O'Hanlon:
Dr John King:

Please note that if you decide to take part you will be asked for some personal information (your age, gender, ethnicity, and if you are a young person, about your mental health and learning needs. However, we will store this information in strict accordance with the Data Protection Act (2018) and all of your information will be kept secure and confidential.

INFORMATION SHEET FOR SCHOOLS

Study Title: From the horse's mouth: A grounded theory study of client and practitioner experiences and views of the role horse-human interactions in Equine Assisted Therapy and Learning

Researcher: Puffin O'Hanlon

Principle Researcher: Dr John King



What is this study? We are inviting a student who attends your school to take part in a research study that is investigating experiences of Equine-Assisted Therapy and Learning (EAT/L) by talking to people who have taken part in sessions.

Who is organising and funding the research? The study is part of Puffin O'Hanlon's Doctorate in Clinical Psychology at University College London (UCL). The Equine-Assisted Therapy and Learning Centre attended by some students at your school has agreed to take part in the study. The research has been reviewed by the UCL Research Ethics Committee.

Why are we doing this study? Research has told us that EAT/L might be helpful for young people who are experiencing difficulties with their mental health, learning, or relationships. We want to find out about people's experiences of interacting with horses in sessions to help us understand how EAT-L works and how it could improve.

Why are students at my school being invited to take part? We are inviting young people aged 11-25 who have attended at least four EAT/L sessions. Student(s) at your school have been invited to take part because they have recently attended EAT/L sessions, and they (and their parents if they are under 18 years old) have given informed consent to take part in the study.

What is the school being asked to do? We are asking your school for permission to use a room at the school for a one-hour research interview. This information leaflet gives more detail about the research and what it will involve, so that you can decide whether or not to give this permission. Please ask us if anything is unclear or if you would like more information.

Does the student have to take part? No. Taking part is completely voluntary. The student and/or their parent/carer are free to decide whether or not to take part, or to stop taking part, without giving a reason, and without any impact on any care or education they receive, now or in the future.

What happens if the student decides to take part? Staff at the EAT/L centre will approach potential participants and their parents/carers at the EAT/L centre. Interested EAT/L clients and their parent/carers will be given an information sheet and the opportunity to ask any questions, and asked to provide informed consent. The researcher will arrange to meet with the student for a one hour research interview, in a quiet, safe and private space, at their EAT/L centre or at the student's school. If the student wants to meet at the school, the researcher will request permission from the school and via

the named school contact for the EAT/L centre. When written permission is obtained (e.g. an email from the head teacher), the researcher will make arrangements to book a room at a convenient time for the school and student. The researcher will inform the student and their parent/carer, the EAT/L school contact, and EAT/L Clinical Lead of the time and location of the meeting.

Research interview questions will focus on the student's experiences of EAT/L and different areas of their life (for example school and teachers, family and friends, pets and other animals, plans for the future). The conversation will be audio-recorded, transcribed and anonymised, and the recording will be deleted. Students who complete the research process will be eligible for a £10 Amazon voucher at the end of the study as a thank you for their time and effort in taking part.

We will ask the EAT/L centre to provide us with summary information about the ethnicity, mental health and intellectual disabilities and learning difficulty diagnoses of the whole group young people who take part in the study. This information will be provided as statistics for the whole group of participants and individual students will not be identifiable from it.

Are there any risks in taking part in this study? There are no major risks to the student in taking part in this study. It is possible that some topics may come up in the interview that may lead the student to become uncomfortable or distressed (e.g. their mental health). If the student feels uncomfortable or upset at any time the researcher will stop the interview. An EAT/L staff member will be available for the student to talk to if they wish.

What happens to information you collect about the student and what they say in the study? All the information collected from or about the student, their parent, or school (school staff contact details) will be treated as confidential and stored securely and pseudo-anonymously in locked cabinets or on password protected computers at UCL. Only researchers directly involved in the study have access to the student's name and contact details (including their named contact at school). We will not tell anyone what the student talked about, unless they tell us about actual or potential harm to themselves or to someone else. In this case we would follow the EAT/L centre's safeguarding policy, and would need to tell other people or services (for example emergency services).

Data Protection Privacy Notice: The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk. UCL's Data Protection Officer is Lee Shailer and he can also be contacted at data-protection@ucl.ac.uk. This 'local' privacy notice sets out the information that applies to this particular study. Further information on how UCL uses participant information can be found in our 'general' privacy notice for participants in health and care research studies, which can be accessed [here](#). The information that is required to be provided to participants under data protection legislation (GDPR and DPA 2018) is provided across both the 'local' and 'general' privacy notices. The student's personal data (name, contact details, gender, ethnicity) will be processed as described in this information sheet. The lawful basis that will be used to process your personal data are: 'Public task' for personal data and 'Research purposes' for special category data. Personal data will be processed so long as it is required for the research project. If we are able to anonymise or pseudonymise the personal data the student or school provides we will do so, and will do everything we can to minimise the processing of personal data wherever possible.

If you are concerned about how any personal data in this study is being processed, please contact UCL in the first instance at data-protection@ucl.ac.uk. If you remain unsatisfied, you may wish to contact the Information Commissioner's Office (ICO). Contact details, and details of data subject rights, are available on the ICO website at: <https://ico.org.uk/for-organisations/data-protection-reform/overview-of-the-gdpr/individuals-rights/>

How will study findings be shared?

We will write a report about the study and what all the young people who took part in the study have said. We might use quotes of what the student tells us during the audio-recorded discussion, but we will not include the student's name or any other information that could identify the student or the school. We will send your school a copy of this report if you would like one. The study results will be presented as scientific papers in peer reviewed journals, at conferences, and in student dissertations. Neither the student nor your school will be able to be identified in any reports, publications, talks or media.

What if something goes wrong? If you wish to raise a complaint then please contact Dr John King (the Principal Investigator for the study) at [REDACTED]. If you feel that your complaint has not been handled to your satisfaction, you can contact the Chair of the UCL Research Ethics Committee at ethics@ucl.ac.uk. If something happens to you during or following your participation in the project that you think may be linked to taking part, please contact Puffin O'Hanlon or John King.

Who can I contact for more information?

The study researchers are very happy to answer any questions. Please call, email or write:

Puffin O'Hanlon

Dr John King

Thank you for reading this information sheet and for considering hosting a research interview at your school.

Participant Information Sheets



CLINICAL, EDUCATIONAL & HEALTH PSYCHOLOGY



UCL

PARTICIPANT INFORMATION SHEET FOR YOUNG PEOPLE

A study looking at the role of relationships between horses and humans in Equine Assisted Therapy and Learning

Would you help us with our research?

Hi! My name is Puffin. I am studying for a Doctorate in Clinical Psychology at University College London and I'd like to ask you to think about helping us by taking part in a research study. Please read this information sheet, talk to other people about it and ask me any questions before you decide.



Why are we doing this study?

Equine Assisted Therapy and Learning may help young people with things like mental health, relationships with other people, and their learning. We want to learn about people's experiences of Equine Assisted Therapy and Learning so that we can understand how to make it more helpful for other young people.

Who is invited to take part in this study?

You have been invited because we are inviting young people aged 11-25 who have been to four or more Equine Assisted Therapy and Learning sessions and who can answer questions about their experiences of Equine Therapy and Learning.



What will happen if I take part?

1. If you are aged 18-25, I will contact you and answer any questions you have. If you're aged 11-17, I'll need your parents' permission for you to take part first.
2. If you're still interested, I will ask you to sign a consent form. I will give you copies of the signed consent form and this information sheet.
3. I will meet you at the Equine Assisted Therapy Centre or your school and we will talk for about 1 hour. I will ask you about your experience of Equine-Assisted Therapy and Learning and about how it fits with different areas of your life - like your school and teachers, your family and friends, and your mental health. You don't have to talk about anything you don't want to talk about. I will record our conversation to make sure I don't miss anything important.
4. I will ask you (and your parents if you're under 18 and not sure) to fill out a form about your age, gender, and about any mental health diagnoses and/or learning disabilities.
5. At the end of the meeting, if you complete the study, I will offer you a £10 Amazon voucher to thank you for your time and effort.
6. I may ask to watch some of the activities you do at the Equine Assisted Therapy Centre and write down what I see. You can tell me (or you can ask a staff member to tell me) to stop watching at any time - you don't have to say why, and nobody will mind at all.



Do I have to take part?

No! It is completely up to you. If you don't want to take part that is fine, and your decision won't affect your care or education in any way at all. You can stop taking part at any time during the study, you don't have to say why. Just say "I don't want to do it anymore" and nobody will mind at all.



What happens to information you collect about me and what I say in the study?

- We will ask the EAT/L centre about the mental health, ethnicity, and learning needs of the whole group of young people who take part. No one could identify you from this information.
- The information that we collect about you and what you say is confidential. Nobody except the researchers will have access to the information we collect about you and what you tell us.
- The only time we have a duty to tell other people is if we are worried about your safety or someone else's safety.
- We will write a report about the study and what all the young people who took part in the study have said. We might use quotes of what you say but not your name so that nobody could know you took part in the study. We will send you a copy of this report if you want it.



Are there any risks in taking part in this study?

If you have had difficult experiences and decide to talk about them in the interview, sometimes this can be upsetting. If this happens, you can talk to the Clinical Psychologist at the Equine Assisted Therapy and Learning centre.

If I have any questions, who can I ask?

Ask the researchers:

Puffin O'Hanlon: [REDACTED]

Dr John King: [REDACTED]

[REDACTED]

What will happen to the recording of what I say?

- We will write down the recorded conversation or send the recording securely to a person whose job is to write down voice recordings (a transcriber).
- We will delete any personal information from the written conversation so that nobody could know it was you except the researchers.
- When it is written down, we will delete the recording.



Data Protection privacy notice

UCL's Data Protection Officer is Lee Shailer and he can be contacted at data-protection@ucl.ac.uk. You can read UCL's privacy notice at: <https://www.ucl.ac.uk/legal-services/privacy/participants-health-and-care-research-privacy-notice> and details of your rights at: <https://ico.org.uk/for-organisations/data-protection-reform/overview-of-the-gdpr/individuals-rights/>

Your personal data (name, contact details, gender, ethnicity) will be processed as described in this information sheet. The lawful basis that will be used to process your personal data are: 'Public task' for personal data and 'Research purposes' for special category data.





PARTICIPANT INFORMATION SHEET FOR PARENTS/CARERS

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

Study Title: From the horse's mouth: A grounded theory study of client and practitioner experiences and views of the role horse-human interactions in Equine Assisted Therapy and Learning

Researcher: Puffin O'Hanlon

Principle Researcher: Dr John King



What is this study?

We are inviting your child to take part in a research study that is investigating client and staff experiences of Equine-Assisted Therapy and Learning by talking to people who have taken part in sessions as a staff member or a client.

Before you decide if you agree to your child taking part in the study, it is important that you understand why the research is being done and what it will involve. Please read this leaflet carefully.

Ask us if anything is unclear or if you would like more information. Take time to decide whether you wish to take part. Whether you decide to take part or not is completely up to you. Choosing not to take part will not disadvantage you or your child in any way.

Why are we doing this study?

Research has told us that Equine Assisted Therapy and Learning might be helpful for young people who are experiencing difficulties in different areas of their life, for example mental health, learning, or relationships at home or school. We want to find out about staff and client experiences of interacting with horses in sessions. We hope that this will help us to improve our understanding of how Equine Assisted Therapy works and how it could improved.

Why has my child been invited to take part?

We are inviting young people aged 11-25 who have attended at least four Equine Therapy and Learning sessions involving interactions with horses. Your child has been invited to take part because they have recently attended Equine-Assisted Therapy and/or Learning sessions.

Young people need to have good spoken English and be able to answer questions about their experiences of Equine Therapy and Learning. Anyone who is interested in the study can contact us and we will check whether they are able to take part.

Does my child have to take part?

No. Taking part is completely voluntary. Your child is free to stop taking part at any time during the study without giving a reason. As their parent/carer, you are also free to decide whether or not they should take part in the study. If you or your child decide not to take part, or to stop taking part, this will not affect any care or education they receive, now or in the future.

What will my child have to do if they decide to take part?

If you and your child decide to take part in the study, we will invite your child to meet with a researcher, who will answer any questions they have. You will also be given the opportunity to talk to Puffin if you would like. If you and your child are still interested, Puffin will ask you both to sign a consent form. Puffin will give you a copy of yours and your child's signed consent form, this information sheet, and the young person's information sheet, to keep.

The researcher will then talk with your child about their experiences of Equine Therapy and/or Learning and about different areas of their life (for example school and teachers, family and friends, pets and other animals, plans for the future). The conversation should last about 1 hour. It will take place in a quiet, safe and private space, either at the Equine Therapy Centre or at your child's school. The conversation could take place over skype or the phone if it is not possible to meet in person.

After the interview, the researcher may observe some of the activities at the Equine Assisted Therapy centre that your child is engaged in, but these will not be audio or video recorded. The researcher will take written notes during these observations, but your child will not be identifiable from these notes. Your child will be asked if they are happy to be observed, and told that they can ask the researcher to leave for any part of the activity.

Will my child be recorded and how will the recording be used?

We will audio-record the conversation to make sure we get a good picture of your child's experience and don't miss anything important. The conversation will be written down by the researchers and then the recording will be deleted. We will remove any personal information from the written conversation so that nobody reading it would be able to know it was your child. We may send audio-recordings via a secure data transfer service to a UCL approved transcriber (a person or company whose job is to turn audio files into text). No one else outside the study will be allowed access to the recordings. No other use will be made of the recordings without yours and your child's written permission.

Are there any risks in taking part in this study?

There are no major risks to your child in taking part in this study. However, your child might find some of the questions a bit difficult to answer, for example about their mental health or their relationships at school or at home. If your child feels uncomfortable or upset at any time during the study we will stop the conversation. A member of staff from the Equine Assisted Therapy and Learning centre will be available for your child to talk to if this happens.

Are there any benefits to taking part?

We hope that what we learn from this study will help people to understand Equine-Assisted Therapy and Learning better so that it can be improved and made available for other young people who might find it helpful. Your child will be offered a £10 Amazon voucher if they complete the study as a thank you for their time and effort in taking part.

Who is organising and funding the research?

The study is part of Puffin O'Hanlon's Doctorate in Clinical Psychology at University College London. The Equine-Assisted Therapy and Learning Centre that your child attends has agreed to take part in the study and to approach staff and young people they think might take part.

Who has reviewed the research?

The research has been reviewed by the UCL Research Ethics Committee.

What other information about my child would you collect?

We will ask you and your child to provide some personal information about your child - their age, gender, and about any mental health diagnoses and/or intellectual disabilities. This is to help provide some background information about the people who take part. This information will be made anonymous - it will be attached to a code so that nobody except the study researchers will be able to identify your child from the data we keep.

We will ask the EAT/L centre to provide us with summary information about the ethnicity, mental health and intellectual disabilities and learning difficulty diagnoses of the whole group young people who take part in the study. This information will be provided as statistics for the whole group of participants and your child will not be identifiable from it.

What happens to information you collect about my child and what they say in the study?

All the information your child gives will be treated as confidential. The written notes from your child's discussion with Puffin, our copies of the consent forms, and the other information we collect will be stored in locked cabinets locked cabinet in a locked office in the UCL Research Department of Clinical, Educational, and Health Psychology at University College London at UCL or on a password-protected computer. Your child's data will be labelled with a numbered code and kept in a separate file from your and your child's name and contact details. Anonymised data may be shared with other researchers at UCL or other institutions, to help answer new research questions, but they will never be given your child's name or contact details. Once names and contact details are no longer required for the research project, they will be deleted, and all data will then become fully anonymised. Only researchers directly involved in the study have access to your child's name and contact details. We will not tell anyone what your child talked about, unless they tell Puffin about actual or potential harm to themselves or to someone else. In this case we would need to tell other people or services (for example emergency services).

We will keep your child's information for up to 5 years after the study is finished. After this time all information will be destroyed. If you or your child decide that they want to stop taking part in the study their information can be destroyed if requested.

Data Protection Privacy Notice

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk. UCL's Data Protection Officer is Lee Shaller and he can also be contacted at data-protection@ucl.ac.uk. This 'local' privacy notice sets out the information that applies to this particular study. Further information on how UCL uses participant information can be found in our 'general' privacy notice for participants in health and care research studies, click [here](#). The information that is required to be provided to participants under data protection legislation (GDPR and DPA 2018) is provided across both the 'local' and 'general' privacy notices.

Your child's personal data (name, contact details, gender, ethnicity) will be processed as described in this information sheet. The lawful basis that will be used to process your personal data are: 'Public task' for personal data and 'Research purposes' for special category data. Your child's personal data will be processed so long as it is required for the research project. If we are able to anonymise or pseudonymise the personal data you and your child provide we will do so, and will do everything we can to minimise the processing of personal data wherever possible. If you are concerned about how your child's personal data is being processed, please contact UCL in the first instance at data-protection@ucl.ac.uk. If you remain unsatisfied, you may wish to contact the Information Commissioner's Office (ICO). Contact details, and details of data subject rights, are available on the ICO website at: <https://ico.org.uk/for-organisations/data-protection-reform/overview-of-the-gdpr/individuals-rights/>

How will study findings be shared?

We will write a report about the study and what all the young people and the staff who took part in the study have said. We might use quotes of what your child tells us during the audio-recorded discussion, but we will not include your child's name or any other information that could identify your child, so that nobody else will know that they took part in the study. We will send you and your child a copy of this report if you would like one. The study results will be presented as scientific papers in peer reviewed journals, at conferences, and in student dissertations. Your child will not be able to be identified in any reports, publications, talks or media.

What if something goes wrong?

If you wish to raise a complaint then please contact Dr John King (the Principal Investigator for the study) at [REDACTED]. If you feel that your complaint has not been handled to your satisfaction, you can contact the Chair of the UCL Research Ethics Committee at ethics@ucl.ac.uk. If something happens to you during or following your participation in the project that you think may be linked to taking part, please contact Puffin O'Hanlon or John King.

Who can I contact for more information?

The study researchers are very happy to answer any questions. Please call, email or write:

Puffin O'Hanlon

Dr John King



Thank you for reading this information sheet and for considering to take part in this research study. |



STAFF PARTICIPANT INFORMATION SHEET

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET



Study Title: From the horse's mouth: A grounded theory study of client and practitioner experiences and views of the role horse-human interactions in Equine Assisted Therapy and Learning

Department: Clinical, Educational & Health Psychology

Researcher: Puffin O'Hanlon

Principle Researcher: Dr John King

What is this study?

You are being invited to take part in a research study that is investigating client and staff experiences of Equine-Assisted Therapy and Learning by talking to people who have been involved in Equine-Assisted Therapy and Learning as a staff member or a client.

Before you decide if you would like to take part in the study, it is important that you understand why the research is being done and what it will involve. So please read this information carefully and ask us if anything is unclear or if you would like more information.

Why are we doing this study?

Research has found that Equine-Assisted Therapy and Learning might be helpful for young people who are experiencing difficulties in different areas of their life, for example mental health, learning, or relationships at home or school. We want to find out about staff and client experiences of interacting with horses in sessions. We hope that this will help us to improve our understanding of how Equine-Assisted Therapy and Learning works and how it could be improved.

Who is invited to take part in this study?

We are inviting staff who have facilitated Equine-Assisted Therapy and Learning, and young people aged 11-18 who have taken part in Equine-Assisted Therapy and Learning involving interactions with horses. You have been invited to take part because you have experience of facilitating Equine-Assisted Therapy and/or Learning sessions.

Do I have to take part?

No. Taking part is completely voluntary. You are free to stop taking part at any time. If you decide not to take part, or if you decide to stop taking part, this will not affect your employment in any way now or in the future.

What will I have to do if I take part?

If you are interested in taking part in the study, we will invite you to meet with a researcher, Puffin O'Hanlon, who will answer any questions you have. If you are still interested, the researcher will ask you to sign a consent form. The researcher will give you a copy of the signed consent form and a copy of this information sheet to keep.

Puffin will then talk with you about your experience of facilitating Equine Therapy and/or Learning. The conversation should last about 1 hour. It will take place in a quiet, safe and private space, either at the Equine Therapy Centre or another location that is easy for you to get to.

After the interview, the researcher may observe some of the activities at the Equine Assisted Therapy centre that you are involved in, but these will not be audio or video recorded. The researcher will take written notes during these observations, but you will not be identifiable from these notes. Before starting an observation, the researcher will check with the EAT/L centre manager, with you, and with any YP participant present that you are happy to be observed. You are free to ask the researcher to leave for any part of the activity, without giving a reason.

Will I be recorded and how will the recording be used?

Puffin will audio-record the conversation to make sure we get a good picture of your experience and don't miss anything important. The conversation will be written down by the researchers and then the recording will be deleted. We will remove any personal information from the written conversation so that nobody reading it would be able to know it was you. We may send audio-recordings via a secure data transfer service to a UCL approved transcription service. No one else outside the study will be allowed access to the recordings. No other use will be made of the recordings without your written permission.

Are there any risks in taking part in this study?

There are no major risks in taking part in this study. We do not think that taking part in the research should be any more stressful than everyday life. If you feel uncomfortable or upset at any time during the study we will stop the conversation.

Are there any benefits to taking part?

We hope that what we learn from this study will help people to understand Equine-Assisted Therapy and Learning better so that it can be improved and made available for people who might find it helpful. Your employer has agreed that your participation in this study can take place in work hours.

Who is organising and funding the research?

The study is part of Puffin O'Hanlon's doctoral clinical psychology studies at University College London. The Equine-Assisted Therapy and Learning Centre where you work has agreed to take part in the study and to approach staff and young people they think might take part.

What other information about me would you collect?

We will ask you for some personal information (your age group, gender, and your professional qualifications, role and career path). This is to help provide some background information about the people who take part. This information will be made anonymous - it will be attached to a code so that nobody except the study researchers will be able to identify you from the data we keep.

What happens to information you collect about me and what I say in the study?

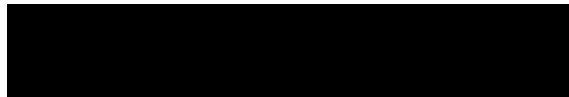
All the information you give will be treated as confidential and stored securely (see Data Protection Privacy Notice below). Confidentiality may be limited by the researcher's duty of care to report to the relevant authorities possible harm/danger to the participant or others. We will keep your information for up to 5 years after the study is finished. After this time all information will be destroyed. If you decide that you want to stop taking part in the study your information can be destroyed if requested.

Who can I contact for more information?

The study researchers Puffin O'Hanlon and John King are very happy to answer any questions. Please call, email or write:

Puffin O'Hanlon

Dr John King



Data Protection Privacy Notice

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk. UCL's Data Protection Officer is Lee Shailer and he can also be contacted at data-protection@ucl.ac.uk.

This 'local' privacy notice sets out the information that applies to this particular study. Further information on how UCL uses participant information can be found in our 'general' privacy notice:

For participants in health and care research studies, click [here](#)

The information that is required to be provided to participants under data protection legislation (GDPR and DPA 2018) is provided across both the 'local' and 'general' privacy notices.

Your personal data will be processed as described in this information sheet. The lawful basis that will be used to process your personal data are: 'Public task' for personal data and 'Research purposes' for special category data.

Your personal data will be processed so long as it is required for the research project. If we are able to anonymise or pseudonymise the personal data you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible.

Your data will be stored in locked cabinets at UCL or in password-protected files on a secure UCL server. Your data will be labelled with a numbered code and kept in a separate file from your name and contact details. Only researchers directly involved in the study have access to your name and contact details. Anonymised data may be shared with other researchers at UCL or with collaborators at other institutions, to help answer new research questions, but they will never be given your name or contact details. Once names and contact details are no longer required for the research project, they will be deleted, and all data will then become fully anonymised.

If you are concerned about how your personal data is being processed, please contact UCL in the first instance at data-protection@ucl.ac.uk. If you remain unsatisfied, you may wish to contact the Information Commissioner's Office (ICO). Contact details, and details of data subject rights, are available on the ICO website at: <https://ico.org.uk/for-organisations/data-protection-reform/overview-of-the-gdpr/individuals-rights/>

How will study findings be shared?

We will write a report about the study and what all the young people and the staff who took part in the study have said. We might use quotes of what you say during the audio-recorded discussion, but we will not include your name or any other information that could identify you, so that nobody else will know that you took part in the study. We will send you a copy of this report if you would like one. The study results will be presented as scientific papers in peer reviewed journals, at conferences, and in student dissertations. You will not be able to be identified in any reports, publications, talks or media.

What if something goes wrong?

If you wish to raise a complaint then please contact Dr John King (the Principal Investigator for the study) at [REDACTED]. If you feel that your complaint has not been handled to your satisfaction, you can contact the Chair of the UCL Research Ethics Committee at ethics@ucl.ac.uk. If something happens to you during or following your participation in the project that you think may be linked to taking part, please contact Puffin O'Hanlon or John King.

Thank you for reading this information sheet and for considering to take part in this research study.

Participant Consent Forms



CLINICAL, EDUCATIONAL & HEALTH PSYCHOLOGY



UCL

Young Person Participant Consent form

Please check you agree with these sentences and put your initials in the boxes

1. I have read the young person participant information sheet v1.2 23.06.19 and I understand what will happen if I take part in this study. ☐
2. I have been able to ask any questions I wanted to ask ☐
3. I understand that I can stop taking part in the study at any time and I don't have to say why. ☐
4. I understand that data protection law says that 'Public Task' is the basis for collecting and using information about me in this study. This is because my information will be used for research that may help other people in the future. I understand that according to data protection legislation, 'research purposes' will be the lawful basis for processing special category data (eg gender, ethnicity). ☐
5. I understand that the research team will keep the information I provide private and confidential, unless the researcher is worried about my safety or someone else's safety. ☐
6. I agree that the information I give can be kept at UCL and that other researchers can use it when it is completely anonymous (no one can tell it is about me). ☐
7. I agree that the researcher can use quotes of what I say when the research is written up as a report, if nobody can tell it was me that said it. ☐
8. I agree that the researcher can record our conversation. ☐
9. I understand that the researcher may ask to watch some of the activities that I do at the Equine Assisted Therapy Centre, but that these won't be audio or video recorded. I understand that I can ask the researcher to stop watching at any time. ☐
10. I understand that the researcher will offer me a £10 Amazon voucher if I complete the study to thank me for my effort. ☐
11. I have names and telephone numbers of the people I can call if I want to ask a question ☐
12. I agree to take part in this study. ☐

<i>Your name</i>	<i>Your signature</i>	<i>The date today</i>

<i>Researcher's name</i>	<i>Researcher's signature</i>	<i>The date today</i>

Young person participant consent form v1.2 23.06.2019
UCL REC approval ID number: 6710/002

PARTICIPANT CONSENT FORM – PARENT/CARER
V1.2 23/06/2019

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study: From the horse's mouth: A grounded theory study of client and practitioner experiences and views of the role horse-human interactions in Equine Assisted Therapy and Learning

Department: Clinical, Educational and Health Psychology

Name and Contact Details of the Researcher(s): Puffin O'Hanlon

Name and Contact Details of the Principal Researcher: John King

Name and Contact Details of the UCL Data Protection Officer: Lee Shailer data-protection@ucl.ac.uk

This study has been approved by the UCL Research Ethics Committee: Project ID number: 6710/002

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

I confirm that I understand that by initialling each box below I am consenting to my child participating in this element of the study. I understand that it will be assumed that unticked/initialled boxes means that I DO NOT consent to my child participating in that part of the study. I understand that by my not giving consent for any one element that my child may be deemed ineligible for the study.

		Initial Box
1.	I confirm that I have read and understood the Participant Information Sheet for Parents/Carers v1.1 23.06.19 for the above study. I have had an opportunity to consider the information and what will be expected of my child. I have also had the opportunity to ask questions which have been answered to mine and my child's satisfaction	
2.	I consent to my child participating in the study. I understand that my child's personal information (<i>ethnicity, gender, age, mental health and learning difficulties</i>) will be used for the purposes explained to me and my child. I understand that according to data protection legislation, 'public task' will be the lawful basis for processing. I understand that according to data protection legislation, 'research purposes' will be the lawful basis for processing special category data.	
3.	I understand that all personal information will remain confidential and that all efforts will be made to ensure my child cannot be identified. I understand that confidentiality will be maintained as far as possible, but I understand that if something my child or I say makes the researcher worried that someone might be in danger of harm the researcher may have to tell other people about this. I understand that my child's data gathered in this study will be stored pseudo-anonymously and securely. It will not be possible to identify my child in any publications.	
4.	I understand that the information my child and I provide may be subject to review by responsible individuals from University College London for monitoring and audit purposes.	
5.	I understand the potential risks to my child of participating and the support that will be available to my child should they become distressed during the course of the research.	
6.	I understand that my child will be offered a £10 Amazon voucher if they complete the study as a thank you for their time and effort in taking part. I understand that there are no other direct benefits, financial or otherwise, to me or my child of my child participating.	
7.	I understand that the data will not be made available to any commercial organisations but is solely the responsibility of the researcher(s) undertaking this study.	

8.	I agree that my child's anonymised research data may be used by others for future research. (No one will be able to identify your child when this data is shared.)	
9.	I understand that the information my child has submitted will be published as a report and I wish to receive a copy of it. Yes/No	
10.	I consent to my child's conversation with a researcher being audio recorded. I understand that the recordings will be destroyed immediately following transcription.	
11.	I understand that the researcher may observe some of the activities at the Equine Assisted Therapy centre that my child is engaged in, but these will not be audio or video recorded and my child can ask the researcher to leave at any time without giving a reason.	
12.	I confirm that I understand the inclusion criteria as detailed in the Information Sheet and explained to me by the researcher.	
13.	I confirm that: (a) I understand the exclusion criteria as detailed in the Information Sheet and explained to me by the researcher; and (b) My child does not fall under the exclusion criteria.	
14.	I have informed the researcher of any other research in which my child is currently involved or has been involved in during the past 12 months.	
15.	I am aware of who I should contact if I wish to make a complaint.	
16.	I understand that my child's personal data will be processed so long as it is required for the research project. Once names and contact details are no longer required, these will be deleted, and all data will then become fully anonymised I agree that my child's anonymised research data may be used by others and shared beyond the department for future research. These researchers will not be given mine or my child's name or contact details, and so they will not be able to identify me or my child when this data is shared. I understand that other authenticated researchers will have access to my anonymised data. I would be happy for my child's anonymised data to be archived within UCL stores.	

If you would like your contact details to be retained so that you can be contacted in the future by UCL researchers who would like to invite you to participate in follow up studies to this project, or in future studies of a similar nature, please tick the appropriate box below.

<input type="checkbox"/>	Yes, I would be happy to be contacted in this way	
<input type="checkbox"/>	No, I would not like to be contacted	

Name of young person

Name of parent/carer Relationship to young person Signature Date

Name of researcher Signature Date

PARTICIPANT CONSENT FORM – PARENT/CARER
V1.2 23/06/2019

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study: From the horse's mouth: A grounded theory study of client and practitioner experiences and views of the role horse-human interactions in Equine Assisted Therapy and Learning
Department: Clinical, Educational and Health Psychology
Name and Contact Details of the Researcher(s): Puffin O'Hanlon [REDACTED]
Name and Contact Details of the Principal Researcher: John King
Name and Contact Details of the UCL Data Protection Officer: Lee Shaller data-protection@ucl.ac.uk
This study has been approved by the UCL Research Ethics Committee: Project ID number: 6710/002

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

I confirm that I understand that by initialling each box below I am consenting to my child participating in this element of the study. I understand that it will be assumed that unticked/initialled boxes means that I DO NOT consent to my child participating in that part of the study. I understand that by my not giving consent for any one element that my child may be deemed ineligible for the study.

		Initial Box
1.	I confirm that I have read and understood the Participant Information Sheet for Parents/Carers v1.1 23.06.19 for the above study. I have had an opportunity to consider the information and what will be expected of my child. I have also had the opportunity to ask questions which have been answered to mine and my child's satisfaction	
2.	I consent to my child participating in the study. I understand that my child's personal information (<i>ethnicity, gender, age, mental health and learning difficulties</i>) will be used for the purposes explained to me and my child. I understand that according to data protection legislation, 'public task' will be the lawful basis for processing. I understand that according to data protection legislation, 'research purposes' will be the lawful basis for processing special category data.	
3.	I understand that all personal information will remain confidential and that all efforts will be made to ensure my child cannot be identified. I understand that confidentiality will be maintained as far as possible, but I understand that if something my child or I say makes the researcher worried that someone might be in danger of harm the researcher may have to tell other people about this. I understand that my child's data gathered in this study will be stored pseudo-anonymously and securely. It will not be possible to identify my child in any publications.	
4.	I understand that the information my child and I provide may be subject to review by responsible individuals from University College London for monitoring and audit purposes.	
5.	I understand the potential risks to my child of participating and the support that will be available to my child should they become distressed during the course of the research.	
6.	I understand that my child will be offered a £10 Amazon voucher if they complete the study as a thank you for their time and effort in taking part. I understand that there are no other direct benefits, financial or otherwise, to me or my child of my child participating.	
7.	I understand that the data will not be made available to any commercial organisations but is solely the responsibility of the researcher(s) undertaking this study.	

8.	I agree that my child's anonymised research data may be used by others for future research. [No one will be able to identify your child when this data is shared.]	
9.	I understand that the information my child has submitted will be published as a report and I wish to receive a copy of it. Yes/No	
10.	I consent to my child's conversation with a researcher being audio recorded. I understand that the recordings will be destroyed immediately following transcription.	
11.	I understand that the researcher may observe some of the activities at the Equine Assisted Therapy centre that my child is engaged in, but these will not be audio or video recorded and my child can ask the researcher to leave at any time without giving a reason.	
12.	I confirm that I understand the inclusion criteria as detailed in the Information Sheet and explained to me by the researcher.	
13.	I confirm that: (a) I understand the exclusion criteria as detailed in the Information Sheet and explained to me by the researcher; and (b) My child does not fall under the exclusion criteria.	
14.	I have informed the researcher of any other research in which my child is currently involved or has been involved in during the past 12 months.	
15.	I am aware of who I should contact if I wish to make a complaint.	
16.	I understand that my child's personal data will be processed so long as it is required for the research project. Once names and contact details are no longer required, these will be deleted, and all data will then become fully anonymised I agree that my child's anonymised research data may be used by others and shared beyond the department for future research. These researchers will not be given mine or my child's name or contact details, and so they will not be able to identify me or my child when this data is shared. I understand that other authenticated researchers will have access to my anonymised data. I would be happy for my child's anonymised data to be archived within UCL stores.	

If you would like your contact details to be retained so that you can be contacted in the future by UCL researchers who would like to invite you to participate in follow up studies to this project, or in future studies of a similar nature, please tick the appropriate box below.

<input type="checkbox"/>	Yes, I would be happy to be contacted in this way	
<input type="checkbox"/>	No, I would not like to be contacted	

Name of young person

Name of parent/carer Relationship to young person Signature Date

Name of researcher Signature Date

Appendix B: Interview Topic Guides

Participant ID:

Demographics/background information – STAFF PARTICIPANTS

1) What is your age-group (please circle)

18-24	25-34	35-44	45-54	55-64	65+
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2) How do you describe your ethnicity (please circle):

White British	White Irish	Other White	White and Black Caribbean
White and Black African	White and Asian	Other Mixed	Indian
Pakistani	Bangladeshi	Other Asian	Black Caribbean
Black African	Other Black	Chinese	Any other ethnic group (please specify):

3) What is your role at the Equine Assisted Therapy and Learning Centre?

4) How many hours per week do you work at the centre?

5) What is your occupational or professional background

6) Please list any relevant qualifications awarded:

7) Please list any relevant qualifications expected but not yet awarded:

8) How many years experience of working with horses do you have?

9) How many years experience of working with young people do you have?

1

Participant ID:

Semi-structured interview topic guide

- 1) Experience
 - What brought you into this role? Can you tell me about any relevant training/ qualifications/ experience?
 - Can you tell me a bit about your relationship with horses over your lifetime?
- 2) Perceived benefits/impacts
 - What do you think are the benefits of EAT/L for clients?
 - What do you think are the 'key components' of EAT/L that lead to these benefits?
 - What do you see as the role of the horse, the MH professional, the horse expert, and the client in sessions? Any other people/animals who play a role?
- 3) Relationships with horses
 - Can you describe the horses at the yard and your relationships with them? (which are easier to work with and why, which are more challenging)
 - What do you see as the key relationships in EAT/L? What role do these relationships play?
 - What is the role of your relationship with the horse in therapy sessions?
 - How do you think the relationship between you and your clients would be different if there were no horse involved?
 - How do you think the group processes (relationships between YPs in the group programme) would be different if there were no horse involved?
 - What do you think a horse brings to the therapy process that another animal could not?
- 4) Ending questions:
 - What was this interview like for you?
 - Is there anything you feel that we did not talk about or that you would like to add?

Thank you very much for talking to me about your experiences. Please feel free to contact me at any time with any questions, comments or concerns.

YOUNG PERSON'S INTERVIEW GUIDE**Demographic questions**

How many sessions of Equine Assisted Therapy and Learning have you been to?

How old are you?

How do you describe your gender?

How do you describe your ethnicity (please circle):

White British	White Irish	Other White	White and Black Caribbean
White and Black African	White and Asian	Other Mixed	Indian
Pakistani	Bangladeshi	Other Asian	Black Caribbean
Black African	Other Black	Chinese	Any other ethnic group (please specify):

What school do you go to and what year group are you in?

School: _____ Year group: _____

Do you have an Educational Healthcare Plan (EHCP)? YES/ NO

Have you ever been given a mental health problem diagnosis? YES/NO

If yes, please list here: _____

Have you ever been given a diagnosis of a learning disability? YES/NO

If yes, please list here: _____

Have you ever been given a diagnosis of a learning difficulty (e.g. dyslexia)? YES/NO

If yes, please list here: _____

Who do you live with? (e.g. foster carer, mother, father, stepdad, grandmother, 2 sisters)

YOUNG PERSON'S QUALITATIVE INTERVIEW TOPIC GUIDE

General: what is/was X like for you? Can you describe X? Who, if anyone, influenced your actions? What was going on in your life then? How, if at all, has your view of X changed?

- 1) It would be helpful for me to know a little bit about what life is like for you at the moment
 - Kinds of things you like doing/don't like doing
 - What, if anything, was your experience of horses before coming to equine therapy?
- 2) Can you tell me a bit about what was it like coming here for the first time? (prompt – people/ animals/ horses/ environment)

Prompts if needed:

- What was your experience of horses before coming here?
 - What brought you to Equine therapy? Whose decision was it for you to come?
 - What were your hopes/goals for EAT/L?
- 3) Can you talk me through what happens in a typical session of Equine Assisted Therapy and/or learning?
 - What makes it enjoyable/helpful/unhelpful/not enjoyable?
 - How does EAT/L compare to other therapy/activities you have done?
 - How has being part of the program impacted on your life at home or at school?
 - 4) Therapeutic relationship aspects - horses
 - Can you tell me a bit about the horses here at the yard? Do you have a favourite/least favourite horse? What (behaviours/characteristics) do you like/not like about them?
 - What is your favourite/least favourite activity to do with the horses? What do you like/not like about it?
 - Can you tell me a bit about the people you have spent time with here at the yard? How have they changed over time? How are they similar/different to your relationships
 - How is your relationship to the horses similar to your relationships with other people/animals in your life? How is it different?
 - How has working with the horses impacted on your relationships (Equine Assisted Therapy staff, peers, school staff, family, friends)?
 - How would you describe the person you were before you started coming to equine therapy? How would you describe the person you are now? What most contributed to this change? What changes have happened in your life since coming to equine therapy? In your relationships?
 - What have you learned about yourself from working with the different horses? What have you learned about other people?
 - What have you learned, if anything, from working with horses?
 - 5) Therapeutic relationship aspects – facilitators
 - What did the facilitators do during sessions? What did they do that was helpful/unhelpful? What do you wish they had done more of?
 - How was your relationship with the EAT/L staff similar to other relationships in your life (friends/family/teachers)? How was it different? What do they do that makes it different?
 - How important was the facilitator/horses in helping you to work towards your goals in EAT/L sessions? Who/what else was important in helping you to work towards goals in EAT/L sessions?

Winding down:

- Can you tell me about something you do to relax? How does it help relax you?
- Is there anything you feel that we did not talk about or that you would like to add?

Thank you very much for talking to me about your experiences. Please call me or email me if you have any questions or if you want to say anything about being involved in the study. |

Appendix C: Process of Grounded Theory Analysis

Bracketing interview example

The following is a summary of a bracketing interview in which I reflected on my position in relation to the research topic prior to participant recruitment.

I am a 33-year-old Clinical Psychology Trainee. I also identify as a White British, middle class, heterosexual woman, and although I grew up in a relatively affluent, rural area. I recognise these aspects of my experience as unearned privileges from which I have benefitted and that have shaped my experience of life in different ways to young people (YP) accessing the EAT/L charity. I was aware of horses as symbols of wealth and of inequality in the equine world, with a large disparity between prominent figures in the equine world who are predominantly white and middle or upper class (including royalty), and the usually invisible and low paid grooms and workers that sustain them.

I experienced several Adverse Childhood Experiences that resulted in a period of disengagement from school in early adolescence. I started attending a local stables after school and at the weekends, and I believe my relationships with the horses and people there were key resources that enabled me to re-engage with school and to develop resilience for later life. I was not able to continue with horses after I left school due to financial constraints. However, I have continued to turn to nature and the outdoors to find calm, joy and strength to manage life's big and little stressors. During the bracketing interview, I realised that I hold belief that interactions with horses and spending time outdoors can be helpful through providing a sense of connection and meaning. I traced this belief to my own lived experience and to familial and societal discourses.

I also recognised a felt sense of connectedness to the YP's experience and on closer interrogation identified this feeling as an emotionally valent sense of connection to my own adolescent experiences. This realisation was helpful as it allowed me to prepare for the potential emotional impact of interviewing participants, and prompted me to actively make time and space outside of the interviews to process my own experiences. It also allowed me to fully recognise that my perspective is the product of a specific set of circumstances that have structured my experience in many different ways to those of the YP accessing the charity.

I first became aware of Equine Assisted Therapy and Learning through a friend who recommended a four day Equine Assisted Learning programme. The programme gave me valuable insight into my own relationship patterns and a belief that the work could be beneficial for others. I approached and started volunteering at the EAT/L charity where this research is based two years ago when I was working as a research assistant. I trained in the EAGALA model half-way through data collection for this thesis with 20 other practitioners. I was struck by the mismatch between the enthusiasm of the practitioners and clients and the strength of their conviction in the benefits of EAT/L, and the lack of an evidence base, and that is where the idea for the current project started.

I conducted a brief scoping review of the literature while researching a thesis topic. Theories of attachment and mentalization in the literature resonated with my personal and professional experiences. I realised that I held a belief that horses could serve as attachment figures for humans, and that relationships with horses may have an impact on human relationships through the opportunities for learning to mentalize the relatively simple mind of a horse. The conceptual review was not undertaken until after the development of the GT model.

Field note abstract

The field note abstract has been removed from the final version to protect participant confidentiality.

Example Case Based Memo

Case based memo illustrating reflective process after data immersion and demonstrating constant comparison with other data including case-based and conceptual memos, identifying of potential implicit meanings or processes.

What are your impressions of the participants' experiences?

Ryan seems to be describing a broader process or shift, beyond individual instances of overcoming his fears – he repeats that he learned that he is “braver than he thought” several times, and seems to relate this shift in self-concept to his ability to overcome his anxiety. I think he alludes to another, linked learning – that of “knowing” what to do to overcome anxiety – for example “just doing it” and doing more activities.

It is striking that Ryan was part of the EAL group, where these psychological concepts are not taught (although do check with Hazel about this...) – is this self-directed learning? And if so, what context/interactions enabled it? Is this learning similar or different to others? How? Earlier in the interview, but part of the same thread of conversation, Ryan linked gaining Thomas's trust to his own and others' gains in confidence. Is this process linked? How?

What isn't said?

Ryan talks about being able to “speak up” to people in the playground he previously didn't “feel cool enough” for, and to make friends at SIH but also in the playground. Ryan talks about this as confidence gains, but I wonder if it could also be thought of more systemically/relationally in terms of social capital/social role/social standing. He talks of “earning” friends – there is something about the use of this word that seems to communicate something about the process at play – is this about “earning respect” and improving one's social status?

I wonder if Ryan uses the word “confidence” to talk about slightly different things, or whether it is the same feeling/quality expressed in different settings – for example he talks about confidence in “speaking up” to staff about his problems, confidence in going up to new people in the playground, confidence in mucking out stables. I wonder if confidence is opposite to fear?? I'll bear this in mind with other interviews.

What connections can you make to other analysis?

One was the connection Ryan made between perceived gains in confidence and the perceived difficulty in building a relationship with a horse - for Ryan, this challenge seemed to be the perceived potential for the horse to do him harm, as well as the extent to which Ryan felt that the horse wanted to intentionally harm him or not (e.g., the experience with Blaze). This connects to Carly and Alice's interviews.

I was also struck by the construction of horses as special or unique in some way - something out of the every day.

What process is at issue here?

Ryan seems to recognise that the gains he has made in trusting others is a relational process, and a triadic rather than dyadic process – he traces his ability to speak to staff about his problems to his own newfound confidence in speaking up, that he attributes to working with the horses, as well as to the staff helping him to feel comfortable (and he attributed this in part to the way that they worked with the YP and horses:

Interviewer [00:20:32] What do you think they did that helped you, that helped you feel confident in talking to them about those things? **Ryan** [00:20:41] I don't really know because I was kind of shocked myself that I actually like spoke to them about that - I think it was just the way how they spoke to you and not like especially with the horses in that and the way how we come up. And that would speak to us every Thursday. And like it was just basically people you could trust. And I found that really good, especially because we ain't known them for that long. Ten weeks is a bit of time, but like not as long as you've known or see everyone else in your life. And I've known people for about three years and still ain't told them that sort of stuff. **Interviewer** [00:21:13] What sort of people? **Ryan** [00:21:15] Just like my very close friends and that in school and that. And I think it's - I don't think it's only them just making me feel comfortable, like by their ways. I think it's just the fact that the horses and that obviously gained my confidence to speak up. And I think that really helped as well. And that's why I gained the confidence to do it.

Later in the interview Ryan talks about developing trust with horses as a reciprocal, process involving group interactions and affecting group cohesion and identity:

Ryan [00:22:28] I think the horses were obviously the most important thing coz obviously, they were the things that took our mind off of what we like, what's going on, our personal lives and not like when we're distracted in school. And obviously there are like some people in there have learning disabilities. Some people has like a form of mental disability. And I think those horses, the way how they acted, not only just around us, but the way how we acted around each other. I think that really gained our confidence and like especially with the horses and that we knew that we could trust the horses as much as they could trust us.

Initial Coding and Memos

Transcript extract demonstrating initial line-by-line coding with gerunds, initial memos (in comments), constant comparison (of data within the same source).

<p>someone else is having a problem, usually I will start getting distressed along with other people in the ward. So I think it all just depends on what kind of day you're having.</p> <p>Interviewer [00:07:29] <u>Mmmhmm</u>. And how about coming here? You said it was a calm environment. What do you think makes it calm?</p> <p>Skyler [00:07:35] I don't know. It's like - you come here, and <u>its</u> like it's a whole change of scenery to start and we're getting out of the environment we're usually in every day. So we get out and it's and it's <u>it's</u> just really nice because <u>It's</u> really it's really calm. It's really green. There's lots of horses. And it just I think the change of environment really helps people out as well, because there's a drastic mood change from when you're sitting inside a hospital to outside with hills and an arena and horses, and things.</p> <p>Interviewer [00:08:17] <u>Mmmhmm</u>. Can you say a bit more about the mood change, what happens for you?</p> <p>Skyler [00:08:22] I don't know - for me, I always get really excited on equine therapy days. I always make sure to get out of bed early because one of the rules is if you don't get out of bed on time, then you can't go to equine therapy, which is fair enough, but so I always make sure to get up really early. And it just I don't know. I think as well as me with the other patients, it just it makes them really happy because I mean, I don't know a lot of people who don't like animals, but it's just - I don't know - we pull up and everyone starts getting super excited.</p> <p>Interviewer [00:09:03] And what's that like being with people who are excited and coming here?</p> <p>Skyler [00:09:08] I mean, it's better than being on a ward with people having problems. I just - I don't really know how to explain it. It's nice to get out of hospital and it's nice having people around you who are going through some of the same things as you. But. Like <u>like</u> there's all kinds of different mental health issues on the ward. So even if people aren't</p>	<p>Having a change of <u>scenery</u> Entering a natural environment with horses</p> <p>Sharing a drastic mood change with peers</p> <p>Getting excited about equine therapy Feeling motivated to change <u>behaviour</u> Experience rules as "fair"</p> <p>Sharing positive emotional experiences with peers – loving animals, getting excited, feeling happy</p> <p>Sharing negative experiences - people having problems <u>on ward</u> "Getting out" Going through the same things in a different environment Sharing experience of EAT Feeling united with peers in EAT Sharing enjoyment of horses</p>	<p>Puffin O'Hanlon Compare this to experience of differences in suffering in description of ward atmosphere above. This also makes me think about other YP's accounts of making friends/having something to talk about – is there a process of connecting/connection??</p> <p>Puffin O'Hanlon Compare with sharing positive experiences above. Is this something about seeing people as problems on the ward? Sharing problems can be connecting in positive environment, disconnecting in negative environment?</p>
<p>going through the same things as you like, we all are kind of united when it comes to equine therapy. So a lot of us like just being around horses and things.</p> <p>Interviewer [00:10:02] Thank you. You're describing it really beautifully. Thank you so much. Um and to remember what your kind of hopes or goals were before you came here?</p> <p>Skyler [00:10:12] I didn't really have many hopes or goals. I didn't I. I don't know. I didn't. I didn't really set anything when I first came here, cause my first reaction when they told me you're going to equine therapy was like, oh, not this again. It's not. It's barely going to be about the horses. It's going to be like the one to one sit type therapy. But once I got here, I actually started having a lot of fun. And I think it really did help increase my mood and things. And I don't know, just it was just really nice to start coming here. And then when I got here, like, I was like, oh, it's not one to one, we do like activities and things. And then like, my whole thing was to learn how to work with like all different types of horses and things. So that's what I did.</p> <p>Interviewer [00:11:17] <u>Mmmhmm</u>. It sounds like you were a little bit apprehensive that it might be one to one therapy.</p> <p>Skyler [00:11:20] Yeah.</p> <p>Interviewer [00:11:22] And how does it kind of compare to one to one therapy or in what ways is it different?</p> <p>Skyler [00:11:31] I think it's a lot better, to be honest, because I mean, it's different for everyone, but for me, I don't really like one to one like sitting therapy, it just - I don't know. I constantly need to be doing things so I like it better when we have like DBT or different therapies because it's quite boring. It gets quite boring just sitting and telling the same story over and over and over again and it can just get - I don't know it can get you can get quite anxious when you're just sitting there doing nothing. And it just feels like one psychiatrist or a person or whatever is just staring you down. So I like it better when we're up and doing things and it's even better if <u>its</u> with horses, which are <u>my favourite animals</u>.</p>	<p>Not having hopes or goals Being told going to EAT Not wanting to go to EAT initially Negative preconceptions of 1-1 therapy Having fun at EAT Attributing improved mood going to EAT Challenging negative preconceptions Having a "thing" and working towards it</p> <p>Preferring EAT to one-to-one therapy Disliking "one-to-one sitting therapy". Needing to be active Telling the same story, sitting doing nothing, feeling bored and anxious Feeling intimidated by professionals <u>Preferring</u> being active Having a special interest in horses</p>	<p>Puffin O'Hanlon Something about challenging negative beliefs about others/world here? EAT being different environment, chance to challenge preconceived negative ideas?</p> <p>Puffin O'Hanlon Being active and doing things in EAT vs feeling passive/helpless/intimidates</p>

Summary of Focused Codes

I wrote this summary after focused coding to clarify my thoughts and to aid consultation with my research supervisors. The aim was to tentatively describe properties of categories and subcategories and explore variation within categories, and to tentatively describe the relationships between them. I wrote this summary prior to conducting the conceptual review.

Categories and sub-categories of a model of horse-human interactions in EAT

PAST – feeling disconnected, disempowered and lacking trust in relationships	
<p>The majority of young people talked about a number of barriers to connection in their relationships at home and school:</p> <ul style="list-style-type: none"> - DISCONNECTED: Feeling different, misunderstood, outcast, or not belonging; Feeling rejected, judged, or not good enough; Feeling bored or disinterested - DISEMPOWERED – feeling ineffective, lacking choice or control, or feeling intimidated or pressured in relationships - DISTRUSTING – having difficulties trusting people due to past experiences of adults betraying their trust, letting them down 	<p><i>Carly: Just - lots of - Professionals who've been involved in the past, who've let things slip, ignored things that shouldn't have been ignored. Also, just people who aren't professionals, people who I trusted and they abused the trust so, takes a lot for an adult to gain my trust or respect.</i></p> <p><i>Alice: They have their little laws that are ridiculous - like - you know, there's obviously rules at school that, you know, teachers can't hug you or can't touch you if you're feelings scared. Lots of kids need that in order to feel safe.</i></p> <p><i>Skyler: It gets quite boring just sitting [in talking therapy] and telling the same story over and over and over again and it can just get - I don't know it can get you can get quite anxious when you're just sitting there doing nothing. And it just feels like one psychiatrist or a person or whatever is just staring you down.</i></p>
STABLES – A social sanctuary, blank slate, potential for fun	
<p>The stables setting is experienced as unfamiliar, novel, scary and/or exciting. This activates core systems (see below) and provides opportunities for learning</p> <ul style="list-style-type: none"> - The stables is experienced as an interesting, varied, space to explore and run around -the potential for fun and excitement motivates engagement. Young people and staff find being active outdoors in nature, green, quiet, outdoors, with animals soothing and this facilitates connection. - Real or perceived danger allows opportunities for exposure to fears. - Rules and boundaries are experienced as protecting people and horses from physical harm, rather than as meaningless, confusing or punitive. This facilitates trust in adults and allows young people to take responsibility for their own and others' welfare. 	<p><i>Aspen (staff member): It's outside of a hospital, a clinic. So there's a lot of ability to move away from the idea that there's something wrong.</i></p> <p><i>Heather (staff member): they're just not managing well in the mainstream environment. And when they come here, they have a clean slate. There's nothing ordinary about walking into a barn on a school day full of horses where you're surrounded by trees and you're kind of on your own - and I think the fact that it's so bewildering means that we're able to start the orientation process together with equal vulnerability and curiosity. I think young people come here quite open minded</i></p> <p><i>Hazel (staff member): Um and because it's so - such entirely different spaces and we work in such a different way. It means that these preconceptions don't get carried over so we almost get a blank slate.</i></p> <p><i>Skyler (15): It's a really good change because the hospitals right in the middle of everything, there's a high road right next to it and all things like that ...its like it's a whole change of scenery to start and we're getting out of the</i></p>
<ul style="list-style-type: none"> - The stables is experienced as a 'social sanctuary' - social norms are different to other contexts, giving people a sense of freedom to explore new ways of being, acting and relating. - Because the environment is so different, young people and staff rely less on preconceptions, allowing them to build relationships from a "blank slate" 	<p><i>environment we're usually in every day. So we get out and it's and it's just really nice because it's really calm. It's really green.</i></p> <p><i>Jacob (12): The fact that there's more animals around - I think it relaxed me a lot more than most of the things I do.</i></p>
<p>INTERACTIONS WITH HORSES BRING 'CORE SYSTEMS' ONLINE: 'threat/risk/fear' (high energy), 'Play/excitement/empowerment' (high energy), 'safety/soothe/connect' (low energy)</p> <p>Horses are experienced at once as a potential source of support and care and eliciting an urge to nurture; a potential source of danger and harm; and a potential source of fun. Therefore, being around horses strongly activates powerful, non-verbal, emotional experiences that revolve around love and soothing, fear, and excitement and desire for both staff and young people.</p> <p>Horses and people share these systems, and people can evoke powerful reactions in horses that are comparable to their own. Safe and rewarding interactions with horses necessitate non-verbal engagement with and manipulation of these 'systems' in people and in horses.</p> <p>Things that people and horses do in interactions activate one system while deactivating others. Structures, activities and staff interventions work to manipulate which system is dominant at any one time in order to maximise opportunities for horses and people to connect and learn.</p> <p>(The systems are closely aligned to the Compassion Focused Therapy 'threat', 'drive' and 'affiliate' systems)</p>	
THREAT/RISK/FEAR (High Energy)	
<p>This system is activated when:</p> <ul style="list-style-type: none"> - Horses are experienced as big, strong, powerful and unpredictable and as having the potential to cause harm - (AND young people experience themselves as small, anxious, incapable, powerless, and see others as unfamiliar and untrustworthy) <p>This system alerts young people and staff to real risks in the environment and motivates a range of safety-seeking and/or nurturing behaviours in horses and people (e.g. seeking safety from staff or peers, or experiencing an urge to nurture or protect others)</p>	<p><i>Skyler (15): it can be quite intimidating when you're working with horses.</i></p> <p><i>Interviewer: What was it like when the horses ran fast?</i></p> <p><i>Casper (13) They made like the ground shake? The ground made noise, or shake. A big noise, yeah, depending on how fast it was running</i></p> <p><i>Ryan (14): obviously horses, they could like kick you, could headbutt you, they could bite you. And I think that's why it's a little bit more nerve wracking when I went to the stables for the first time</i></p> <p><i>Hazel (staff): So, I think the power of the work is that you can't ignore or feel indifferent to a horse. Um and a lot of that way that - I think a lot of the</i></p>

<p>When too strongly activated, young people and horses are likely to feel unsafe, disconnected, and demotivated, and may respond with fight, flight or freeze, which prevents connection and engagement. When too strongly activated in staff, staff may respond by intervening in a way that removes choice or freedom (e.g. removing young person from a situation).</p> <p>It is most strongly activated when relationships or activities are new or unfamiliar.</p>	<p>power is that there is this - these huge animals that are quite intimidating and quite scary</p> <p>Alice (15): And they left me to look after Thomas and keep him in the space. And I was like "you just left me with the biggest horse here on my first day" [puts on high voice].</p>
PLAY/FUN/EXCITEMENT (High energy)	
<p>This system is activated when:</p> <ul style="list-style-type: none"> - Horses are seen as novel, special, exciting, risky, fun to play with - Challenges are overcome and people experience a sense of achievement or empowerment <p>When activated in balance with other systems, young people are likely to feel motivated to explore, learn and engage in EAT/EAL.</p> <p>When too strongly activated, excitement can lead to people and horses getting distracted, disconnecting from horses or staff, and not attending to risks, and can lead to threat/risk/fear activation.</p> <p>It seems to be more likely to be activated when people and horses have choices and freedom – for example in open spaces (arena or field), and activities requiring overcoming challenges or fears when energy is high.</p>	<p>Skyler (15): we pull up and everyone starts getting super excited.</p> <p>Jasmine (14): ...when he's in the arena he'd just go straight over to like these cones and just start like putting the cones in his mouth and like throwing them. So it was funny. He's just my favourite horse.</p> <p>Carly (18): It's something that I wanted to do, rather than being forced to.</p> <p>Alice (15): Twice a week on the ward we had to do coping skills - the most boring thing ever...And coming here was a bit like coping skills, but with horses. So we were still talking about the same stuff...But there were horses involved, and yeah, that was fun and distracting and interesting.</p> <p>Heather (staff): the kids, quite chaotic kids would all turn up and were all really - you know - enthralled by the power - the presence of the horses</p>
Safety/soothe/connect (low energy)	
<p>This system is activated when horses are experienced as:</p> <ul style="list-style-type: none"> - "Gentle and calm": Feeling happier, more relaxed in the presence of horses - "Cute and cuddly": Characterizing horses as nurturing and eliciting nurture 	<p>Heather (staff): [to] be with the horses in a non-verbal capacity starts this process of building a therapy alliance - or starts the process of allowing them to relax enough that they can learn and take in information, or think.</p> <p>Aspen (staff): there's something about the ratio of a horse to human, which is a bit like a mother child ratio... <u>its</u> almost like some kind of parent figure without it being - I think it's very containing the size of the horse</p>
<p>When activated, people and horses are more relaxed, distracted from worries, and more open to connection and to learning. They are more focused on others' needs and driven by an urge to nurture others.</p> <p>Connecting with horses, and feeling trust and love, is powerfully rewarding for young people to experience, and for staff/teachers/peers/family members to witness.</p>	<p>Carly (18): they're like such calm and like easy animals, like my whole nature around them just changes...I don't know what it is it's like I'm calm and I think there's much more of a connection</p> <p>Ryan (14): I adore horses and I think they're really cute and everything.</p> <p>Skyler (15): Horses are just big and you can hug them.</p> <p>Interviewer [00:11:46] What what helps the horse to feel grounded and present in the moment?</p> <p>Ivy [00:11:56] It's interesting. You can - you can create often with horses by managing your state, and feeling very grounded yourself and doing exercises that allows you to feel very still, very quiet. Find those quiet places in yourself. And the horse follows the strongest state in a herd, so the strongest state always wins. So if you're wanting to teach someone how to be more present, how to feel - to feel more grounded, to feel calmer - you can help them by saying, look, if you do some of these things, see what the horse does and the horse will go, oh, look that person's breathing out - that horse is looking - that that person is looking really slow and quiet, and I'd like to be near to that - and the horse will copy and will model what was humans doing?</p>
STAFF INTERVENTIONS TO BRING SYSTEMS ONLINE & balance them – what do staff actually DO? And WHEN do they do it? WHY?	
<p>LOOKING AFTER AND TRAINING HORSES INVOLVES CONNECTING THROUGH BODIES: "Horses can't talk"</p> <p>In order to stay safe, bond with, and have fun with horses, young people learn to make use of their senses in order to notice changes in horses' bodies and energy levels, and they learn the effect of their own bodies and energy on horses and then on other people.</p> <p>Direct, face-to-face communication is experienced as intimidating, confusing, disempowering and disconnecting by young people, who often have difficulties putting their experiences into words, or find verbal communication confusing. Tuning into bodies, energy levels and sensations is experienced as novel and challenging at first, but young people tend to learn at this concrete level quickly, aided by powerfully reinforcing feedback from horses, giving them a rare sense of accomplishment and empowerment.</p> <p>Feeling accepted and trusting horses enables young people to accept feedback from horses – Aspen "she's actually been able to speak up about major life decisions and actually stand up to her sisters and stand up to her parents. You know, mum says she sees that as a win in her books.</p> <p>Interviewer: And what do you think happened to enable that change? Aspen [00:24:31] Do you know what? I think part of it is that she's learned that nothing bad is going to happen if she does say to the horse "can you move backwards", for example. She's learned that no matter what she does to the horse, if she makes a mistake, the horse doesn't really care - it, it comes back - it's always that consistency that that she has</p>	

ROLE OF HORSE 2) – HORSES PROVIDE FEEDBACK, leading to experience of self as an AGENT of change (leading in turn to self-awareness and self-regulation)	
NOTICING, ACCEPTING: Developing AWARENESS (?) Young people experience feeling noticed and accepted and able to “be themselves” in relationships with horses:	
<p>Young people experience feeling noticed, understood and accepted for “being themselves” in relationships with horses when horses are:</p> <ol style="list-style-type: none"> 1) experienced as sensitive and responsive to human emotional needs (more so than humans) 2) experienced as non-judgmental, genuine, and honest (in comparison to humans) <p>Staff facilitate this experience as soon as possible when people first arrive by:</p> <ol style="list-style-type: none"> 3) Providing physical safety 4) Providing psychological safety (safety briefing based on horse psychology) 5) <u>Modeling</u> a curious, non-judgmental observer stance, and encouraging present moment awareness (through connecting YP to these qualities in horses); Standing back, inviting young people to meet and observe horses 	<p>Hazel: ...they're a prey animal and so therefore they live in herds and their brains are set up to keep themselves safe from danger...Um then we talk about that and we do a lot of observing their behaviours with that in mind, most of the behaviours a horse shows relate to . anxiety and the anxiety is that they're going to get eaten by something. And as they get the awareness quite early on that these behaviours tend to be about worry and anxiety. So then when they see those same behaviours as an immediate reaction to their behaviours, they understand where it comes from.</p> <p>Aspen (staff): They literally live in the moment so they're unencumbered by both past and future. And therefore, it's much easier to work with.</p> <p>Carly (18): I think they just like me and there's no – I don't know it sounds nuts there's no like preconceptions, you know, like, oh, I know your friend, I know your sister – they're like – it's just – they know you and that's it. And you don't need to explain yourself. You need to do anything at all. You just. Like if you were mute and deaf you will have the same connection</p> <p>Skyler (15): They just have a good use of sense so they can tell when you're scared and tell when you're sad and things like that. So they - I don't know it's kind of weird the way they work cause sometimes they're better at evaluating emotions than actual people are. So they can be a lot more helpful, like with horses here like when I work with Daisy, sometimes I get upset and she just comes and nuzzles next to me and stuff, so it's quite nice.</p> <p>Aspen (staff): The horses are all different colours, all different sizes, they've all got different difficulties. So it's a very normal-normalizing environment</p>
ATTUNING & CONNECTING: developing TRUST in relationships with horses	
<p>Young people start to build positive relationships with horses, connecting through:</p> <ul style="list-style-type: none"> - Establishing common ground - sharing personality traits with horses - Experiencing a special connection – a ‘best friend’ or <u>favourite</u> horse 	<p>Carly (18): It was just it was nice being able to give her like – make her feel clean again. <u>Dunno</u> it was just really sweet... I guess it's just you're looking after her.</p> <p>Interviewer: And are there any other horses that kind of stand out to you?</p> <p>Carly (18): I mean, they've all got just a human streak haven't they. Like you put a load of their mannerisms together and you've got me.</p>
<ul style="list-style-type: none"> - Grooming, taking care of horses, connecting through physical touch. This was EVERY young person's favorite activity, grooming seemed to elicit a strong urge to nurture and look after horses, which contributed both to soothing and relaxing. <p>Horses respond to particular qualities related to calm, sensitivity and responsiveness, and so interactions with horses elicit these qualities from young people. As people take care of horses, they see themselves as having the capacity to be patient, gentle, and caring. They also felt they were making a valuable contribution in a community whose purpose is to take care of and train horses. Both of these experiences contribute to developing a positive identity.</p> <p>Seeing horses are ‘like me’ is a normalizing experience that promotes belonging, and allows young people to ‘notice’ and ‘accept’ their own traits, which contributes to developing a positive identity.</p> <p>Connecting with horses activates the drive to “connect” and lays the foundation for building relationships with people.</p>	<p>Interviewer: Yeah. And how do you make friends with the horses? Casper: Like, pet them first, don't go straight up like in activities and stuff like that, just let them know you - let them learn how nice you are, or bad you are.</p> <p>Interviewer: And how would you let them know that you're nice?</p> <p>Casper: Like, petting them, doing the stuff you're supposed to do for the horse, like clean them.</p> <p>Alice (15): after a while, once I got to kind of know what she liked and what she didn't like, she let me approach. She'd never come to me - God forbid she should come to me - but she let me approach, if I walk, very, very slowly. She let me like stroke her face if I did it very, very slowly. And then she'd eventually let me put her headcollar on. Out in the field. Very - and you know - Yeah. We just slowly got there</p> <p>Interviewer: What do you like about her? Maya: Maybe we have more connection with her - I <u>dunno</u> she listening to me and she's <u>she's</u> comfortable when she's with me. Yeah. That's why.</p> <p>Interviewer: And you said you learned about that body language. Can you tell me a bit about that? Jasmine: Um like when they're scared, like they might like, breathe really heavily and they'll like do this quiver thing with their shoulders, or like put their ears back. Or widen their eyes a lot. So, yeah. It's to show that they're scared. That's pretty cool.</p>
Setting boundaries – developing RESPECT in relationships with horses	
<p>Horses respond to clear boundaries and leadership in interactions with people. Young people learn to set these boundaries through clear, confident, assertive body language. Therefore interactions with horses involve:</p> <ul style="list-style-type: none"> - Setting boundaries around bodies in interactions with horses - Developing assertiveness, leadership using bodies and energy <p>This process appears to be marked by “moments of empowerment” – for example putting a headcollar on for the first time, or directing or connecting with a previously feared horse. These interactions involve finding a balance between being</p>	<p>Aspen (staff): So looking after their physical safety is a way of helping them think about their self- self-worth and personal kind of emotional safety. And just physically how children manage their physical safety and being aware of it and talking to them about it, because obviously when they are emotionally feeling unsafe, they display it very physically and it's being able to talk to them about that and seeing it in the flesh.</p> <p>Aspen (staff): And being able to move a big horse out your space or say, I don't want to be right next to you, I want you to follow me is a hugely empowering thing</p>

<p>calm and gentle, and being directive and assertive. They often involve the experience of facing or overcoming fears, and often involve feeling supported by others (peers or staff) in doing this. This experience not only leads to developing an identity as a capable, confident person, but also to a sense of connection and community (with horses, peers and staff). Both help young people to feel safe.</p> <ol style="list-style-type: none"> 1. Feeling incapable, ineffective, powerless in interactions with horses 2. Experiencing empowerment in interaction with a horse 	<p><i>Jasmine (14) When Heather was showing Hassan, they - he was scared of horses a lot, but I noticed, as they like said words of encouragement. He was able to put the head collar on him - on Thomas the horse. And he wasn't really scared after that.</i></p> <p><i>Heather (staff): we'll give a health and safety briefing of a few points to look at and then we will give a demonstration of how a headcollar goes on. And then we'll leave young people to it to - to get a head collar on. It nearly always takes over - at least over 10 minutes, quite often near - nearly 20 minutes for the young person to get the headcollar on the horse. But I think that - that moment sets up the whole rest of the twelve week program cause it lets young people know how we work and that we're not going to help - they will <u>beg</u> quite a lot to start with - "please help me, please miss I can't do it." And then also, they've had that moment of empowerment - they've done it, they realize that they can do something difficult by themselves and can use <u>each other</u> for help rather than adults. And then from then on that they're more likely to do that more and more and more.</i></p> <p><i>Interviewer [00:33:17] What do you think makes the difference between the 95 percent of the time where you've got eyes and ears and attention and the 5 percent of the time where there's real challenges?</i></p> <p><i>Ivy [00:33:33] It seems to be when - though the 5 percent of times has been when we've had a very, a very big group, that is probably bigger than it should be. And it's when - they just don't give a shit about horses at all, they don't give a shit about anything or anybody in that moment.</i></p>
<p>BELONGING AND CONTRIBUTING TO A COMMUNITY THAT LOOKS AFTER AND TRAINS HORSES</p> <p>The young people described various experiences of exclusion in many areas of their lives - families, school, services, and peer groups. At the stables, they talked about a different experience - of belonging and contributing to a community that looks after horses. They described feeling accepted, understood and supported. To connect with horses, they had to learn to be both kind and assertive, and they had the opportunity to demonstrate these qualities to those around them. They began to see themselves as capable of contributing to a community through leadership, teamwork, and caring for others. They described how they took this newfound confidence and empathy into other contexts and made new friends, changed unhelpful behaviour, and felt hopeful and deserving of happiness and goals for the future.</p>	
<p>NOVEL CONTEXT, DIFFERENT SOCIAL NORMS, ENCOURAGING PROSOCIAL RISK-TAKING (vs social avoidance or antisocial risk-taking?) – changes the context for peer influence (see Blakemore)</p> <p>NB – ACKNOWLEDGING POWER AND PRIVILEGE (could compare how YP from different ethnicities talk about belonging etc)</p>	
<p>ROLE OF HORSE 1) Horse as a buffer, REDUCING SOCIAL THREAT by providing an external point of focus and a shared point of connection</p> <ul style="list-style-type: none"> - Horses (and the setting) provide an external, shared point of focus which relieves interpersonal pressure and challenges for both YPs and for staff (staff are better able to manage interpersonal behavior that challenges) - Looking after horses becomes a shared task/common cause that provides a shared sense of meaning and purpose (which engenders a sense of 'community empowerment' and fosters hope and motivation) - Staff and young people demonstrate their nurturing and leadership qualities through interactions with horses <p>Staff facilitate this process through valuing young people's contribution to looking after the horses and for setting the context for young people to get to know horses and peers and to see peers as sources of support</p>	
<p>Building safety and trust in relationships with staff – a gateway to relationships with horses, and a bridge to relationships with other people</p> <p>YPs feel understood and trusting of staff and able to confide in them more quickly (BONDING) than in other relationships, feel supported and looking to staff for safety (managing FEAR), and learn from staff (HAVING FUN) when staff were seen as:</p> <ul style="list-style-type: none"> - friendly, genuine, accepting and non-judgmental, 	<p><i>Ryan: obviously helped coz that could be a way that would start conversations in the playground like say, if. I didn't know how to start conversation with them, I could just like talk about horses and they'll talk back to me. And it's basically something that just helps me speak up a lot.</i></p> <p><i>Liam: Because if we didn't have the horse, we wouldn't really talk to each other. But when we work with each other, we tell each other what to do.</i></p> <p><i>Hazel (staff): it's all about, the horses and <u>and</u> the fact, it breaks down all these barriers and we get a relationship with the young people, just because we're almost the - the gatekeeper to the horses I think - um they get a relationship with the horses first - that happens first, and then as a result they then get a relationship with us because they really want to learn a lot more about the horse behaviour</i></p> <p><i>Interviewer: What did you learn about other people?</i></p> <p><i>Casper (13): They're good as well.</i></p> <p><i>Interviewer: What was good about people?</i></p> <p><i>Casper: Coz they're like there to like help and like just keep comfort for the horse and stuff</i></p> <p><i>Aspen (staff): So seeing the young person get very cross with the horse is easier to work with because we are removed - we are one <u>one</u> step away from that. So we can talk about it.</i></p> <p><i>Ryan: I was kind of shocked myself that I actually like spoke to them about that - I think it was just the way how they spoke to you and not like especially with the horses in that and the way how we come up. And that would speak to us every Thursday. And like it was just basically people you could trust. And I found that really good, especially because we <u>ain't</u> known them for that long. Ten weeks is a bit of time, but like not as long as you've known or see</i></p>

<ul style="list-style-type: none"> - sensitive and responsive to YP emotional and practical needs. <p>Interactions with horses facilitate the staff/YP relationship in several ways:</p> <ul style="list-style-type: none"> - Staff are seen as "horse people" and different to other adults, so that young people approach the relationship with fewer preconceptions (blank slate). - Staff are seen as a source of safety, knowledge and support for connecting with horses, which provides motivation to connect with staff ("GATEWAY"). Staff give direction rather than answers, avoiding the expert position - Showing or demonstrating with behaviour, rather than telling in words - Staff use horse's reactions to clients as information about clients' internal worlds <p>This is contrasted (implicitly and explicitly) with other relationships with adults and professionals, in which YPs describe feeling misunderstood, intimidated, uncared for, or pressurized.</p>	<p>everyone else in your life. And I've known people for about three years and still <u>goin'</u> told them that sort of stuff.</p> <p>Jasmine: it was really nice because I knew I could talk to them if I needed to go over to them.</p> <p>Heather (staff): It's a very powerful feeling, and to have someone by your side who's - in essence, meant to be making it - helping you make it safe enough for you to be there - that being my stuff like the equine specialist or myself and to regulate - help you regulate those emotions is already a big step in therapy</p> <p>Aspen I've heard a story previously where one of the horses here had quite a traumatic background. And as a result, she's quite hyper vigilant of, you know, people's moods and feelings and body pretty - I guess pretty much like our kids that come here and- I remember being told that there was this one girl who appeared very, very meek on the outside and very, very sad. And Daisy just wouldn't go near her. And underneath all that sadness was this really intense rage and anger directed towards kind of family and everybody in and Daisy just picks up on that. Daisy wouldn't go near her. And the client was just wondering, you know, well why - why isn't she coming near me? You know, what's <u>what's</u> happening here? And that kind of led to that progression in the conversation around. You know, what was really underneath those feelings. So they're - they're very intuitive as well.</p>
<p>Staff interventions – safety and scaffolding</p> <p>Staff structure activities, space, and interactions with horses based in order to enable experiential learning with minimal verbal input from staff. Staff scaffold this process through intervening to shift energy levels if energy levels are too high (RISK) or too low (young people becoming disengaged or disconnected).</p> <p>NEED TO EXPAND ON THIS & FIND EXAMPLES</p>	<p>Heather: There's a lot of I think - a lot of children who struggle with how much positive attention they get, and care and love and - if they get into difficult difficulties, it's more pressure from parents or school or adults rather than space and time to problem solve themselves and repair those mistakes that they made or</p> <p>Heather: on the safety briefing - we want our clients to think for themselves, we don't want to give them hard and fast rules on what's safe or not, but we do need to inform them about how horses think and behave so that they can make those judgment calls themselves - we're giving them a sense of ownership from the beginning about how they are going to behave, because</p>
	<p>In the end, we want them to be autonomous and <u>non directed</u> - they're not coming here to learn skills, they're coming here to explore and experiment and learn</p> <p>Hazel (staff): we partner up the people with horses that have a quality - that are going to bring out the quality that they find difficult ...so we make the very quiet, passive young people work with the naughty, stubborn horses that need you to be really strong and assertive...and then really chaotic young people to work with the horses that get very worried, very easily, so they have to learn to be very calm</p>
<p>TRAINING HORSES AND PEOPLE</p>	
<p>The foundations of trust and respect from looking after and connecting with horses in the stables are developed further in the arena.</p> <ul style="list-style-type: none"> - As they build up the confidence to PLAY with horses and peers, young people learn through TRIAL AND ERROR, taking RISKS, and responding to FEEDBACK. Young people learn to use their bodies and energy to balance the three systems in themselves and others, alternating EXPLORING, EXPERIMENTING and EXPOSURE to fears through taking RISKS, with CONNECTING and seeking SAFETY. - Horses reward calm, sensitive, assertive behaviour through cooperating or connecting, while reacting aversively (fight/flight or non-cooperative behaviour) to aggression, intimidation, or lack of attention/focus. Empathy and assertiveness therefore become desirable qualities for group membership - Young people find it easier to understand, take on board, and respond to horse's bodily, non-verbal FEEDBACK to their <u>behaviour</u>, because it is concrete, immediate, not personal, and difficult to ignore (strongly activating soothe/play or threat). - The process of EXPLORING, EXPERIMENTING and EXPOSURE leads to greater UNDERSTANDING of their own bodies and energy levels. Young people learn to be ADAPTABLE and FLEXIBLE. Young people also develop skills in SELF-SOOTHING through regulating emotions and changing <u>behaviours</u> (e.g. learning 	<p>Aspen: I think it's that very real danger, these large animals. It's very collaborative. It's collaborative for the horses and for the horses have to collaborate to live together. And we have to collaborate to look after them. And that's what a lot of our young people struggle with is - is kind of being able to collaborate...</p> <p>Hazel: So having that physical experience of - do an action affecting this huge, massive animal, which is in effect a wild animal in its head I think is massively empowering.</p> <p>Interviewer: How would you help them out with their anxieties? Carly: Um, you show them that what you're doing is safe and they build up the trust with you and from then they can kind of do what you're doing, or what you want him to do.</p> <p>Heather: [training horses is] a constant process of gaining their trust, gaining their respect through how you handle them and how you interact around them with your body</p> <p>Ryan (14): But when you gain his trust, he really listens to you and that. And like he's so gentle with you and that.</p> <p>Interviewer: Yeah. What do you think helped the horses be more comfortable?</p> <p>Jacob: Us knowing what they like and dislike, um about us sometimes. Like they learned at the very - like, yeah at the very, start that it dislikes being like ran at cause it just dislikes because it doesn't know what it can be. So it just runs away.</p>

<p>to stay calm and focused in order to connect and work with horses). This can happen with or without staff intervention.</p> <ul style="list-style-type: none"> - Young people may also develop their capacity to EMPATHISE, developing an UNDERSTANDING of horses' and peoples' behaviour through inferring mood or energy levels from movements and bodies. This can happen with or without staff intervention. - Young people learn to manage RISK through taking RESPONSIBILITY for their own and peers' safety (e.g. by telling a peer to move out of the way of a horse) and by establishing RESPECT in their relationships with others through setting boundaries, demonstrating assertiveness and confidence, and being kind, patient and caring towards others. - Young people look to staff, and then to each other, for SUPPORT and SAFETY. - Young people experience UNITING with peers, horses and staff, through caring for each other and having fun. <p>Through these processes, young people learn to build TRUST in their relationships with horses and people.</p>	<p>Interviewer: [was it helpful to] to develop your own answer? Jacob: Yeah. Cause I feel like it could like make someone like access on how the horses could feel and maybe someone could give their own opinion, someone else's opinion and, and people could start thinking a lot more on what to do next.</p> <p>Hazel: It tends to be the underdogs - the young people that are quite quiet and often maybe get bullied or overlooked in a peer group. They tend to be the ones that are quite empathetic and able to work with the horses more effectively than perhaps the ones that are a bit more bullish and tend to take more of a dominant role in a - in a group. And those qualities then suddenly get the - that young person seen more as a leader and a bit more integrated into the group. So it changes group dynamics quite quickly - the horses do, and then also it encourages young people to change their behaviour so the more bullish ones that maybe don't empathise with others very much will see the success that are empathising are having and will start to emulate and change that in their behaviour</p>
<p>LEARNING TO BELONG AND CONTRIBUTE – RESPECT</p> <p>THE BIGGEST RULE IS RESPECT (repeated at every safety briefing). Respect seems to come from a combination of horses being intimidating AND accepting/trustworthy. NEED TO LOOK INTO THIS MORE AND GIVE MORE THOUGHT</p>	
<p>Young people described different responses to unfamiliar and unknown peers or staff at the stables in initial sessions or when there is a change in people (staff or peers), either feeling curious and excited, or feeling different, outcast, scared.</p> <p>Young people connect with the core task of working together as a team with a shared purpose of looking after and training horses, motivated by the experience of having a role and responsibility for taking care of horses and by feeling capable of making a difference.</p>	<p>Liam (12): It was scary at first. Then when I get to when I get to know everybody. It's really fun. Interviewer: So what was scary about it? Liam: I didn't know what it was going to be like</p> <p>Aspen: and that's what we're trying to train most young people to do, is to exist with humans in a safe way and appropriately so that they can have fulfilled lives and safe lives. And so it's the environment and that understanding that we don't care what you look like, how many Instagram followers you have, it's more about what you do here in the moment so that</p>
	<p>you're kind and gentle and you don't raise your voice that you can be part of our herd, whether it's the herd within the horses or the herd of people where we respect each other space, where we respect each other's right for food and safety and water and shelter.</p> <p>Carly [00:45:36] It just didn't make me feel like an outcast, which is what most people have done to me my whole life – it's just like, whatever – we don't care what you're doing or how you're acting.</p> <p>Skyler: But I don't know, it just it's not the same here. They, they really try to be all inclusive and they really try to make you feel like you're part of the team and things like that</p>
<p>Developing trust and respect with people; forming a positive social identity</p> <p>LINK TO RESILIENCE??</p>	
<p>REFLECTING, MENTALISING, TRUSTING – developing verbal and cognitive capacities</p>	
<p>ROLE OF HORSE 3) METAPHOR</p>	
<p>Observing and reflecting on interactions with horses facilitates these processes through:</p> <ul style="list-style-type: none"> - Enabling young people to talk about feelings and behaviours in a concrete way and normalizing and validating having, talking about, and working through them - Understanding behaviour through mentalising horses and young people - Developing greater trust in relationships - These processes can happen with or without direct intervention from staff. 	<p>Skyler: So when a horse is acting shy or whatever or not joining in the inactivity and you relate it to a person, you kind of take yourself out of the situation and you actually think about it and you're like hmmm that person might be going through some shit right now and stuff like that... I think it just shows me that there's a baseline to everything so people might be struggling or have things going on, but they'll keep it really under wraps like they won't let anyone know. Because usually if someone's being horrible to you or being nasty or whatever, they usually have their own things going on. So it's kind of just made me realize that with my parents they might have other things going on and even though it doesn't make it right. It's it's it. It happens...I mean, it kind of makes me feel like it's probably not all my fault. Like they sometimes make it out to be. There might be things going for them that make them feel the need to be nasty or whatever.</p> <p>Jasmine: My friend up-, my friend the other day, she was upset and I didn't notice this before. If she done this, but after equine, I was like, OK, this is a bit weird. Like, she was looking down a lot and she wasn't making eye contact with anyone. And she just kind of like didn't say much. So I was like, OK,</p>

	<p>there's something wrong with you. What's going on? And then found out she was really upset about something because her brother had done something to her at home and I was like Oh, my God</p> <p>Alice: But yeah, I think. I think it changed how I approach people cause I had started really analysing - when they were new patients on the ward I started really analyzing how they were acting so that I would know whether or not they were OK with me talking to them.</p>
CALM – feeling able to manage emotions and behaviour in other contexts	
<p>Young people develop skills (for example in exposure to fears or psychological or behavioural flexibility) in managing their emotions and behaviour, and confidence that this may make a difference - young people learn they have some power to influence the world around them.</p> <ul style="list-style-type: none"> - Feeling able to overcome fear and control behaviour in other contexts - Learning to be flexible and try different approaches rather than getting stuck in unhelpful patterns of behaviour. - Learning that I can make a difference 	<p>Ryan: And it makes me understand that like you only live once and that and just like whatever you get the chance to do, I'd like just take it because like obviously it helps with my confidence as well, like I say if I was gonna go on a roller coaster ride and I was very scared of it. I'd probably still go on it now because like I think I've faced my fears with the horses. Obviously I'm a lot braver than I thought</p> <p>Liam: Um. The horses helped me achieve my goal in school by turning my behaviour around, going to lessons and doing my work.</p> <p>Carly [00:28:48] ...I was trying to get [a horse] through – there was two barrels and a wooden crate and he just didn't want to go through it. And I was trying and trying, and I was like you need to just change like the way you're doing it. See if that will work. And then I went round and did it the other way and they managed... You have to be adaptable. If something isn't working the way you want it.</p> <p>Interviewer: have there been any specific situations where that's happened since you've been going to the yard?</p> <p>Carly (18): Yeah. Um so this week I was actually under Section 2 in hospital. And normally I kick off and lose the plot and make things much worse for myself. And this time I literally just kept my head down, and just don't do anything and see if this works. And legally, they could have held me up to 28 days, but I got discharged within two days. Three days. It's kind of like you just need to change your mindset and do the opposite of what you want to do. It might make a difference. It might change.</p>
CARING, CONFIDENT AND CONNECTED – developing better relationships	
	<p>up for him and I was showing them like, Ethan's just not like someone that you can pick on. I was just like showing people that I can stand up for people</p> <p>Interviewer: And what were you doing to show them?</p> <p>Hasan: I was literally I went to them and told them to stop. Like they were just like, "what for? What you are you gonna do, what you're gonna do?" I just told Ethan I said, "just come with me quickly" and I literally moved him out the areas so like he didn't, like, get told. Then we started to make friends.</p> <p>Hasan explained how this was different from before -</p> <p>Interviewer [00:26:28] And do you think it sounds like it's been really important to you to stand up for your friends and to be assertive with other students. How has being with them, how is the equine therapy impacted on that do you think?</p> <p>Hasan [00:26:48] It has made me much more confident to like stand up for like people - like help people. It's made me really confident.</p> <p>Interviewer [00:26:58] And is that different now to before you started?</p> <p>Hasan [00:27:03] Yeah before, like well, my friends used to like - I think it was Dylan... they wanted like a fight like we were in year 7. His mom and my mom were friends.... I didn't really want to do anything because like I know he's been like he annoyed my friends really much and they were telling me to, like, join in our fight I was just like, nah. I said I would, but I really didn't like. I was just stand back and I was scared to do anything. I didn't want to do nothing. So I just like stood back and was just like, I don't think we should do this. But they did it anyway. And then after that I went to Dylan and I said, like, sorry and that.</p> <p>/</p>

CAPABLE – able to belong and contribute to other social groups	
<p>Young people take their experience of being seen and seeing themselves as calm, confident, capable and caring into other contexts. This process may be facilitated by teachers, parents or carers being part of sessions, or witnessing sessions.</p> <ul style="list-style-type: none"> - Developing a positive self-concept – capable, confident, kind - Developing hope, feeling able to be happy - Wanting to work with horses in the future 	<p><i>Interviewer: Do you know what it is that's happened, while being with the horses that's given you that sense of "I don't care"?</i></p> <p><i>Carly: I think it just means that I am good at something and I don't need to show everyone all different sides of me I can like – I dunno – I don't need to try so hard.</i></p> <p><i>Skyler: I think most of all, I've learned that I'm allowed to be happy but don't have to be miserable all the time just because of what my head tells me, like I'm allowed to enjoy myself, I'm allowed to do what I like doing.</i></p> <p><i>Aspen: I think lots of diagnoses of attention deficits - lots of deficit diagnosis and you - seeing them function with these "deficits", but their "deficits" being put to such good use. So, you know...that their ADHD was helpful in making them keep really focussed on the horses and being in five different places at once to help everybody</i></p> <p><i>Hazel: And he was so assertive. And then from that moment, everyone treated him completely differently - um the teachers stepped back...and they start to see what the people are capable of, then they feel more able to do that a bit more in the classroom environment as well...one of the biggest bits of feedback we get from the teachers is that it changes their way of working even in the school environment</i></p>
PROCESS THROUGH A SESSION	<p><i>Fern: I feel like the most beneficial thing is when young people lead the horses back from the arena to the to the to the stables for the grooming, because all the learning you can see come in to, you know, when they lead - if they're leading them up, the horses are pulling them over to eat grass, when they need them back, they're much more aware of their body and where they are, where they place themselves, and the learning there is massive.</i></p>

Example Conceptual Memo (Stage 3-4)

This memo is from late stage 3/early stage 4 analysis. It shows the early evolution of the category “Being part of a social sanctuary”, defining properties and variations of the potential category, and tentative relationships with other tentative categories

The stables becoming like a herd/alternative family/community of people and horses: exploring the potential role of shared experience and potential connection to sense of safety

“you can be part of our herd, whether it's the herd within the horses or the herd of people” (Aspen)

Interviewing Aspen was the first time I had really begun to conceptualise the stables as some sort of system – I was struck most by what she said about the “herd”, but then when transcribing also that the stables is like a “family” – organised around caring for the horses, and enabling connections with people from all walks of life, different ages, building community links with people in the local area. Is there something about the MULTIPLICITY of relationships and connections made at the stables? The more I think about it, the more relationships I see as important – for example, the importance of interactions between peers, peers and horses, peers, staff and horses...and of course the interactions between horses and horses...

What helps build the connections? What helps bring all these different people and different species together? Is it the *shared experience*?

The theme of sharing an experience at the stables comes up again and again. This is sometimes about sharing an experience, or sharing characteristics, with people or horses at the stables “being around people I felt comfortable with” (Aspen); at other times it is the sense of feeling connected in other settings through the shared experience at the stables – for example having “something to talk about” in the playground (Ryan). What is the difference between these two types of connection? Need to follow this up in interviews.

What function does the sense of shared experience fulfil? Are shared experiences shared only with certain people, or does it extend to everyone at the stables? Does the sort of experience matter? For example, do people talk about sharing negative/scary/broing or exciting/satisfying experiences (go back to data)

Hypothesis to test: sharing experience leads to a sense of safety via sense of connections with others

Diagramming

Diagrams and explication of process in the main text of Parts 2 and 3.

Reflexive diary extract

The following is a reflection on the role of context in shaping interactions between YP and professionals. This adapted extract from my research diary uses two prototype examples to protect anonymity (based on clinical examples but not real characters).

In my CAMHS placement, I met YP in institutional settings – their school or the clinic rooms of an old psychiatric hospital. The first stories I heard or read about them were generally “problem-saturated” expert opinions written or spoken about them in professionals meetings or in client notes. This was part of the assessment process, and helped clinical teams to manage risk and formulate difficulties. At the stables, staff are generally told the young person’s name, age, school and little else.

Before I met Michael in a CAMHS service, I had read several pages of RiO notes, talked to his parents, his teachers, and his previous therapist, read several emails between commissioners and service providers, and attended two professionals meetings. Despite the team’s best efforts to include Michael’s strengths and views, the heaviest focus was on the ways in which his behaviour had challenged those around him. When I first met him at school, I felt apprehensive about how he might respond to a new professional, and under pressure to do something to change the behaviour. I found him singing and dancing in the classroom with his support worker and asking me to join in. This mismatch between my expectations of Michael and the person in front of me so utterly took me by surprise that I realised that I had unwittingly come to several conclusions about Michael’s character without having met him.

Before I met Chantil at the stables, she was referred as part of a school group as “Chantil, aged 14, wants to improve her confidence”. When I met Chantil when assisting on a programme at the stables, I had no choice but to make an effort to get to know her in person, and no pressure other than to support her to manage and learn from her moment-to-moment experience at the stables. I got to know Chantil as a YP who was sensitive and attentive to horses’ needs and supportive of younger peers who were less confident with horses. It was only at the end of the 12 weeks courses that one of the support workers told me that Chantil had been excluded from three schools, most recently for kicking a teacher. My mind immediately searched external factors for an explanation – was she being bullied? Had she put in a situation where she felt unable to escape from danger? I noticed how different this was to my encounter with Michael, where I was making a risk assessment based on my preconceived ideas about his character. It is important to acknowledge that the “blank slate” may be possible at the stables because YP are accompanied by teachers and support staff, who carry responsibility for risk and hold the problem-saturated stories. BUT I wonder if there are ways of bringing the blank slate/strengths-based approach into

my CAMHS work...such as trying not to have conversations about the person without the person...or limiting how much information I read before meeting them?