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MAKING SENSE OF CHANGE IN AN EQUINE ASSISTED
INTERVENTION.

Section A: What current evidence and theories support the use of Equine Assisted Interventions (EAI) for treating people with social, emotional and mental health difficulties?

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Section B: Exploring how parents make sense of change in an equine assisted intervention for their child: The HorseCourse

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Summary of Portfolio

Section A is a review of current evidence and theories supporting the use of Equine Assisted Interventions (EAI) in the treatment of people with social, emotional and mental health difficulties. It outlines the existing research base and theories drawn on in EAI, highlighting a lack of consensus on underlying theories. The review also reveals a lack of research into understanding change mechanisms in EAI. Clinical implications and suggestions for further research are also discussed.

Section B presents a qualitative research study exploring how parents make sense of change in an Equine Assisted Intervention: The HorseCourse. Eight semi-structured interviews were carried out and Interpretative Phenomenological Analysis was used to analyse transcripts. Results revealed four superordinate themes which have been discussed in the context of previous research. Limitations, implications for practice and suggestions for future research have also been presented.

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Section A: Literature Review

What current evidence and theories support the use of Equine Assisted Interventions (EAI) for treating people with social, emotional and mental health difficulties?

Word Count

7624 (342)

Abstract

This review explores the existing evidence for equine assisted interventions (EAI) and the theories supporting this research. It begins by outlining definitions of different types of animal and equine-assisted interventions. A search of Web of Science and PsychInfo found 13 relevant articles which are reviewed, and research and clinical implications discussed. The review outlines the existing research base and the theories drawn on in equine-assisted interventions. It highlights the lack of consensus on the theory underlying EAI. In addition, there appears to be a little research into understanding the possible mechanisms of change in EAI. Where positive benefits are reported for participants it is not clear if it is something about the horse, something about the novelty of the experiences or something else entirely different that is at play. The review concludes with clinical implications and suggestions for further research, including the exploration of mechanisms of change in EAI.

Key words: equine assisted interventions, mental health, emotional wellbeing, evidence, theories

Introduction

Animal Assisted Interventions

Interactions between humans and animals date back thousands of years. Humans have used animals as means of transport, to power mills, for sport, leisure and in war. Animals have been useful companions, farm workers and play roles in rescue, security and police work. In more recent decades, animals have been used in therapeutic work with humans. Levinson (1969) was one of the first to report benefits of using dogs in counselling sessions with children; case studies were used to inform and encourage further research on the positive effects he observed animals brought to therapy.

In order to develop greater understanding of animals used in therapeutic interventions with humans, it is important to make sense of the terminology and definitions used. This can cause confusion, as there are many seemingly similar interventions that have different names and there are also variations across interventions that use the same name. In a dissertation review, LaJoie (2003) found that there were 20 different definitions of Animal Assisted Therapy (AAT) and that 12 different words were used to describe the same phenomena. With such varying reports cited in the literature, this review will begin by outlining some of the key terminology in the area of animal interventions.

AAT is an umbrella term for many different goal directed interventions in which animals are an integral part of the treatment process. Human professionals who may be mental health or equine specialists facilitate the intervention. Various animals can be used in AAT including cats, dogs, dolphins and horses. AAT can include programmes that may not qualify as ‘therapy’ in the medical sense (Kruger & Serpell, 2006).

Animal Assisted Activities (AAA) are delivered by professionals or volunteers alongside animals, they can provide motivational, educational, recreational or therapeutic benefits to an individual’s quality of life. A key difference between AAA and AAT is that AAA can be more spontaneous and do not involve treatment goals (Kruger & Serpell, 2006).

Both AAA and AAT can be grouped together as forms of Animal Assisted Interventions (AAI). AAI have increased in popularity over the past number of years and various animals are being used to enhance therapeutic work with humans of all ages and with a wide range of difficulties. Despite the growing popularity of AAI there is currently no widely accepted framework of the underlying theory (Kruger & Serpell, 2006).

Research has been carried out into various forms of AAI with a wide range of client groups. Gee, Mueller and Curl (2017) present an overview of AAI work with older adults, highlighting that animals can reduce stress and blood pressure, helping to improve cardiovascular health. In addition, animals, including pets and therapy animals, can play a role in ameliorating loneliness, depression and anxiety and improving quality of life.

Gee et al. (2017) highlight some of the challenges of AAI research, for example the fact that human-animal interactions can be difficult to quantify. They also raise a concern that there can be publication bias, whereby only effective AAI studies are written up and published in journals and other work with poorer outcomes may not be in publication. Publication bias can be a particular problem in AAI, as many researchers develop hypotheses and test for these benefits, ending up with confirmation bias, rather than employing a more sound scientific method of testing a null hypothesis.

In other forms of treatment, such as Randomised Controlled Trials (RCT), participants can be offered placebos instead of the intervention and experiments can be run 'double blind' to reduce bias. However, in animal assisted interventions it is very apparent that the animal is present and therefore difficult to run a double-blind experiment or intervention.

O'Haire (2017) offers a systematic review of AAI carried out with people who have a diagnosis of autism spectrum disorder (ASD). Within this review, which included research from 2012 to 2015, O'Haire reports that the most commonly reported outcome was increased

social interaction and calls for a focus on refining AAI techniques, identifying optimal circumstances for change and replicating studies to develop the evidence base.

Beetz (2017) presents a paper which outlines theories and possible processes of action in AAI. There are many proposed theories and ideas, including the biophilia hypothesis (that humans have a natural affinity to all living species) (Wilson, 1984), attachment theories (Winnicott, 1951) and cognitive and social theories (Bandura, 1977). As previously indicated, there is not one widely accepted theoretical model underpinning AAI, and calls are often made for further and more rigorous research to seek clarity on this. Beetz (2017) suggests that understanding what it is about animals that leads to positive effects across education and therapeutic settings will provide a better rationale for the use of AAI and promote efficacy. However, it is not clear if it would even be appropriate to have one theoretical framework given that such a diverse range of animals are used in different ways across interventions. The theory of why a horse might benefit a human experiencing emotional distress may or may not be the same as the benefits of a domesticated pet, such as a cat.

Equine Assisted Interventions

Winston Churchill was once quoted saying, 'There is something about the outside of a horse that is good for the inside of a man' (Wray, 1984). Interactions between horses and humans date back thousands of years to when horses were first domesticated and used for transport, and subsequently agriculture and warfare (Anthony, 2007). With the growing development of AAI in the past few decades, horses are now widely used in many different types of interventions with people around the world. Interventions with horses seem to offer something different to AAI with smaller animals (Granger & Kogan, 2006).

Equine Assisted Intervention (EAI) is an umbrella term which encompasses any intervention involving a horse directly with people; interventions can be run in groups or with individuals and they can involve interaction with a horse which may or may not involve riding. Interventions can involve trained mental health workers or psychotherapist and an

element of talking therapy, but they can also be facilitated by trained equine specialists and focus on activities and tasks. Interventions under this umbrella term of EAI include, but are not limited to; ‘equine assisted therapy’ (EAT), ‘horse assisted therapy’ (HAT), ‘equine assisted psychotherapy’ (EAP) and ‘equine facilitated therapy’ (EFT).

Horses can be used in many ways including hippotherapy and riding rehabilitation. Hippotherapy is a form of physical, occupational and speech therapy often used with patients who have neurological or other physical disabilities such as cerebral palsy or multiple sclerosis (Koca & Ataseven, 2015). Hippotherapy is based on theories of the physical movement on the horse and aims to enhance the balance, mobility and physical posture of the rider; given the specificity of hippotherapy and its focus on physical symptoms, it will not be included in this literature search for equine assisted interventions.

Much of the existing research into AAI and particularly EAI, focuses on populations with specific neurodevelopmental conditions, such as autism spectrum disorder (ASD) (O’Haire, 2017) and Attention Deficit Hyperactivity Disorder (ADHD) (Jang et al., 2015). Given specific needs and aims of such equine approaches for people with diagnosed developmental disorders, such research will be excluded in this review. Examining EAI literature for a wider range of varying neurodevelopmental conditions is beyond the scope of this current review.

Previous Reviews of the Research

Previous reviews into EAI research have highlighted limitations of some methodologies. Anestis, Anestis, Zawilinski, Hopkins & Lilienfield (2014) carried out a systematic review of 14 peer reviewed empirical EAI studies in which a horse played a pivotal role in treatment of a specific mental illness in children and adults. Anestis et al. (2014) found issues with internal and external validity and design flaws of the research, for example six of the fourteen studies used control groups, but none controlled for the ‘novelty’ factor of EAI. Anestis et al. (2014) concluded that the studies were not sufficiently valid to

provide evidence that EAI were any more effective than the passing of time for mental disorders and highlighted the need for more well designed studies to justify its use.

Wilkie, Germain and Theule (2016) carried out a meta-analysis of seven empirical studies to determine treatment effects of EAI for 'at risk youth'. Results indicated a moderate effect size, suggesting that youth respond positively to EAI, and it is a viable alternative to conventional intervention strategies. Wilkie et al. (2016) do also however highlight that their research was limited by a lack of consistently reported study variables and call for greater rigor in quality of research. In an earlier review, Bachi (2012) also highlighted the gap between practice in EAI and the knowledge base; particularly noting that evaluation studies showing benefits of interventions with horses are limited by small samples and lack of control groups.

Rationale

EAI are increasingly used for a wide range of individuals with social, emotional and mental health difficulties. Despite their popularity, there remains further development to strengthen the evidence base of EAI and to close the gap between knowledge base and practice. Previous reviews outlined above including Anestis et al. (2014), Bachi (2012) and Wilkie et al. (2016) have examined quantitative EAI research, bringing to light concerns about reported research findings, particularly in terms of methodology and study design.

This review offers an up to date evaluation of more recent research literature to understand what evidence and theories support the use of EAI for people with social, emotional and mental health difficulties. Qualitative research, not included in previous reviews will be explored in addition to quantitative studies. Bachi (2012) highlighted a gap between knowledge base and practice in EAI, this review will build on this work by examining theories underlying existing EAI research. Wilkie et al. (2016) emphasised the importance of rigour in EAI research; the quality of the qualitative and quantitative research literature will therefore also be critiqued in this current review.

Aim

The aim of this review is to explore the existing research into EAI, and the theories and models supporting its use as treatment for people with social, emotional and mental health difficulties. The review aims to generate a deeper understanding of the existing EAI evidence base and the quality of this evidence, leading to a discussion on clinical implications and suggestions for future research.

Search Method

Firstly, the search terms ‘equine assisted therapy’ or ‘equine assisted intervention’ were mapped to subject headings and entered into Web of Science - Core Collection and PsychInfo databases. This initial search of the two databases returned 242 results.

An additional search filter was then applied on these papers, searching within results for the word ‘theory’ or ‘model’ - 42 matching results were found. The titles of these papers were then screened for relevance and duplicates were removed.

Inclusion criteria was based upon studying research that (1) involves models or theories supporting the use of equine assisted interventions and equine assisted therapy for (2) humans of (3) any age in (4) any country. Only papers with (5) full texts available in (6) English language were included in the review.

Exclusion criteria was applied to remove research that narrowed in on (1) specific populations, for example studies solely involving people with Autism Spectrum Disorder (ASD) or Attention Deficit Hyperactivity Disorder (ADHD) were excluded from the literature search. In addition, papers that involved (2) hippotherapy were also excluded, as this considered is a separate type of therapy focusing on physical rehabilitation.

Following a review of the titles and abstracts, 35 papers were deemed irrelevant based on the inclusion and exclusion criteria outlined above, and therefore were not included.

The seven remaining papers were reviewed in full. The reference lists of these papers were then reviewed to check if there was any additional relevant research. This added a further 10 studies to the papers reviewed in this literature search. Three papers which included reviews and a meta-analysis were excluded at this point. One paper was also excluded due to its focus on physical therapy aspects of equine interventions, which is not the focus on this review; resulting in a total of 13 papers included in the current review. See Figure 1 for a diagram presenting the steps of the literature search. Table 1 provides an overview of the papers included in this literature review.

Figure 1. Flow chart of literature review

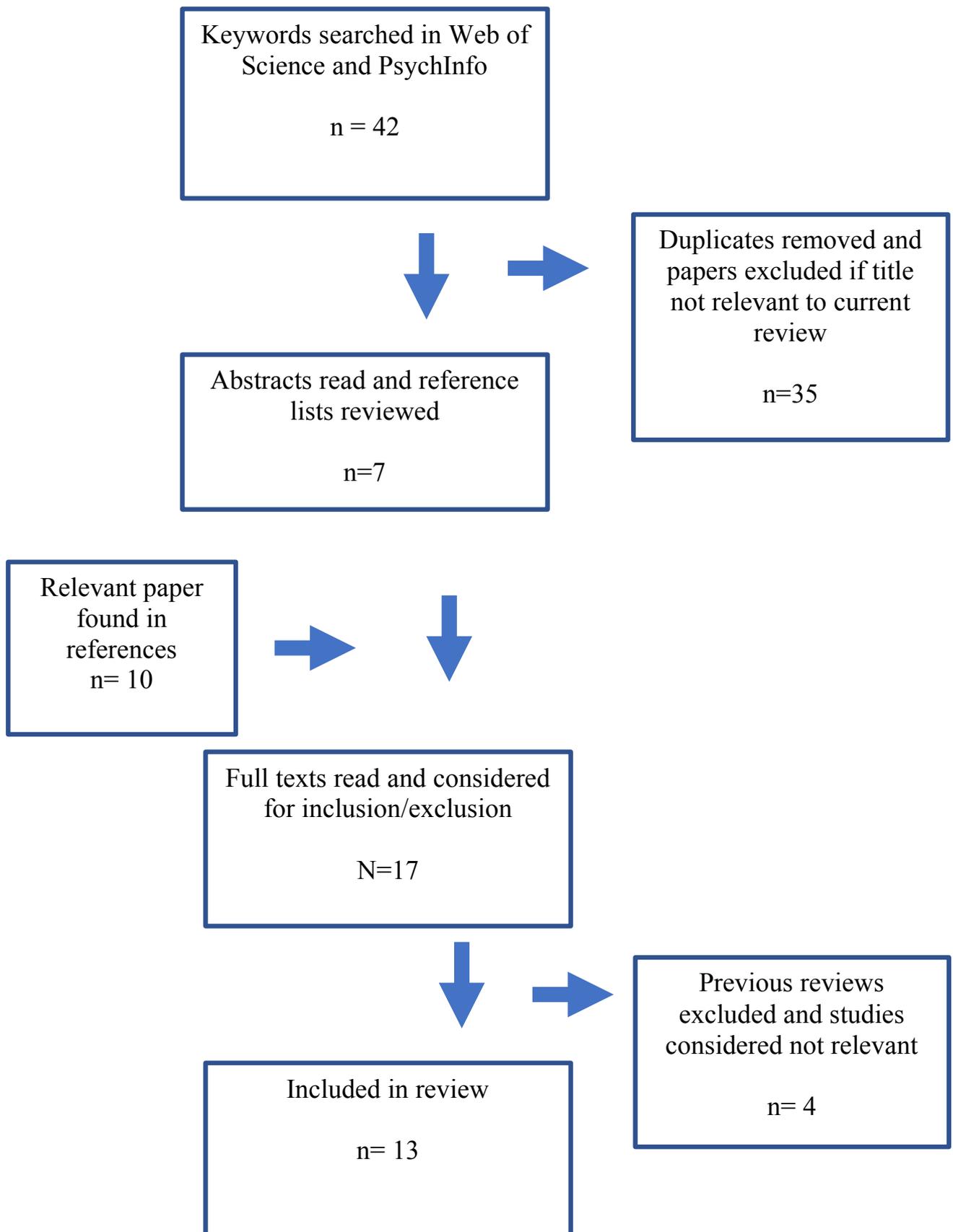


Table 1. Overview of papers included in review

Authors	Type/Name of EAI	Country	Link to theory or model	What research?	With whom?	Main Findings
Qualitative Research						
Kern-Godal, Brenna, Arnevik & Ravndall (2016)	Horse Assisted Therapy (HAT)	Norway	Not specified (exploration of experience) Theme linked to Identity	Qualitative Thematic Analysis	Adults with substance use disorder (SUD) who took part in HAT as part of treatment	Participants found HAT more than a break from usual treatment; themes included change of focus, identity, activity and motivation.
Kern-Godal, Brenna, Kogstad, Arnevik & Ravndall (2016)	Horse Assisted Therapy (HAT)	Norway	Not specified (exploration of patient-horse relationship) Theme linked to attachment	Qualitative Thematic Analysis	Adults with substance use disorder (SUD) who took part in intervention as part of treatment	Horses facilitated positive self-concept and emotional support. Horse relationship, emotional effect and mastery were important interrelated themes in SUD treatment.
Lee & Makela (2017)	Equine Assisted Psychotherapy (EAP)	USA	Systems Theory - holistic view of individual in an environment	Qualitative thematic analysis	Eight EAP mental health practitioners interviewed	Cognitive activities and strategies of EAP can be used to inform social work practice; including holistic working and incorporating systems.
McNamara (2017)	Equine Facilitated Therapy (EFT)	Australia	Highlighted absence of theoretical underpinning	Qualitative pilot	Facilitators of EFT based on work with children and young people	EFT can be maximised through stronger theoretical guidelines, greater involvement of

						care givers and research into change mechanisms.
Nelson, Signal & Wilson (2016)	Equine Assisted Therapy & Learning (EAT & L)	Australia	Highlighted variations in theoretical underpinnings of different centres	Qualitative pilot involving survey of EAT & L practice	Staff at EAT & L programs across two states in Australia	Large variations in practice exist which impacts on growth of an evidence base.
Wanneberg (2014)	Equine Assisted Therapy (EAT)	Sweden	Identity Theory	Qualitative analysis of interviews based on identity theory	Adults with physical disabilities	New identities were formed based on what participants <i>could do</i> .
Quantitative Research						
Alfonso, Alfonso, Llabre & Fernandez (2015)	Equine Assisted Cognitive Behavioural Intervention	USA	Horses used alongside cognitive behavioural intervention	Pre and post outcome measures - Social Anxiety Scale	Young women with social anxiety	Intervention had significantly greater reductions in social anxiety scores compared to control group.
Fei Ho, Zhou, Fung & Kua (2017)	Equine Assisted Learning (EQUAL)	Singapore	Learning – habits of mind and character skills	Pre, during and post outcomes ‘Habits of Mind’	‘At-risk’ youth	Equine intervention group showed improvements in character skills associated with academic performance compared to control group.
Fields et al. (2018)	Equine Assisted Activities Program (EAAP)	USA	Lived Environment Life Quality Model	Pre and post outcomes based on Quality of Life (QoL)	Older adults with dementia diagnosis	EAI was associated with more positive QoL indicators than other activity situations

Merkies, McKechnie & Zakrajsek (2018)	Equine Assisted Therapy (EAT)	Canada	Physiological responses	Behavioural observations and physiological responses of horses measured comparing 'PTSD' individuals with 'control' match	Adults with a diagnosis of PTSD	Horses did not differentiate between PTSD participants and control match. Experience with horses had more impact on horse interactions than human 'emotional state'.
Theoretical discussion						
Bachi (2013)	Equine Facilitated Psychotherapy (EFP)	USA	Attachment Theory	Links attachment theory to EAI	Not specified - includes any individual who has received EAI	EAI facilitators provide secure base allowing participants to develop positive attachments which can improve other relationships.
Burton, Gammage & Hebden (2018)	Equine Assisted Therapy & Learning (EAT & L)	UK	-Non-violent communication -Person-Centred Approach -Object Relations (Klein) -Play & Drama therapy -Mindfulness -Attachment	Theoretical discussion based on case examples and facilitator experience	Perspective of facilitator on work with young people with psycho-social issues	Relationships play a central role between client-horse-therapist and horse-handler in building trust and resolving trauma.
Johansen, Arfwedson Wang, Binder & Malt (2014)	Equine facilitated body and emotion-oriented psychotherapy	USA	Emotion Focused	Links a specific program (Emotion Focused Equine Psychotherapy) with emotion focused theory and attachment	Individuals with 'mental disorders'	Horses' sensitivity and receptivity to human body language aids awareness of patient's emotions and bodily responses, improving communication and problem solving skills.

Review Findings

Of the 13 papers included in this review, 10 papers involved empirical research and three solely discussed theoretical hypotheses of EAI (Bachi, 2013; Johansen, Arfwedson Wang, Binder & Malt, 2014; Burgon, Gammage & Hebden, 2018). The current review will offer an up to date understanding of the existing literature and will explore which theories and models are used in current EAI research. In addition, it will include a range of literature including both qualitative and quantitative research methodologies, as well as theoretical discussions.

The empirical research involved six qualitative studies (Lee & Makela, 2017; Kern-Godal, Brenna, Kogstad, Arnevik & Ravndall, 2016; Kern-Godal, Brenna, Arnevik & Ravndall, 2016; Wanneberg, 2014; McNamara, 2017; Nelson, Signal & Wilson, 2016) and four quantitative studies (Alfonso, Alfonso, Llabre & Fernandez, 2015; Fei Ho, Zhou, Fung & Kua, 2017; Merkies, McKechnie & Zakrajsek, 2018).

The publication years of the papers ranged from 2013 to 2018. Nine of the papers were from the last three years (published since Wilkie et al., 2016 review), and it was apparent from reading the literature that there are increasingly more publications in EAI research. None of the papers found this in search were used in previous reviews by Bachi (2012), Anestis et al. (2014) and Wilkie et al. (2016).

Client Populations

All the studies reviewed used EAI with human participants, as per the inclusion criteria. Three of the 13 papers specifically focused on equine assisted interventions with children and young people, including ‘at risk youth’ (Fei-Ho et al., 2017), individuals with ‘psychosocial issues’ (Burgon et al., 2018) and females with social anxiety (Alfonso et al., 2015). One of the studies also involved older adults with a diagnosis of dementia (Fields et al., 2018).

One paper involved adults with disabilities (Wanneberg, 2014). Two papers involved people with substance use disorder (Kern-Godal, Brenna, Kogstad et al., 2016; Kern-Godal, Brenna, Arnevik et al., 2016). Two of the papers involved equine assisted interventions with traumatised adults (Merkies et al., 2018) or people with ‘mental disorders’ (Johansen et al., 2014). The diversity in client populations demonstrates that EAI is being offered to a wide range of people with various social, emotional and mental difficulties.

The studies included in this review came from many countries around the world, demonstrating how widely used equine assisted interventions are internationally. Five of the 13 studies were based in the USA, and the remaining studies were from Australia, Sweden, Norway, Canada, Singapore and the UK. Table 1 offers an overview of studies including information on which countries research was carried out, methodologies used and which participant groups were involved.

Key Themes

Grant and Booth (2009) highlight that various typologies of review and methodologies that can be utilised to provide overviews of existing research literature. Review types and associated methodologies each have their strengths and weaknesses and are dependent on the types of research being examined. Searching for themes is one way of synthesising information when a range of research methods (both qualitative and quantitative) have been used and helps to draw out main themes from the results. Previous systematised reviews of literature such as Wagg, Callanan and Hassett (2017) have used inductive thematic analysis to review healthcare research.

In the current review, inductive thematic analysis was applied to the 13 papers reviewed and five main themes emerged from the data. The analysis process involved reading papers individually and uncovering, examining and recording patterns (or key themes). These were examined on re-reading and resulted in the following themes; outcomes for participants, facilitator perspectives, participant experiences, theories underpinning research and

limitations in developing an evidence base. The main themes will now be discussed and then the quality of the current research base will be critiqued using the Critical Skills Appraisal Programme (CASP) tools for quantitative research (CASP, 2018) and Mays and Pope (2000) for qualitative research. Finally, this review will conclude with a discussion and implications for clinical practice and future research.

Outcomes for Participants

Three studies in this review reported a range of positive outcomes and benefits for participants who took part in EAI. Alfonso et al. (2015) reported investigated the use of an EAI (Project Stride) for young women with social anxiety and found scores on a Social Anxiety Scale significantly improved for young women involved in the intervention compared to those randomly assigned to a control group. The scores were collected at baseline, immediately after intervention and at six week follow up. Alfonso et al. (2015) do note that this was a small-scale study of 12 participants, however the findings support a full-scale efficacy trial as a follow up.

Fei Ho et al. (2017) reported improved outcomes for ‘at-risk’ youths who were having difficulties with mainstream curriculum at a school in Singapore. Students were randomly assigned to either an EAI or a control group. The outcomes measured were Habits of Mind (character skills, including thinking flexibly, managing impulsivity, persistence, listening and understanding with empathy and taking responsible risks). Habits of Mind is not a reliable or valid measure, rather it is framework used in education. Researchers involved in the study considered the cultivation of these Habits of Mind as skills to enhance learning and future attainment for young people. The study found that children who took part in the equine intervention had improvements in Habits of Mind character skills, they also noted that the rate of change in character skills was associated with the child’s academic performance later in the school term.

Fields et al. (2018) found that an equine assisted intervention was associated with positive quality of life indicators for older adults with a diagnosis of dementia. Participants involved had previous experience with or an interest in horses. The EAI was compared to other routine activities in a long-term care facility including watching television, meal times and downtime. The study found that residents were able to have conversations, maintain gaze, walk, participate and enjoy more pleasure when involved in the equine activity compared to other settings. Researchers highlighted that such an EAI may be an effective nonpharmacological approach for improving quality of life outcomes for adults with dementia.

Taking part in an EAI can also have a positive outcome on identity construction. Wanneberg (2014) found that participants with disabilities interviewed in their qualitative study could acquire new identities or reconnect with identities they had prior to illness or accidents. Participants talked about how the work with horses helped them to connect with what they can do, rather than what they cannot do.

From the direct responses and themes derived from qualitative interviews, Kern-Godal, Brenna, Kogstad et al. (2016) and Kern-Godal, Brenna, Arnevik et al. (2016) highlight that individuals on substance use disorder treatment found EAI to be a positive experience and something that contributed towards recovery.

Facilitator Perspectives

Much of the research in EAI involves direct work with facilitators, equine-psychotherapists and trainers. McNamara (2017) and Nelson et al. (2016) both use qualitative methods to explore perspectives of EAI facilitators and practitioners. McNamara (2017) highlights that there is wide variation in EAI practices and an absence of a theoretical underpinnings and recommend further research into mechanisms of change driving EAI.

Nelson et al. (2016) similarly highlight the lack of consensus on theoretical underpinnings of EAI; in their pilot study which explored current practices of EAI with

facilitating centres, they reported that there were major variations in practice. Some of the equine centres used trained horses, whilst others used traumatised horses. Two of the centres used an intervention that also involved riding the horses, and three of the centres used non-riding activities. Three of the five centres involved in this study said they specifically focus on emotional regulation. Although there are some overlaps and similarities, with such variations in practice within the same intervention, a question is raised about whether it is appropriate to conceptualise this as one singular intervention.

Lee and Makela (2017) also focused their research on the experiences of practitioners involved in equine-assisted psychotherapy and particularly how their cognitive activities and strategies could be used to inform social work practice. Participants involved discussed incorporating horses and the natural environment in their work with people and the importance of instilling confidence in novices. Lee and Makela (2017) suggest that social work practice should also view individuals in a holistic way, incorporating the system and environment around a person in their work.

Burgon et al. (2018) use a heuristic approach to describe ethnographic case studies and make links between their vignettes and underlying theories of EAI. The paper draws on experiences of the authors in their own therapeutic practice with young people who have psychosocial issues. The authors report that relationships play a central role in building trust and resolving trauma (particularly client-horse-therapist and horse-handler). Research involving facilitators of EAI is key to understanding current practice; it is however possible that these studies could be open to bias, with those involved personally invested in promoting the practices. It is also not clear what the participants themselves make of the ideas about relationships being central. Research involving the perspectives of participants themselves is imperative to developing practices, suitable interventions and a strong evidence base.

Participant Experience

Three of the papers focused specifically on the experiences of participants themselves, and used qualitative methodologies to explore these.

Kern-Godal, Brenna, Kogstad et al. (2016) and Kern-Godal, Brenna, Arnevik et al. (2016) interviewed participants who had been involved in EAI as part of substance use disorder treatment in Norway. Kern-Godal, Brenna, Kogstad et al. (2016) interviewed participants on their experience of how the patient-horse relationship contributed to their treatment. Responses subjected to thematic analysis suggested that horses were facilitators of positive self-construct and provided emotional support to participants during treatment. They also report that the relationship with the horse, emotional effect and mastery to be important interrelated themes.

Participants were asked how they felt EAI contributed to treatment (Kern-Godal, Brenna, Arnevik et al., 2016). Thematic analysis highlighted that the change of focus, activity, identity and motivation made horse assisted treatment more than just a break from usual treatment. Participants talked about the stable environment being a context where they were able construct sense of self as useful, responsible and accepted and fundamentally different from the 'self' receiving treatment for a problem.

Both studies found that participants experienced EAI as contributing towards their substance use disorder treatment and construction of a positive identity. It is difficult to draw generalisable conclusions from such research, as it has been carried out with a small specific population. In addition, participants who felt that they did benefit from the intervention are more likely to volunteer for such an interview, therefore the data collected is subject to bias and voices of other participants with other experiences may not be heard.

Wanneberg (2014) explored participant experiences of EAI through interviews with a focus on identity. They reported that adults with disabilities who took part in EAI were able to recapture former identities or develop new identities. One finding in the responses was

how individuals focused on what they could do when interacting with horses, and how this enhanced self-image.

Theories underpinning EAI research

There are numerous theories described as underpinning EAI throughout the existing research. Burgon et al. (2018) discuss several different theories underlying their EAI practice with young people; these include non-violent communication (Rosenberg, 2003), a person-centred approach of unconditional positive regard (Rogers, 1967) and also theories of play and drama therapy involving stepping into new roles to understand different perspectives.

Nelson et al. (2016) highlights there were various theoretical underpinnings influencing the practice of EAI in Australia, including (but not limited to) mindfulness approaches, attachment, emotional regulation and developing mastery.

The main theoretical models in the papers reviewed will now be discussed.

Mindfulness

Burgon et al. (2018) discusses mindfulness practice and the links with EAI. Mindfulness is about increasing an individual's attention and concentration, making them more present in the moment and this can help create calmness and enhancing general wellbeing (Goodman, 2005). Burgon et al. (2018) outlines how work with horses also involves mindful awareness and sensory experience. The paper highlights that participants must be mindful of their surroundings in an environment with horses and Burgon et al. (2018) describes horses themselves as naturally mindful, seeking calmness and connection to others around them. In their survey of methodologies of EAI practice, Nelson et al. (2016) found that mindfulness was part of the theoretical underpinnings for one EAI centre in Australia.

Emotion-focused approaches

Johansen et al. (2014) outline how a specific EAI, equine-facilitated body and emotion-oriented psychotherapy can be used as a structured programme for adolescents and

adults with mental disorders who are not responding to mainstream treatment. The paper highlights how horses can help participants feel safe when a secure base has been established. It also notes that specific qualities of horses, such as sensitivity to the environment, mirror human body language make them suitable facilitators of psychotherapy. The incorporation of emotion focused therapy approaches (Greenberg, 2014) means that through the work with horses, participants can pause and call to attention how they are emotionally experiencing that moment, which helps them to become more self-aware. Johansen et al. (2014) suggests mechanisms of change can occur through the relational dynamics between the participant and the horse, which has links to attachment theory. They also comment that horses could help motivate participants to engage in the therapeutic work, which is particularly pertinent as they focus on individuals who have not benefitted from 'mainstream' treatments. Johansen et al. (2014) suggest that more research needs to be conducted into the experiences of therapy processes and what people perceive to be effective components of EAI.

Cognitive behavioural theory

Alfonso et al. (2015) combined equine activities alongside cognitive-behavioural strategies as an intervention for young women with social anxiety. It was thought that EAI could strengthen the effect of cognitive behaviour therapy (CBT) for reducing symptoms of social anxiety. It was hypothesised that fears of self-disclosure might be ameliorated by diverting attention from oneself and the focus on completing unfamiliar tasks with a horse. The combination of behavioural approaches with the animal and cognitive techniques resulted in reductions in social anxiety symptoms for the young women involved.

Systems theory

Lee and Makela (2017) suggest systems theory as an underpinning theoretical model of EAI. From their qualitative research with experienced practitioners they explored practitioner's metacognitions and suggest implications for social work, including the benefits of seeing an individual in the context of their system. One strategy which practitioners use is

choosing appropriate setting for the work, and they highlight that getting this setting right is essential to helping participants to feel safe and held. Systems theory shows the importance of not viewing individuals in isolation, instead holding a holistic view factoring their relevant systems into the work to enhance the support (Legge, 2016).

The Lived Environment Life Quality Model guided the Fields et al. (2018) study into the use of EAI and people with dementia. The equine activities which took place outside of the residential care home at an equine centre appear had more favourable outcomes in terms of quality of life, when compared participation in other activities including music group and physical therapy. It is believed that using EAI, the incorporation of nature of environment and personal factors promoted quality of life of older people with a diagnosis of dementia. This shows the importance of considering such clients not as individuals in isolation but in the context of their wider system and indeed what impact this system and particularly environment can have on their wellbeing.

Identity theory

Wanneberg (2014) explored the influence of EAI on identity construction; they noted that participants discussed experiences of either developing a new identity or recapturing a former identity from their previous experience with horses.

In keeping with exploratory aims of the research of Kern-Godal, Brenna, Arnevik et al. (2016) into participant experience, there are no set theories or expectations driving the research. However, themes extracted from the interviews data draw out 'identity', highlighting that participants involved in EAI were able construct an identity of a positive self.

Attachment theory

Bachi (2013) aimed to reveal how attachment theory can inform and enrich the practice of EAI and highlights that such interventions are widely popular despite lacking a theoretical and research base. It draws on previous research of attachment, and how people

develop internal working model based on their experiences of attachment, particularly in early life. Bachi (2013) suggests that through EAI horses and facilitators could provide a secure base and holding environment to help participants build trust and rapport. Over time it is believed this could help participants to work on attachment, by developing new more positive experiences of attachment and improve other relationships and aspects of life.

Kern-Godal, Brenna, Kogstad et al. (2016) explored the experiences of participants' relationship with the horse in EAI and their perceptions of its contribution to treatment of substance use disorder. The findings were interpreted in the context of attachment theory, with the horses viewed as an attachment figure developing an alliance with the human, facilitating positive attachment, reflective functioning and emotional regulation. Participants did report that the horses provided emotional support, were perceived as non-judgemental and were facilitators of positive self-construct. This research ties in with other literature highlighting how the therapeutic alliance is the strongest predictor of success in psychotherapy regardless of the model used (Ardito & Rabellino, 2011).

Burton et al. (2018) highlighted many other theories underpinning EAI, as discussed above. This paper however concludes that relationship is the central tenant underpinning all theoretical aspects relevant to EAI. They discuss how trust and relationships developed through horses and human handlers can open new ways of clients having trusting reciprocal relationships beyond the intervention. This fits with attachment theory (Bowlby, 1988) and the trusting relationship between an infant and a caregiver being a predictor of success in later relationships. The relationships of the participants with the horse and the facilitator can model respectful trusting relationships with a secure and safe base.

In contrast to research based on attachment theory that suggests horses attune to human emotions, and meet attachment needs, Merckies et al. (2018) suggests something different may be at play. Their research into physiological responses of horses highlights that horses did not differentiate between people with PTSD and those with a 'healthy mental

state'. In fact, the horses were more influenced by whether participants had experience of horses or not, than the participant mental or emotional state. They conclude that misunderstanding the interaction of horses and humans could lead to unrealistic expectations of the animal and suggest horses should not be given the idealistic responsibility of acting as a primary care giver to humans in need.

Limitations in developing EAI evidence base

The papers reviewed highlighted some of the limitations in developing a strong evidence base for EAI. A previous review, Bachi (2012) focused on highlighting the gap between the practice in equine interventions and the knowledge base; noting that evaluation studies showing benefits from interventions with horses were limited by small sample size and lack of control groups. The current review found that experimental research into outcomes of EAI also involved small samples, and although control groups were used, novelty of the equine intervention was not controlled for.

Terminology

All of the studies reviewed involve interventions that fall under the umbrella of 'equine assisted interventions' as per the inclusion criteria of the literature search. The interventions reviewed involved direct contact between humans and horses with a trained facilitator, however the terminology used to describe the equine assisted interventions varied considerably. The 'type' of EAI as defined by each paper are recorded Table 1. Of note, there were 11 different descriptions across the 13 papers. This wide variation in terminology highlights some of the difficulties in developing a credible theoretical foundation, as it is unclear whether different names are being used to describe the same principles or separate practices. The varying terminology also adds challenges to developing an empirical evidence base as it is difficult to compare like with like.

Variations in Practice

In addition to the wide variation in terminology used to describe differing and similar practices of EAI, there are also many discrepancies within specified interventions. One of the reviewed papers focused on examining the practices of Equine Assisted Therapy & Learning (EAT & L) across two states in Australia. Nelson et al. (2016) carried out a survey into the methodologies of five different EAT&L centres and found that although they were all using the same terminology there were huge variations in their theoretical underpinnings, procedures and practices.

Similarly, McNamara (2017) carried out an investigation into practices of Equine Facilitated Therapy (EFT) in Australia and also found that there were variations between practices from the facilitators who were interviewed in their study.

There was also variation across the studies in terms of who delivered the interventions, and how these were facilitated across the literature. Some of the EAI involved trained psychotherapists (Lee & Makela, 2007) and were combined with a complementary therapy such as a cognitive behavioural intervention (Alfonso et al., 2015).

Quality of the empirical research

Qualitative research

Using Mays and Pope (2000) to evaluate the quality of the qualitative research (see appendix A for summary of criteria) it was apparent that the methodologies and design of the reviewed studies were appropriate for the research goal and in addition the aims were clearly stated. Ethical issues were also considered and the process of data analysis was well described. Appropriate quotes from participants were also presented to support the qualitative themes of the research. A strength of Nelson et al. (2016) was how they gave participants the opportunity to review and clarify the data, thus improving the validity of the research. On the other hand, the authors highlight that social desirability may have skewed any negative

comments made. Authors in the qualitative papers were transparent about their own experiences, backgrounds and influences on the research, showing good reflexivity.

A limitation of Wanneberg (2014) is that there does not appear to be good quality assurance with a second coder involved to co-construct and verify in the qualitative analysis of the data. MacPhail, Khoza, Abler and Ranganathan (2015) highlight how a second researcher can improve inter-coder reliability and enhance the quality of the research. Wanneberg (2014) do however note that once the themes of the data had been established, they looked for contradictory data to test the findings and revised them based on this. This shows good reflexivity and looking for disconfirming cases is an important part of quality assurance (Mays & Pope, 2000).

A further limitation of the qualitative research is how generalisable findings are, however all studies acknowledge this and suggest further research with different groups of people across different contexts. Convenience sampling was used by Wanneberg (2014) which may have biased selection of participants involved and missed some individuals who could have contributed. Kern-Godal, Brenna, Kogstad et al. (2016) and Kern-Godal, Brenna, Arnevik et al. (2016) used purposeful sampling and recognise that many of the participants who chose to take part in the research did so because they had a positive experience of the equine intervention; it is not known if this was representative of all who took part. The sensitivity to context of the qualitative research as well as the transparency enhances the quality of these papers (Mays & Pope, 2000).

Quantitative research

In the quantitative empirical research, there were three case control studies (Alfonso et al., 2015, Fei Ho et al., 2017 and Merkies et al., 2018) and one cohort study (Fields et al. 2018). Alfonso et al. (2015) and Fei Ho et al. (2017) appropriately selected participants and randomly allocated them to EAI groups and non-intervention groups. In Merkies et al. (2018) one group was selected as individuals who had a diagnosis of PTSD, and the control group

was matched in terms of age and gender. The selection of and recruitment of cases and case controls is well described in the papers and appropriate, strengthening the quality of the research (CASP, 2018) (see appendix B for a summary of CASP criteria).

Fei-Ho et al. (2017) however highlight that although a control group was used, it is not clear what factors accounted for the differences between groups. They suggest that the novelty factor of the EAI and the fact that the treatment group got to leave school and travel to an equine centre may have played a part in the outcomes, and potentially demoralised the control group who remained in school. CASP (2018) highlight the importance of considering other variables which may have influenced outcomes. It also should be noted that in the Fei Ho et al. (2017) study the outcome ratings were conducted by staff, and not the pupils themselves. It is possible that the staff beliefs about the effectiveness of the intervention might have resulted in bias in their ratings of pupils. It is not known how the pupils themselves experienced the intervention or felt about its outcomes for their own lives. In addition, the outcome measure used (Habits of Mind) is an education framework and is not a reliable or valid measure.

Alfonso et al. (2015) also had a control group, and participants were randomly assigned to either this or the equine-intervention group. The fact that the control group received no treatment at all, highlights that the equine intervention may have been better than ‘nothing at all’ in reducing social anxiety. This does not indicate what, if anything about the equine intervention might have been responsible for the change. It would be beneficial for future research to compare the equine intervention with other treatments for social anxiety, as well as a control group and authors do suggest conducting a full-scale efficacy trial of their intervention.

In Fields et al. (2018) study involving adults with a diagnosis of dementia, the cohort of participants received ‘usual care’ activities alongside EAI. The participants were observed across all settings including activities such as music groups and physical therapy; they found

that the quality of life indicators were most positive in the equine setting. These findings are strengthened by the fact that the EAI has been compared to other activities, and not just to 'no treatment' as in the case control research. The use of computers to assist in the analysis of quality of life behaviours, reduces bias of the data, as these were more objective measures than human ratings.

Merkies et al. (2018) also used objective measures (heart rate and saliva cortisol levels in horses) to understand how differing human mental states affected horse behaviours and responses. A strength of this research was the minimal bias of the measures used and also how other variables were considered that may have influenced results, for example how much horse experience the humans had and their attitude toward the animal. Merkies et al. (2018) adds something new to the knowledge base in EAI; very little research has been conducted into the impact of humans on the animals. The research raises important points to consider, including the suggested unrealistic expectations placed on animals and a possible misunderstanding that horses attune to human mental states when their study suggests horses respond more to physical cues.

Discussion

This review outlines key themes derived from a literature review of EAI research publications in the last six years. Empirical studies have reported improved outcomes for participants and have explored facilitator perspectives as well as participant experience. The evidence base for EAI appears to be continually growing and this review demonstrates that there has been progress in recent years in terms of the quality of published papers compared with previous reviews (for example, Bachi, 2012), particularly with the increased use of control groups. All four of the quantitative studies reviewed used control groups, however similarly to Anestis et al. (2014) review, not all studies controlled for the novelty factor of EAI. Bachi (2012) suggested further qualitative research in EAI was needed; this current review demonstrates an apparent increase, with six of the 13 publications using a qualitative

methodology. Based on the Mays and Pope (2000) criteria, the quality of these papers was generally of a good standard; at times convenience and purposeful sampling were used which may have influenced bias, however the studies acknowledged the limitations and highlighted the sensitivity to context. This allowed readers to make conclusions on transferability of knowledge rather than generalisability (Rolfe, 2006). Increased quality research enables greater confidence in the EAI evidence base, despite progress it appears that there is still room for development with further good quality well designed EAI research studies.

One of the factors attributing to difficulties in making sense of the current state of research with EAI is variation in practice and concerns are around the quality of the research studies reported on rather than the equine interventions themselves. Perhaps the key question to consider is the suitability of the research methodologies in understanding EAI and the quality of this research. A barrier to EAI research with larger data sets is the financial aspect, it can be quite costly to run research studies and particularly funding and running centres that involve equine interventions. In addition, there is a continuous need to show an evidence base and improved client outcomes to move EAI into mainstream practice and maintain funding for such services (Nelson et al., 2016).

Overall, most of the papers seem to suggest that EAI can have beneficial impacts for many individuals (including older adults, people with substance use disorder, and young people at risk). What is much less clear from this review is what the key theoretical models underlying EAI are. Various theories are involved in research in this review including identity theory, mindfulness and attachment theory. There's also minimal existing research into the mechanism of change in EAI.

Attachment theory (or certainly a link between the horse-human relationship) is the dominant theoretical base for the EAI papers included in this review. Despite this, there are reportedly weak links between this theory and the practice of EAI (Bachi, 2012). Merckies et

al.'s (2018) research into horse physiological responses to humans also opens further questions about attachment theories.

Research implications

It is not yet clear what mechanisms of change in EAI are responsible for any perceived positive impacts on people. It is possible that change mechanisms could be linked to attachment relationships and, as in other therapies, the therapeutic alliance is a driver for change (Ardito & Rabellino, 2011). However, it is yet to be determined whether this alliance is in the horse-participant relationship, the participant-facilitator relationship, the modelling of the horse-facilitator relationship or an interesting combination of this triad. Further research is needed to uncover more fully what mechanisms are involved.

On the one hand, there seems to be growing evidence suggesting that EAI are beneficial in supporting people with a variety of difficulties. On the other hand, there remain some concerns about the quality of the research, therefore future research needs to have a strong focus on quality.

Much of the current research highlights the need for more research, however the idea that more and more research into diverse and idiosyncratic practices will result in one clear theoretical framework which underpins EAI is perhaps a romanticised and unrealistic goal to be working towards. It is not clear whether there will be one model that will neatly fit the wide variations EAI practices. The literature suggests that creating stronger links between the practices of EAI and the associated theories is important for the development of the area.

An important point raised in the literature is how the quality of research must be of a good standard for results to be valid and contribute to an evidence base. One strength of the current research is how much practice based evidence has been carried out, where despite methodological flaws, the interventions are ecologically valid as they are carried out in real life settings. Of course, a limitation on the other side of this is how replicable they are and how confounding variables can be controlled. In future experimental studies, having a control

group as well as a third ‘control with alternative treatment’ group might be one way of gaining insight into the potential benefits of EAI compared to other equally novel interventions.

It has been suggested in the literature (Alfonso et al., 2015; Johansen et al. 2014) that randomised controlled trials (RCT) are lacking in EAI, and carrying out such research could strengthen the evidence base. Although an RCT may be a good fit for medical science, they represent a restricted model of science and may not fit with the experiential nature of EAI (Bachi, 2012).

The research indicates that the horses might have played a key role in influencing attachment relationships and that taking on a new role may have supported participants in constructing new and positive identities. The theories of attachment underlying much of the research need further exploration to link theory to practice (Bachi, 2012). The quality of the horse-human interaction as a factor that facilitates positive attachment and emotional regulation may fit with research literature (Ardito & Rabellino, 2011) indicating that therapeutic alliance is the strongest predictor of success regardless of psychotherapy model. Future research could examine this horse-human relationship further, and involving participants themselves in such research would be key to understanding attachment.

Clinical implications

EAI can be helpful in improving outcomes for individuals including people with social anxiety, youths at risk and older adults. In addition, participant experience research also suggests benefits for people in substance use disorder treatment and people with disabilities. EAI can work well when combined with other talking therapies, such as emotion-focused work and cognitive behaviour therapy. Using horses and other animals to help engage clients and to complement and enhance other therapies.

Clinical Psychologists often rely on talking therapies and it is important to consider alternatives such as EAI which might be beneficial to patients and clients with a range of

difficulties. EAI can be offered to individuals who may struggle to engage with talking therapy approaches or have not found such interventions to be effective.

Practically it is important that client-centered approaches are used to ensure EAI are a good fit for individuals. Merckies et al. (2018) highlights that horses respond differently to humans depending on their experience with horses and in Fields et al. (2018) the participants with dementia all had had previous experience with or interest in horses. Clinicians and facilitators must continue to work closely to with clients to understand what will engage them and work best for them. Taking on board client perspectives of perceived change and how they make sense of experiences is important, as this offers something in addition to reliance on facilitator perspectives and outcome measures.

Conclusion

This review highlights that there are a wide variety of Equine Assisted Interventions being offered to different client groups and that there is growing research in EAI around the globe. There are variations in definitions and practices of EAI approaches but existing evidence suggests that EAI are both appealing and acceptable to participants involved and can contribute to improved outcomes on a range of measures.

Theories underpinning EAI vary from study to study and more research is needed to examine theory-practice links. In addition, when EAI has led to improved outcomes for human participants, this was often in comparison to control groups with 'no treatment'. It is not yet understood what mechanisms within EAI might be involved in change processes, with such an experiential intervention involvement of client perspectives will be important. Exploring how participants make sense of change is one way of seeking to understand mechanisms of change in EAI.

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Section B: Empirical Paper

**Exploring how parents make sense of change in an equine assisted
intervention for their child: The HorseCourse**

Chosen Journal: Journal of Child Psychology and Psychiatry

Word Count

7992 (346)

Abstract

Background: Change processes in alternatives to talking therapy, such as equine assisted interventions (EAI) have not been widely researched. This study aimed to explore how parents make sense of change in an EAI (The HorseCourse, THC) and what meaning that held for them.

Method: Eight interviews conducted with parents of children who had completed THC were subjected to Interpretative Phenomenological Analysis.

Results: Four superordinate themes were developed to reflect how parents made sense of change; change as a journey, seeing is believing, a chance to shine and making connections.

Conclusion: Parents experiencing change as a journey resonates with other participant experiences of change. Additionally, seeing is believing suggests that the physical movements and witnessing these played a role in facilitating change for parents. A chance to shine connects with research that highlighted feelings of mastery and positive self-construct after EAI. And finally, making connections resonates with previous EAI and wider psychotherapy change process research which highlight the importance of therapeutic relationships. In addition, parents felt that they themselves were part of facilitating change in THC through shared experiences and helping children reconnect with the experience. Practice implications include giving children audiences to witness change processes and opportunities to shine through mastering new skills. Given that parents made sense of change as a journey, future research could explore children's experiences of change over time.

Keywords: Equine-assisted intervention, horse, young people, parental experience, change

Introduction

Talking therapies as interventions

Over the past 60 years talking therapies have been offered as treatment for clients in a range of settings (Parry, 2015). ‘Talking therapy’ is a broad term which captures different forms of psychotherapy, including cognitive behaviour therapy, family therapy and psychodynamic psychotherapy (Carr, 2015). Recent decades have seen increasingly developed evidence-bases for talking therapies as treatment for a wide range of conditions (Fonagy et al., 2015). With increased research evidence, support for talking therapies has grown; with government backing the National Health Service (NHS) have run a programme over the past ten years specifically to ‘Improve Access to Psychological Therapies’ (IAPT) (Clark et al., 2009). This has meant that across the United Kingdom (UK) every local health area has an IAPT service offering psychological treatments in the form of talking therapy in line with National Institute for Health and Care Excellence Guidelines (NICE, 2011). A key part of IAPT has been monitoring clinical outcomes to determine efficacy of the interventions offered (Clark et al., 2018). Outcomes are routinely monitored and reported in services beyond IAPT and are endorsed by the British Psychological Society (BPS) (Sperlinger, 2002).

Change process research

Outcome measurement is one way of demonstrating efficacy and provides feedback to develop practice (Sperlinger, 2002); however, outcomes do not necessarily indicate what it is about a particular intervention that produces change. Some years ago, Safran and Muran (1994) claimed that with an increase in outcome studies there was less research into the underlying mechanisms of change (understanding the how and why). It remains true today that there is an emphasis on outcomes in talking therapies (Mendelberg, 2018). ‘Change Process Research’ was first introduced by Greenberg (1986) to study the processes by which

change occurs in psychotherapy and was intended to break down the dichotomy of ‘process’ and ‘outcome’. Greenberg highlights the need to measure outcomes at different stages of the therapy alongside levels of process; the importance of context is also drawn out, in that processes need to be viewed in the context of the relationship in which they occur. Studying mechanisms of change in therapeutic work can bridge the gap between the theory and the practice of therapy (Greenberg, 1986). Despite calls for change process research being published in the 1980’s, Elliott (2010) argues that change process methods have not realised their potential and are not contributing to understandings of client change.

Whilst there are key differences in talking therapies, stemming from different philosophies and theories, there are also similarities. McAleavey & Castonguay (2015) describe common factors as the shared features of talking therapies (such as therapeutic alliance) and unique factors as elements that are uncommon or absent in other talking therapies. They highlight that both common and unique factors can operate in the change process; and suggest the false dichotomy of separating these can be unhelpful as they are systematically linked (McAleavey & Castonguay, 2015; Castonguay, 2000).

Participant experience

Therapeutic alliance is a key feature across all talking therapies and is one of the most frequently studied in process of change (Castonguay, Constantino, & Holtforth, 2006). Therapeutic alliance is a positive collaborative relationship between therapist and client and is widely reported as a key indicator of successful outcome in therapeutic change (Ardito & Rabellino, 2011). There are various angles on the therapeutic alliance, including the therapist perspective, the client perspective and an outsider’s view. Castonguay et al. (2006) highlight that among the different perspectives, it is the client’s assessment of the therapeutic alliance that best predicts outcome.

Understanding participant experience of the change process is imperative to understanding change, however client perspectives are often overlooked. Both change processes and understanding human experience are complex and ideographic, and therefore investigating them may best suit qualitative methodologies (Hill, 2005). Rayner, Thompson and Walsh (2011) analysed client experiences of change process in psychotherapy and recommended that further exploratory research should be conducted in this area. Exploratory qualitative research suggests that service users are interesting in taking part in research to further understanding of individual therapeutic experiences (Binder, Holgersen & Nielsen, 2010).

Whilst studies have explored service user experience in various therapeutic interventions (Kern-Godal, Brenna, Kogstad, Arnevik & Ravndal, 2016; Elliott, 2008) there often remains focus on symptom reduction and outcome measures (Sperlinger, 2002). Previous research has explored patient experiences of the change process, for example the experience of adults receiving Cognitive Analytic Therapy (CAT) (Rayner et al., 2011). Other research has included perspectives from the wider system, for example, the parent experience in child-parent psychotherapy (Kenny, Hassett & Pae, 2017).

When talking doesn't work

Although there is evidence for talking therapies as effective interventions for adults and children (Fonagy et al., 2015) there remain individuals who struggle to engage in talking therapies and disengage from treatment. There is also evidence suggesting clients can experience negative change as a result of talking (Barlow, 2010). Various interventions that can be offered to people who are unable to engage in talking therapies, including complementary therapies such as yoga or meditation (Gebauer et al., 2018) and Equine Assisted Interventions (EAI) (Fine, 2006).

There are challenges in developing theoretical frameworks and evidence bases in EAI due to difficulties in quantifying human-animal interactions (Gee, Mueller & Curl, 2017) and variations in terminology and practice (McNamara, 2017). Some EAI involve a combination of talking therapies, including cognitive-behavioural strategies, alongside the work with a horse (Alfonso, Alfonso, Llabre & Fernandez, 2015). Other forms of EAI do not involve talking therapy and focus on experiential learning with horses to bring about therapeutic change (Nelson, Signal & Wilson, 2016).

Various theoretical frameworks have been outlined as underlying EAI, including attachment (Burgon, Gammage & Hebden., 2018) and identity theory (Wanneberg, 2014). However, Bachi (2012) highlights that there are often weak links between theory and practice and McNamara (2017) reported in their qualitative analysis the absence of an underpinning theoretical model.

Research into EAI has examined outcomes for participants (Alfonso et al., 2015) and qualitative research methods have been used to investigate participant experiences (Kern-Godal et al., 2016). Research has shown that EAI can have beneficial impacts for many individuals, including older adults with dementia (Fields, Bruemmer, Gloeckner & Wood, 2018) and ‘at-risk’ youth (Fei Ho, Zhou, Fung & Kua, 2017). Many outcome studies in EAI compare interventions to ‘no treatment’ groups (Alfonso et al., 2015) limiting what inferences can be made regarding what processes were involved in the reported participant change.

Much EAI research makes links to attachment theory; Bachi (2012) suggests that this area needs further exploration to bridge the gap between theory and current practice. McNamara (2017) also highlights the lack of research into perceived mechanisms of change. Research into change processes in EAI has not received as much research attention as change process in talking therapy, however Beetz (2017) suggests that understanding what it is about

animal interventions that leads to positive effects in therapeutic settings will promote efficacy and rationale for their use.

The HorseCourse

The HorseCourse (THC) is an equine-assisted, activity-based intervention that has been used with client groups, including offenders in prisons to reduce risk of re-offending. Currently THC has community-based headquarters in Weymouth, Dorset where they offer programmes primarily to young people (aged 8-24 years) and families who are experiencing 'troubling difficulties'. A prerequisite of referrals to THC is individuals who have become 'stuck' or disengaged with talk-based support. Over a five-day programme 'resilience skills are taught, rehearsed and repeated' in an intensive and challenging experience with specially trained horses and one to one facilitator support. (The HorseCourse, 2019). Working with horses unmounted, participants learn to be benign, trustworthy and effective leaders through Parelli Natural Horsemanship skills (Parelli, 2019). THC has an emphasis on participants modelling calm, assertive, focused and clear communication (The HorseCourse, 2015).

THC has developed a theory of change (appendix C) highlighting causal mechanisms and outcomes including changes in identity, reduced problem behaviours, improved relationships and increased engagement with education (The HorseCourse, 2015). Challenges increase in difficulty throughout the programme to cause habitual reactions of frustration, anxiety and upset. Through these challenges, alongside facilitator coaching and responsiveness from the horses, participants develop eight skills; calmness, assertiveness, confidence as a learner, focus and perseverance, empathy, realistic analysis and planning, responsibility (for emotions, thoughts and actions) and communication. THC uses consolidation with participants, and includes THC Star which offers a visual display of the progress in the eight outcome areas. The course ends with an external assessment in

horsemanship, and certificates, photos and a DVD to mark and celebrate the participant's achievement.

Parental Role

Previous EAI research (McNamara, 2017) has reported a lack of parental involvement when equine interventions were delivered with children. Whilst THC is offered to people of various ages, when children participate parents and carers are a key part of their THC experience, making it unique amongst other equine interventions. Parents are invited to accompany their child in all steps of the experience and to be joint participants in the intervention throughout the week-long HC intervention. Facilitators work closely to empower parents as well as their children in developing THC star skills, such as calmness and assertiveness. THC programme views parents and carers as one of the key features in the therapeutic process. Parents who participate in THC alongside their child are also included in the end of programme horsemanship assessment and certificates of achievement.

Rationale

EAI such as THC are widely used and have gained more research interest in recent years, particularly for individuals who are unable to engage in talking therapies. It is not yet understood whether the processes of change in EAI have common factors with talking therapies or whether unique processes are at play. When considering the how and why of change, it is imperative to involve the lived experience of the individuals whose lives the changes are about (Wallcraft & Nettle, 2009). Given the fundamental role that parents play in THC intervention with their child, they offer a unique insight into experiences of the change process. Exploring the lived experience of how people make sense of change is one way of researching psychological change process in EAI and could lead to developments in understanding what makes such interventions effective.

Aim

The aim of this project is to develop a psychological understanding of how parents experience and make sense of change in TheHorseCourse, and what meaning this change has for them.

Research Questions

1. How do parents make sense of change processes in TheHorseCourse?
2. What meaning does this change experience have for them?
3. What do parents think may have facilitated or hindered the change?

Method**Design**

This study involved qualitative methodology, using semi-structured interviews to collect data. Interpretative Phenomenological Analysis (IPA) was used to explore how people make sense of their experiences and the meanings held for them (Smith, Flowers & Larkin, 2009). IPA's emphasis on understanding and meaning made it an appropriate methodology for exploring how parents make sense of processes of change. Other studies exploring how parents make sense of experiences have also used IPA (Carpenter et al., 2018; Kenny, Hassett & Pae, 2017).

Participants

Parents were chosen as participants in this study given their fundamental role in their child's THC experience; facilitators involve parents and carers at every stage of the intervention and see them as a key feature in the change process. Given their lived experiences of the intervention, exploring parental responses offers a useful insight and perspective.

A homogenous sample of participants was sought given the planned interpretative phenomenological analysis. Smith et al. (2009) highlight sample size is contextual and must be considered on study by study basis. Reid, Flowers and Larkin (2005) highlight how less can be more when exploring lived experiences, particularly when seeking an idiographic focus. Purposeful sampling was used to recruit participants through THC. To ensure homogeneity, inclusion criteria selected English speaking parents of children and young people who had completed the HC in the previous 12 months.

Eight adults who consented to participate in interviews were parents or foster parents of a young person with mental health difficulties or emotional needs; these difficulties were affecting the child's ability to engage in education. All families involved had previously sought talk-based support, and were referred to THC because they were stuck or unable to engage with that approach; referrals came from education, mental health and social services.

Two males and six females took part; seven participants were white British, and one was white European. Two of the interviewees were foster parents and six were biological parents. There were two married couples within the sample; Christina was married to David and Gary was married to Faith. Participants were offered no incentive, beyond reimbursement of travel costs.

Procedure

Recruitment was completed with support from the THC; individuals who had expressed an interest in research participation and fitted inclusion criteria were contacted via telephone and email with an invitation to take part. Those interested were then sent an information sheet and consent form (Appendix E). Face to face interviews were then arranged with the researcher at THC headquarters, when this was not possible interviews were conducted over telephone.

Interviews

A semi-structured interview schedule (Appendix F) was developed in keeping with IPA methodology (Smith et al., 2009) with open-ended questions focused on research aims (Kvale, 1996). Members of SAGE (Salomons Advisory Group of Experts) were consulted for a service user perspective on accessibility of the consent form, information sheet and interview questions. Each participant was interviewed individually and the interviews, recorded on a dictaphone, lasted between 35 and 70 minutes. Participants were informed that recordings would be kept confidential and transcripts would be anonymised.

Data Analysis

Recorded interviews were transcribed verbatim and IPA was used to analyse the data (Smith et al., 2009). Through repeated reading of transcripts notes on descriptive, linguistic and conceptual features were made (Appendix J). Emergent themes were extracted into tables for each participant with identified quotes to ensure they encapsulated experience (Appendix L). The researcher looked for patterns in the emergent themes across participants clustering these into sub-themes and finally abstracting sub-themes under four superordinate themes (Appendix K). The analysis involved a hermeneutic cycle, with the researcher interpreting and making sense of the participant experiences.

Quality assurance and reflexivity

A colleague conducted a bracketing interview (Fischer, 2009) prior to the first interview allowing the researcher to engage reflexively on personal influences on the research (Appendix I). This brought to light the researcher's role as a white, female, trainee clinical psychologist who is not a parent and has experience working therapeutically with children and families. Despite limited experience with horses, the researcher was mindful of limitations of talking therapies for some children and was keen to understand alternative

interventions. The researcher's personal experience of animals and nature as calming influences was also discussed.

To enhance the quality of the research, Yardley's (2000) guidelines were followed. The research demonstrates sensitivity to context, given the purposeful sampling of homogeneous participants with a shared lived experience. In addition, commitment and rigor were demonstrated throughout the data collection (in-depth interviews) and analysis. Time was taken by the researcher to engage fully with the interview transcripts and contemplate the participant experiences throughout the analysis process. The approach of IPA (Smith et al., 2009) considers the hermeneutic cycle of the researcher making sense of how the participants made sense of their experience; openness and transparency is key hence the research diary which records influences and ideas at various points in the process (Appendix H). IPA fits with a 'critical realist' epistemology, making positivist assumptions about objective reality whilst acknowledging socially constructed understandings through language and context (Maxwell, 2012). Inter-coder agreement (Yardley, 2008) was used comparing a supervisor's analysis of two transcripts to ensure themes were grounded in data.

Ethical considerations

This research was carried out in line with BPS code of ethics and conduct (BPS, 2018). Salomons Ethics Panel, Canterbury Christ Church University granted ethical approval (Appendix G). As talking about experiences could be distressing for parents, the researcher checked in with participants during interviews, with a contingency plan to signpost to appropriate agencies if necessary. Participants were informed of their right to withdraw from the research.

Results

This study aimed to explore how parents made sense of change in THC, what meaning this change held for them and what may have hindered or facilitated change. Interpretive

phenomenological analysis resulted in 13 subthemes, under four superordinate themes; ‘change as a journey’, ‘seeing is believing’, ‘a chance to shine’ and ‘making connections’.

Table 2 displays themes with illustrative quotations.

Table 2. Superordinate themes, sub-themes with illustrative quotes

Superordinate Theme	Subtheme	Illustrative Quote
Change as a journey	Right time to start	‘I would give anything a go just to see how it would work. I didn’t know it would work or whatever but just to give anything a go because we had tried everything at home’ (Eleanor)
	It’s not over yet	‘He learnt to control some of his feelings, I’m not saying all of them but he could put them into little boxes and still be assertive when he wasn’t feeling assertive’ (Barbara)
	Tools to take with you	‘...and he used one of the methods they taught him up here... and he just dealt with it and he managed ... like they teach them... Take a breath, put yourself in neutral, start again. He done that and he managed to get through the lesson’ (Daniel)
Seeing is believing	Instant Feedback	‘The fact that he could get that result straight away (with the horse), it has got to be that. It’s got to be. That’s the most, that’s the best thing about it’ (Christina)
	Parent as a witness	‘Yea, they want you to see it, then you can talk about it as memories, otherwise they just say I did this and you go okay. Whereas if you’ve seen it with them, you can have a discussion about it’ (Faith)

	Doing, not talking	‘I mean, it amazed me actually to be quite honest with you, I mean it’s all non-verbal, he doesn’t actually have to say anything, just by his body language and his breathing...’ (Christina)
A chance to shine	Achievement	‘he did so well that it gave him confidence in something he was really good at so the fact that it was a different... and he got to shine a little bit there, which he liked’ (Helen)
	Self-regulation	‘It’s amazing and you can actually control them with your breathing. I just wouldn’t have said that you could do that’ (Faith)
Making Connections	Horse-child connection	‘... and she said to him, “That is complete trust, that horse completely trusts you.” And the horse walked to him and looked at him and he had to stroke its nose and she said to him, that is complete trust.’ (Christina)
	Facilitator support	‘The way that the girls training the horses talk to them... it’s not overbearing or training, it’s almost as an equal and I think it’s quite therapeutic’ (Gary)
	Connecting with calm	‘To me it was a very calming atmosphere... the peacefulness, the birds, just the whole place is really calming I think,’ (Faith)
	Shared experience	‘We hadn’t had any time where it was calmer for us. It was just like a week section, no school, no learning centre, no threat of any sort of learning and just became almost like a full stop to that chapter, so it was really good.’ (Anne)
	Reconnecting	‘We just reiterate everything to him all the time... just like give him a little

reminder, 'Remember what you learned on the HC?' Don't always tell him what he learnt, just say to him, 'Do you remember what you done on the HC? Just think about the situation you are in and what you could do to get round it.' (Daniel)

Change as a journey

Parents talked about their experiences of change at THC in the context of their child's journey, commenting on what had happened before and how they came to THC with a sense of desperation, willing to try anything. Parents also talked about how change was ongoing, there was a sense that progress had been made during THC but that more change was expected on the continued journey. Parents shared how tools their children had learned at THC were still being put into practice.

Right time to start. Parents shared their experiences of seeking help for their children prior to THC. There had been many difficult experiences of previous help not being helpful:

'Nothing was being done about it... I actually went into school ten times, and spoke to 15 different people to try and get him help' (Anne)

There was also an element of mystery and scepticism for some parents at the start on how THC might help:

'Is this really going to work? How can a horse actually work with him, because I haven't been able to do it and his dad hasn't been able to do it... the school haven't, no one has been able to do it, how can an animal do it?' (Christina)

Despite unclear ideas of how THC could help, having already tried 'everything' themselves, parents arrived with a sense of desperation to start something new. This connected with a readiness for change; there was a sense that things were getting worse and nothing was helping, leading to an urgency to try something different:

‘We would try anything because his anxiety levels were so high... we was getting nowhere’ (Daniel)

It’s not over yet. Parents talked about the change their children had experienced at THC, but also how despite the intervention coming to an end, the journey was not over yet. There was a sense that despite change and improvements for their child, there were still ongoing challenges, as Eleanor described:

‘Obviously, there’s still arguments, he’s a teenager (*laughs*) so that’s understandable but in the grand scheme of how things were before there is a lot better communication and a lot better contact between me and him’ (Eleanor)

Anne described how THC had been the start of change for her son:

‘He’d been able to relax and he’d done really well, so he got that and that was a catalyst to start calming him.’ (Anne)

Similarly, Daniel talked with a sense of hope that the journey of change would continue for his son.

‘So hopefully, if he carries on doing it, then that will make him stronger and more resilient too’ (Daniel)

Tools to take with you. In their ongoing journeys of change, parents talked about tools and techniques their children had learned through THC. These had been helpful during the intervention and were continuing to be put into practice beyond the end of the course:

‘He has finally got it that he breathes... it was sort of like he is putting it into practice... and that is what he learnt here’ (Christina)

Parents talked about how using tools learned at THC was making changes for their child across challenging contexts in everyday life, including school:

‘...the tools he was given at THC were fantastic and that helped the rest of the school year go really well.’ (Helen)

Seeing is believing

This superordinate theme encompassed the parents' interpretations of how their child experienced change at THC, through visible interactions with the horse. In addition, as parents were present during the intervention, they too had their own experience of what they had seen and witnessed their child do. Parents described a significance in seeing something that enabled belief in the possibility of change.

Instant Feedback. Parents noticed that when their child implemented strategies learned at THC, they saw immediate results in the horse's response to their action:

'Seeing the results of the horse, when the horse reacts to what you do - I think that's what's done it, that's what's worked for him' (Daniel)

Christina added why she thought this was so effective, describing what she felt her son had learned through this instant feedback from the horse and how this could translate across other contexts:

'I think that because he was getting that instant reward if you like, from the horse, it sort of like instilled something in him, that if he behaves in such a way when things go wrong, it will stop the thing going wrong. It halts it and I do feel that he thinks that way now' (Christina)

Faith also described seeing her daughter implement a technique and the horse's movement demonstrated she had got this right; she could believe it as she had seen it:

'And as soon as she was breathing okay, the techniques were okay, the horse went back' (Faith)

Parents as a witness. This subtheme developed from parents' stories about watching their child's participation in THC, and seeing them in a new light. This seemed to allow parents to see something different but very positive in their child as they witnessed new qualities:

‘He was cleaning like the hooves of the horses and was really gentle and I saw a really different tactile side to him... it does show that he can be sensitive and he’s got his soft side, whereas normally you would just see him on his Xbox... so just seeing him do something like that was completely different’ (Eleanor)

Parents described changes they could see physically in their child, which seemed to communicate to them something of an internal change:

‘His body language changes as well. He goes more relaxed rather than just like, it’s just like either head forwards and shoulders down sulking, he will take that breath and he will just feel like, refreshed I suppose. It refreshes him from that point and he is happy again’ (Daniel)

Parents witnessing their child in a new environment and seeing changes take place impacted parents, but Christina and Faith described how they felt it was an important and validating experience for the children to have an audience:

‘Yea, they want you to see it, then you can talk about...’ (Faith)

Doing, not talking. As highlighted previously, all children referred to THC have had experiences of being stuck with talk-based therapy. Parents felt the fact THC did not involve the child talking about difficulties played a role in the change process. Parents described the non-verbal aspects and importance of visible physical movements and body language and shared that their children had learned new ways of communicating without using words.

‘And it’s taught him to be a bit firmer in what he is doing, I suppose a little more assertive as well but through like body language rather than words’ (Daniel)

Christina described how for her son, she felt the fact there was no discussion was helpful; with horses, things cannot be negotiated, therefore communicating with actions was effective.

‘I think it could be because it’s nonverbal because there is no discussion, it’s just, you do that and I will behave, if you don’t do that, I won’t behave. And I think that could be one way that it works, because there is no discussion on it, it’s just the way it is.’ (Christina)

Helen also describes how the fact that THC was about doing and not about talking, was a good fit for her son:

‘They interacted with him in a positive, not a verbal - not talking about any of the situations that might have put him in. What I think was really fantastic about it was how it wasn’t about talking about what happened in the past and that really suited him because he was quite closed and didn’t want to talk about things’ (Helen)

In addition to the non-verbal aspects of THC being helpful to participants, parents emphasised the physical body language and *doing* element they could see, which to them represented an internal change:

‘You have to learn that even if you are not quite sure, that you have to put your shoulders back, your back straight, you know and be assertive’ (Barbara)

A chance to shine.

This superordinate theme comprised elements of the child’s achievement at THC and the self-regulation that enabled this. Parents felt their child’s opportunity to succeed in a new task played an important part in growing confidence and changing how they felt about themselves. Parents talked about how children were more in control and able to experience new things with their progress.

Achievement. Parents commented on what an impact they felt the sense of achievement had on a child’s confidence:

‘...he did so well that it gave him confidence in something he was really good at, so the fact that it was a different... and he got to shine a little bit there, which he liked’
(Helen)

Parents also talked about how they believed their children experienced a sense of pride and reward when they completed THC and achieved their certificates. The marking of success with a tangible certificate seemed to be important to parents and their children:

‘He was really chuffed when his certificate came through’ (Eleanor)

For some parents this confidence their child had achieved was visible in their body language:

‘It was his confidence level. He was you know, he was straight up (*sits up*), if you saw him before any of that, he was like that (*head down*). There was no confidence...’
(Christina)

Self-regulation. Parents talked about how managing to self-regulate, using their breathing to put their body in neutral, helped their children master new skills and shine:

‘He just took a breath like they teach them... “Take a breath, put yourself in neutral, start again”. He done that and he managed...’ (Daniel)

In being able to regulate themselves, parents talked about how this put their child back in control, both of themselves and of the horse.

‘It’s amazing and you can actually control them with your breathing. I just wouldn’t have said that you could do that’ (Faith)

The experience of self-regulation seemed to be something that parents felt the child had to learn to do for themselves, there was an onus on the child to experience this and master the skills, embedding them, and that helped bring change:

‘I think the fact that he can behave in a certain manner, and he has to calm himself down or the horses won’t do what he wants them to do. He has to be in a

frame of mind and I think that is the best thing because that is embedded in him now.

That he has control, it is up to him how something ends.’ (Christina)

Making connections

A final superordinate theme encapsulated the subthemes involving making connections. These connections were between the horse and the child, between the facilitators and the families and the shared experience connection of the parent and child. There was also a connection that parents made with the environment around them at THC and finally how families reconnected with their memories of THC once it had ended.

Horse-child connection. Parents described connections that their children made with horses and this seemed to be significant in the changes that they encountered. There was a sense for some parents, including Anne, that her son made a special connection with the horse and was accepted by the animal:

‘The horse just completely went, “Okay, you’re great. I understand what you are saying”. You know, the horse just completely got him. It was marvellous’ (Anne)

Similarly, Daniel talked about how his child’s connection with one of the horses was unique, and in some way special (exceeding the expectations of others).

‘They did say a couple of the horses here are hard to work with and with what’s happening with him, some of them, they just took to him, and they said a couple of the horses they’ve not seen react that way, like straight away with the person that they are working with’ (Daniel)

Parents often used anthropomorphism (attributing human qualities to animal) in their descriptions of the interactions between their horse and the animal. Anne shared her thoughts on horses’ nature and qualities:

‘Animals are non-judgemental, aren’t they? ... They are just as they are, there’s no underlying current of deviance’ (Anne).

Trust was a seemingly human trait which parents saw as an important part of the child's connection with the horse, as Gary and Christina both described. Gary talks about how the horse may be offering something to his daughter that humans cannot:

‘She has had such a knocking in life, that her confidence and people turning their back on her she trusts. I should think perhaps she trusts the animals more than she trusts people.’ (Gary)

Christina also talks about how the facilitator said that the horse trusted her son and the impact that had on him, and seemingly also on Christina as his mother:

‘and she said to him, “That is complete trust, that horse completely trusts you.” And the horse walked to him and looked at him and he had to stroke its nose and she said to him, “That is complete trust”. And he looked back at me and just gave this great big grin. You know?’ (Christina)

Facilitator support. Facilitators played a key role in making connections with the children and parents which seemed foundational to the change process. Parents described how the facilitators interacted with the family and the difference that this made in facilitating change:

‘and they sort of got to know you... tried to build you up’... ‘she would encourage him every step of the way’ (Barbara)

Helen talked about how the work with the horses wouldn't be possible without the support and connections made with the facilitators:

‘I mean of course people make a difference, don't they? You know, it's the horses but if there is no one to guide the horses and have the skills that they have for handling the horses, then they can't actually go on’ (Helen)

Gary shared from his observations, how he felt the connection the facilitator made with his daughter was *quite therapeutic*.

“The way that the girls training the horses talk to them (*young people*) ... it’s not overbearing or training, it’s almost as an equal and I think it’s quite therapeutic.’

(Gary)

Other parents commented on how the facilitators connected with families and the importance of how this made them feel which played a part in the change process:

‘Their whole relaxed attitude to it and how they are inclusive and positive. I think it does change a lot of people’s lives and it is valuable’. (Helen)

Connecting with calm. Parents talked about their experiences of the calm environment at THC. Spending time outdoors with animals in nature seemed to play a role in how families felt. Parents described the sense of calmness that they experienced just by being present at THC, and this seems to have been a powerful feeling influencing parents as well as children:

‘To me it was a very calming atmosphere... the peacefulness, the birds, just the whole place is really calming I think.’ (Faith)

The physical experience of a relaxing and calm environment seems to have paved a way for learning and change to occur, which is captured in Daniel’s explanation:

‘It’s a relaxed atmosphere that he is learning in. I think that if it was a stressed atmosphere, then he wouldn’t have been able to do it, it wouldn’t have helped him at all.’ (Daniel)

Shared experience. Parents and children connecting with one another during their THC experience seemed to play an important part in the change process. Eleanor describes what she and her son discovered and how this changed their relationship:

‘I think because it was just us two, there was no one else around, there was no husband or other children, there was no distractions and it was just me and him in the car on the way home, for him to then go to school, so it was like our time, now we try

to do that a bit more... we actually realised we don't talk enough; we can play fight and muck about and laugh and joke now which we couldn't do before' (Eleanor)

Anne also talks about how unique it was to have time alone with her son, and how this break from other aspects of life made space for them to be together:

'We hadn't had any time where it was calmer for us. It was just like a week section, no school, no learning centre, no threat of any sort of learning and just became almost like a full stop to that chapter, so it was really good.' (Anne)

As well as the shared experience of spending time with one another, parents talked about how they also shared experiences with their children in terms of their own revelations and self-discovery. For some this seemed like a surprising discovery:

'In my mind, I was doing something for Mike, and not taking time out for myself which is probably what I needed to do, and in doing something for Mike, it was actually really healing me and showing me that I wasn't okay and that I needed to do something to fix that' (Anne)

There was a sense of togetherness with parents and their children and it seemed that parents connected in some parallel processes with their child, leading them to believe that they are not as different as previously thought. Faith went from discussing what her daughter got from THC and then began using the language, 'we' to describe a more shared experience:

'Cause we all need to do that and I don't think we do that enough in life. Yea, I think sometimes we just need to stop, don't we? And we don't. I think life is very hectic for a child, that's probably the most important thing... and for an adult'. (Faith)

Reconnecting. Parents explained that they continued to talk with their child about THC after it finished. The idea of reconnecting with the memories of the experience seemed to support families with ongoing change. Parents described how they played an important role in

reminding their child of what they had learned at THC and supporting them in their continued journey:

‘We just reiterate everything to him all the time... just like give him a little reminder, “Remember what you learned on the HC?” Don’t always tell him what he learnt, just say to him, “Do you remember what you done on the HC? Just think about the situation you are in and what you could do to get round it”.’ (Daniel)

Having something physical from THC seemed significant in remembering the experience through photos, certificates and DVDs.

‘...we’ve got photos of what we have done and our certificates... He has watched them (DVD) once or twice, so it does feel quite strange to watch it back but it just kind of makes you remember it better, things you might forget’ (Eleanor)

Parents described how they and their children also reconnected with THC by going back to volunteer, this was perceived as adding a sense of purpose:

‘...she is becoming involved with helping now so that’s something that’s given her a purpose, is coming here each week ... so you know it’s something, it’s an activity that’s coming into her weekly life now as well, so that’s given her, as well as just coming to the course, she has now got a hobby’ (Faith)

Discussion

Four superordinate themes represented how parents made sense of change in THC and the meaning this change held for them. Parents saw change as a journey and described how their child’s chance to shine, alongside the connections made helped facilitate change. In addition, the visual experience of seeing results in action enabled belief in change, and impacted how parents made sense of change. Parents highlighted making connections as

another facilitator of change. Findings are discussed with consideration to research questions and existing literature.

‘Change as a journey’ signified how parents did not see the outcome at the end of THC as a final result but rather part of an ongoing process continuing beyond the intervention. This resonates with a recovery model of mental health (Oh, 2013) which sees recovery as a personal journey, rather than fixed outcome. Parents talked about the progress and change THC had enabled but alongside this was a sense that ‘it’s not over yet’ and challenges continued for their child, however perhaps now in a more manageable way, or with a new perspective.

From parents’ explanations of their experience, THC was framed in context of a wider journey; preceding THC were challenging experiences of help; when ‘help’ was not helping. Reder & Fredman (1996) describe how clients can bring their beliefs about helping processes (relationship to help experiences) and how this can influence the outcomes of referrals and treatment. Parents described how previous experiences of ‘help’ not helping, led to a sense of desperation and coming to THC was a welcomed hope at the right time for their family.

Parents described visible observations made during THC; ‘seeing is believing’ encompassed how the things that parents saw at THC stayed with them, changed their perspective and facilitated change. Parents described ‘instant feedback’ from the horses as enhancing their child’s learning; there was a two-way process involved in this where children had to be aware of their own body and movements and had to watch for the horse’s response. Parents talked about how for their children, this was a live and undeniable confirmation that they were perfecting the techniques. This ‘instant feedback’ to reinforce learning of new skills is a key causal mechanism in THC theory of change, ‘Horses promote consciousness

and self-awareness in participants by acting as a mirror; actively reacting and giving feedback to human behaviour' (The HorseCourse, 2015, p. 16).

How parents witnessed their child made a difference to how they viewed them; this change in how parents saw their child enabled parents to believe they were capable in settings beyond THC. Parents who arrived at THC concerned about their child's distress and worried about their child's inability to cope, disheartened by lack of support were leaving THC with a changed perspective. Narrative therapy focuses on helping people to re-author their story with a preferred narrative, thickening the aspects of the story that have been lost in problem saturated stories (Morgan, 2000). THC appeared to give parents opportunities to develop and strengthen preferred aspects of their child's identity as capable and in control. Outsider witnessing is a narrative approach that creates an audience for a child's preferred story (Morgan, 2006; Christie, McFarlane, Casdagli & Fredman, 2016). Having parents as an audience to witness their child's progress appeared to facilitate change and helped to translate this to new contexts beyond THC.

As previously noted a prerequisite of a referral to THC is disengagement with talking therapies, it seemed that there was something powerful within THC that involved 'doing, not talking'. Parents described how non-verbal aspects of THC were fundamental; it was not about what their children said, it was about what they did and this could be seen visually by those around them, including horses. To parents this appeared to feed into change, as children developed new ways of managing and communicating with their body, rather than with words. Some parents talked about how their child could do things, even when they did not feel them, as Daniel describes, 'use the body language he used with the horses to make him look strong'. This embodiment of assertiveness seemed to open new ways of being for children, or perhaps new ways of doing. Embodiment, or embodied cognition takes the conceptual position that body movement and postures can affect mental processes, and vice

versa (Tschacher & Pfammatter, 2017). Ideas around physical movement and doing, rather than, or in addition to talking have not been widely addressed in EAI research but resonate with research developments in trauma work (van der Kolk, 2015). Approaches such as body psychotherapy also involve the principle that non-verbal therapeutic techniques and body focused awareness can bring about therapeutic change (Rohricht, Gallagher, Geuter & Hutto, 2014).

‘A chance to shine’ encapsulated sub-themes of achievement and self-regulation. Parents described how progressing and achieving is important in change and THC star used with participants records this. THC also uses certificates and ending ceremonies to mark the achievements that participants make (The HorseCourse, 2015). Parents described how the chance to achieve and shine at THC led to changes in their child’s confidence and self-esteem. As parents talked with pride about their child’s achievements this resonated with a new narrative with strength based focus on their child’s identity (Morgan, 2000). Similarly, a sense of mastery, positive identity construction and enhanced self-image has been documented in participant experiences following EAI (Kern-Godal et al., 2016; Wanneberg, 2014).

The child’s ability to self-regulate their emotions was a sub-theme of ‘a chance to shine’. Parents talked about how through THC children were able to find ‘neutral’ and regulate themselves to work calmly and effectively with the horses. Children being in control of themselves and the horses resonates with locus of control, the degree to which people believe they have control over the outcome of events in their lives (Rotter, 1966). It is possible that with an internal locus of control developed through experiences at THC, children then believe that in other areas of life they can take steps to stay in control; as Christina described, ‘...that is embedded in him now, that he has control, it is up to him how something ends’. This is a real contrast to the stories bringing families to THC where they

felt desperate and at a loss of how to cope and manage their difficulties, with help failing to help. Research into emotional regulation (Fustos, Gramann, Herbert & Pollatos, 2013) claim that perception of one's own bodily states can enable people to change their emotions.

Themes on how parents made sense of change in THC resonate with the Attachment, Regulation and Competency (ARC) Framework (Blaustein & Kinniburgh, 2018). This highlights how development can be disrupted for children who have experienced trauma, and targets interventions on these three domains, attachment, regulation and competency to help children develop resilience. Enhancing competency through giving children opportunities to shine and teaching children skills in regulation were some ways that parents experienced change at THC.

The final superordinate theme conceptualises how fundamental 'making connections' was to the change process for parents in THC; this also has links to the attachment interventions of ARC framework which focus on building safe surroundings for children. For parents, making connections seemed to be a key part of change and resonates with other change process research into talking therapies that highlight the value of strong therapeutic alliance in change processes (Ardito & Rabellino, 2011). One unique difference is the connection with the horse; parents described how horses were perceived to hold human qualities, such as trust. Anthropomorphism is often discussed as an underlying mechanism in EAI (Bachi, 2013); parents in this study talked about the connection their children made through trusting relationships with the horse. However, beyond this, it appears that parents felt horses offered something more than humans could, the attribution of 'non-judgemental' meant horses were experienced as more accepting and trustworthy than humans. This resonates with other EAI research in which participants reported relationships with horses facilitated emotional support (Kern-Godal et al., 2016).

Burgon et al. (2018) highlights relationship as the central tenant underpinning EAI and connections developed through horses and handlers can enable participants to develop trusting relationships beyond the intervention. Burgon et al. (2018) and Kern-Godal et al. (2016) suggest horses attune to human emotional needs. In contrast however, Merkies, McKechnie and Zakrajsek (2018) claim horses are more influenced by the handlers experience with horses, than emotional states. In THC participants are learning Parelli horsemanship skills, in which horses respond to physical cues, perhaps this links to why parents experienced horses having such a connection with their children.

This study adds to existing research on how trusting relationships can facilitate change, as parents felt such connections made with horses, facilitators and the environment were important. In addition, parents saw themselves as an important part of helping their child reconnect with THC after it had ended. McNamara (2017) reported that there was a lack of parental involvement in EAI for children and parental experiences in this study support the view that including parents is fundamental part of facilitating change.

Limitations

This study involved parents whose children completed THC and had opted into being contacted about research. A homogenous sample of parents was selected to meet research aims; however, this may not represent parental experiences more widely in EAI. One off interviews were conducted limiting inferences on how perceptions of change experience vary over time and as with any IPA research, results cannot be generalised. In addition, six mothers and two fathers took part meaning results may be more representative of mothers' experiences than parents generally. Conducting interviews at THC may have influenced what participants said; however, two interviews conducted over telephone showed no notable differences compared to face-to-face interviews. Although steps were taken to address quality assurance through reflexive exercises, it is likely that the researcher not being a parent and

their role as a trainee clinical psychologist will have influenced interview responses as well as analysis and results.

Practice implications

The findings demonstrate, similarly to a recovery model in mental health (Oh, 2013), parents experienced change as a journey. This has implications for therapeutic clinical work when there often is an emphasis on measured outcomes at the end of an intervention; this may not fully grasp the complexities of how people experience change and how change continues after interventions.

Parents described how the horse-child connection offered something beyond what was humanly possible; horses were experienced as more trustworthy and less judgemental than people. This is important to bear in mind for individuals who have had challenging experiences with people, an intervention involving an animal could help develop trust. Another key part of making connections was how participants reconnected with THC through, memories, photos and certificates and how this further contributed to change. Clinical psychologists could use physical documents (Fox, 2003) to support participants in managing endings and having transitional objects to take forward (Litt, 1986), enabling people to stay connected with their change experience. According to parental experiences giving children a chance to shine, and having witnesses to see and believe can also facilitate change; such approaches could also be incorporated in other interventions clinical psychologists offer.

This research also highlights the value in seeking participant voices and using qualitative methods to explore change processes and this could continue to be used to further understanding across other clinical contexts.

Future research

This study explored the lived experience of parents who were involved in an equine intervention and how they made sense of change. Future research could use creative ways to engage children to understand more about how they experience and make sense of change. It could be interesting to explore differences in parent and child experiences of the same event. Given that children who participated in THC were not able to engage in talking therapies, there may be ways of exploring their experiences through creative expression such as art or using the materials such as certificates, videos and THC star.

To develop a model in the future for how the change process works in THC, a grounded theory approach could be utilised and could involve perspectives of facilitators, as well as parents and children.

Given this current study explored how parents made sense of change and highlights change as a journey, a future project could carry out longitudinal research exploring how a change journey might develop over time.

The existing literature into therapeutic alliance resonated with the connections that participants made with horses and facilitators at THC; such relationships could be explored further in the context of attachment to understand more about how they relate to change processes in EAI.

Conclusion

This study aimed to explore how parents make sense of change in THC, what meaning this held for them and what may have hindered or facilitated change. The findings highlight that change was experienced as a journey, with the THC a part of a bigger story that began before the intervention and continued beyond the intervention. Parents did not feel that elements of THC hindered change but described how change was facilitated through seeing results in action; witnessing physical movements helped them believe and understand that an

internal change was in progress and this resonates with embodiment research. THC giving children opportunities to achieve and a chance to shine was another key part of the change experience for parents, which connected to a sense of mastery and positive self-construct in previous research (Kern-Godal et al., 2016). As in other EAI (Bachi, 2013) and wider psychotherapy research (Ardito & Rabellino, 2011) parents also described how making connections through relationships plays an important role in change. This study adds that parents perceived themselves as a key part of the change process for their child in THC, alongside the horse, facilitator, environment and memories.

Practice implications include giving children audiences for others to see and believe in change processes and offering new ways of allowing people to connect with memories of change experiences after interventions have ended. Future research could explore how children themselves make sense of change in EAI and longitudinal research could investigate how the journey of change might develop over time.

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Section C: Appendices

Appendix A.

From Mays & Pope (2000) Evaluating the quality of qualitative research

Some questions about quality that might be asked of a qualitative study:

- Worth or relevance – Was this piece of work worth doing at all? Has it contributed usefully to knowledge?
- Clarity of research question – If not at the outset of the study, by the end of the research process was the research question clear? Was the researcher able to set aside his or her research preconceptions?
- Appropriateness of the design to the question – Would a different method have been more appropriate? For example, if a causal hypothesis was being tested, was a qualitative approach really appropriate?
- Context – Is the context or setting adequately described so that the reader could relate the findings to other settings?
- Sampling – Did the sample include the full range of possible cases or settings so that conceptual rather than statistical generalisations could be made (that is, more than convenience sampling)? If appropriate, were efforts made to obtain data that might contradict or modify the analysis by extending the sample (for example, to a different type of area)?
- Data collection and analysis – Were the data collection and analysis procedures systematic? Was an “audit trail” provided such that someone else could repeat each stage, including the analysis? How well did the analysis succeed in incorporating all the observations? To what extent did the analysis develop concepts and categories capable of explaining key processes or respondents’ accounts or observations? Was it possible to follow the iteration between data and the explanations for the data (theory)? Did the researchers search for disconfirming cases?
- Reflexivity of the account – Did the researcher self-consciously assess the likely impact of the methods used on the data obtained? Were sufficient data included in the reports of the study to provide sufficient evidence for readers to assess whether analytical criteria had been met?

Appendix B.

From Critical Appraisal Skills Programme (CASP, 2018) - Case Control Study Checklist

Questions that need to be considered when appraising a case control study:**Section A: Are the results of the trial valid?**

1. Did the study address a clearly focused issue?
2. Did the authors use an appropriate method to answer their question?
3. Were the cases recruited in an acceptable way?
4. Were the controls selected in an acceptable way?
5. Was the exposure accurately measured to minimize bias?
6. (a) Aside from the experimental intervention, were the groups treated equally?
(b) Have the authors taken account of the potential confounding factors in the design and/or in their analysis?

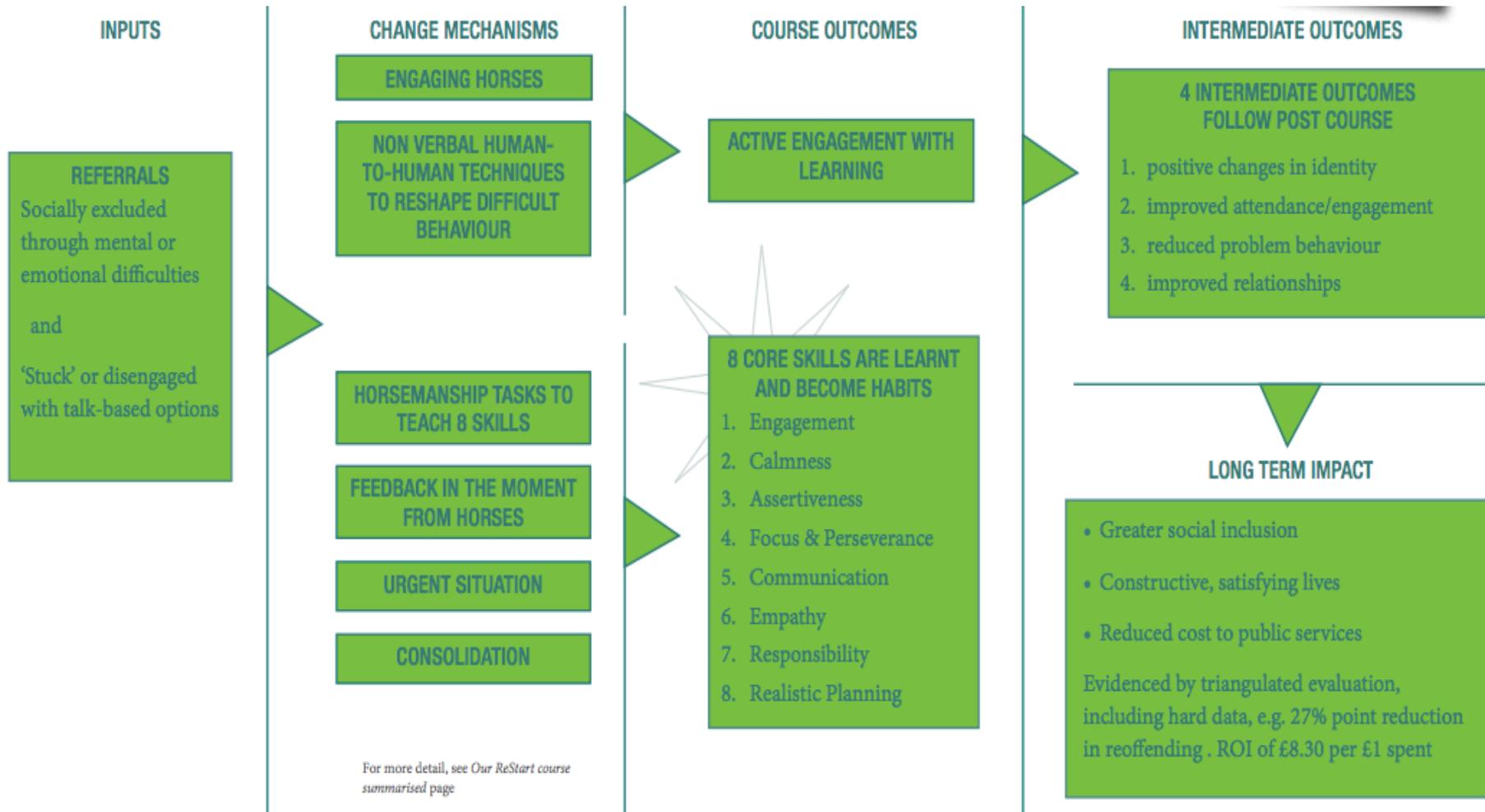
Section B: What was the treatment effect?

7. How large was the treatment effect?
8. How precise was the estimate of the treatment effect?
9. Do you believe the results?

Section C: Will the results help locally?

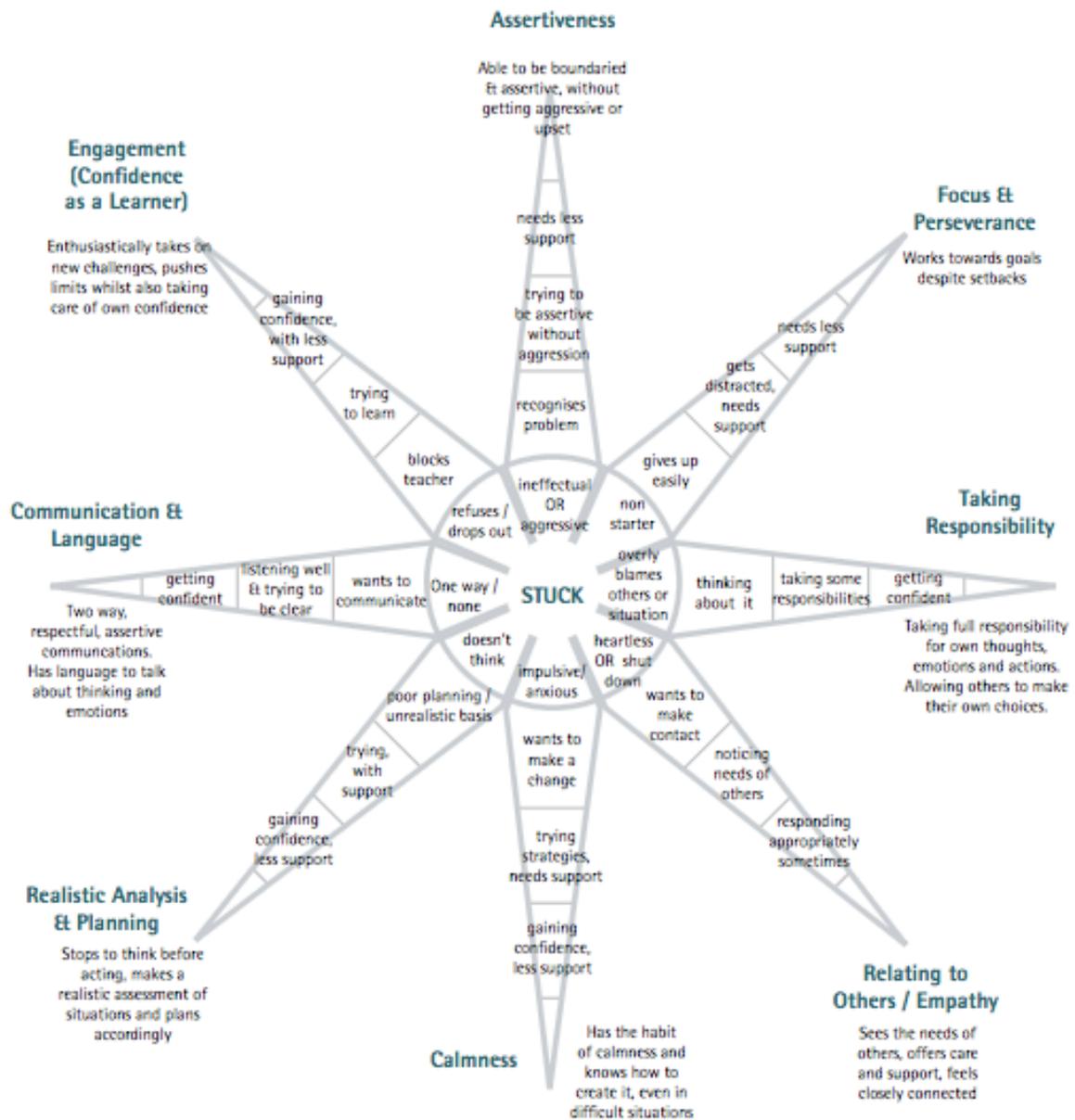
10. Can the results be applied to the local population?
11. Do the results of this study fit with other available evidence?

Appendix C. The Horse Course – Theory of Change (from The HorseCourse, 2015)



Appendix D. The HorseCourse Star

TheHorseCourse Skills Star



Appendix E. Information Sheet and Consent Form



Information about the research

Study: Exploring how parents make sense of change in the HorseCourse

Hello. My name is Suzanne Watson and I am a trainee clinical psychologist at Canterbury Christ Church University. I would like to invite you to take part in a research study. Before you decide, it is important that you understand why the research is being done and what it would involve for you.

This sheet will tell you about the purpose of this study and what will happen to you if you choose to take part.

What is the purpose of the study?

The aim of this study is to explore how parents make sense of change after they have completed The HorseCourse and what meaning that change has for them. We want to understand the perspective of parents who take part in the HorseCourse and what they think may have helped or hindered change. There are various theories about what people find helpful and unhelpful with regards to change in talking therapy and animal assisted therapy and we want to add to this research by speaking with people who have experience taking part in the HorseCourse.

Why have I been invited?

You have been invited to take part as you and your family have recently taken part in the HorseCourse and you have consented to being approached about research opportunities.

Do I have to take part?

It is entirely up to you to decide to join the study. If you agree to take part, I will then ask you to sign a consent form. You are free to withdraw at any time, without giving a reason. This would not affect your involvement with the HorseCourse or any other services who are supporting you and your family.

What will happen to me if I take part?

If you do choose to take part in this research you will meet with myself, Suzanne, at the HorseCourse headquarters in Weymouth. I will conduct an interview asking you some questions about your experiences of the HorseCourse; these will include how things were for you and your family before and after the HorseCourse, what you liked and didn't like about the HorseCourse and how you feel about yourself, members of your family and family relationships after completing the HorseCourse. Please feel free to be as honest as you like in your answers and you do not have to answer any questions that you don't want to.

The conversation that we have during the interview will be recording on a dictophone and this will be stored on a password protected pen drive. The conversation will then be typed up to be analysed and at this stage, everything that was talked about will be anonymised so that you will not be identifiable to protect your confidentiality. My supervisor may also be involved in reviewing parts of the interview to help develop the analysis.

Expenses and payments

As a thank you for taking part in this research, we can reimburse your travel expenses to and from the HorseCourse on the day of the interview.

What are the possible disadvantages and risks of taking part?

It is possible that some things may come up during the interview that might be upsetting to talk about. If this is the case, you can end the interview at any time. If you are upset after the interview, you can contact me at s.watson757@canterbury.ac.uk and I can signpost you to other available support.

What are the possible benefits of taking part?

We cannot promise that you will benefit personally from taking part in this research, but there is a possibility that taking part in this research will help you to reflect upon your experience of the HorseCourse.

What if there is a problem?

If you have a concern about this study you can contact me on the email address given. If you remain unhappy and have any complaints you can contact the Research Director at Salomons Centre, Canterbury Christ Church University, Dr Paul Camic at paul.camic@canterbury.ac.uk

Will information from or about me from taking part in the study be kept confidential?

Yes. We will follow ethical and legal practice and all information about you will be handled in confidence.

What will happen if I don't want to carry on with the study?

If you decide that you do not want to carry on with the study after you have taken part in the interview, you can get in touch with me and we will destroy the recorded material that we gathered with you. Unfortunately, it will not be possible to withdraw once the data analysis has taken place in August 2018.

What will happen with the results of this study?

I will write up the results for my doctoral thesis at Canterbury Christ Church University. This may be written up and submitted to a psychology journal. No one who took part in the study will be identified in any part of the write up or article. Some anonymised quotes may be used in the write up of this research.

Will information from or about me from taking part in the study be kept confidential?

All information about you will be kept confidential and there will be no identifiable information included in the write up and report on this research. Participants have the right to check the accuracy of data held about them and correct any errors. The data collected will be stored securely at Canterbury Christ Church University for five years, in keeping with University ethics panel requirements.

Who has reviewed this study?

The study has been reviewed by Canterbury Christ Church University and has been given ethics approval by The Salomons Ethics Panel, Salomons Centre for Applied Psychology, Canterbury Christ Church University.

Contact Details

You are welcome to contact Suzanne Watson (Trainee Clinical Psychologist) at:

s.watson757@canterbury.ac.uk

If you decide to take part in this research study, you will be given a copy of this information sheet and a signed consent form to keep.



CONSENT FORM

Study: Exploring how parents make sense of change in the HorseCourse.

Name of Researcher: Suzanne Watson

Please initial box

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without reason and without my legal rights being affected.

3. I agree that an audio recording may be used to record the interview. This will be deleted once a written record is accurately noted.

4. I understand that relevant sections of the recorded interview may be looked at by another member of the research team. I give permission for these individuals to have access to the recorded data.

5. I agree that anonymous quotes from my interview may be used in published reports of the study findings.

6. I agree to take part in the above study.

Name of Participant: _____ Date _____

Signature _____

Name of Person taking consent: _____ Date _____

Appendix F. Interview Schedule

Semi-Structured Interview:

- Introduce self, Suzanne Watson, Researcher
- Explain rationale and procedure. 'The aim of this research, as the information sheet outlines is to explore the experience of change for parents who have taken part in the HorseCourse. Today I will be asking you some questions about your experiences. You do not have to answer any questions that you don't want to and you can choose to terminate this interview at any time'
- Have you signed the consent form? Do we both have a copy of that?
- Do you have any questions about the research?

1) I wonder if you could start by telling me a bit about yourself and your time on the Horse Course?

(Prompts: Would you like to share what you were referred for? Who made the referral? What were your thoughts about the referral being made? What did you think about The HorseCourse before you started?)

2) What do you remember about the HorseCourse?

(Prompts: What stands out to you? Did you find any aspects of it particularly useful? In what way was that useful? What sense do you make of that?)

3) Did you notice any changes in yourself when taking part in the Horse Course?

(Prompts: What changed? Who noticed? Did anything feel different for you during The Horse Course? Can you tell me a little bit more about that?)

4) What did this mean for you?

(Prompts: What do you think brought about the change? How did you make sense of that? Was there something in particular within the HorseCourse that you think led to the change? How do you think that happened? Why do you think it happened? What was it like for you to feel that way?)

5) Have things changed since you completed The HorseCourse?

(Prompts: What's different now? Is anything the same as before? Have you thought much about The HorseCourse since completing it? Have any of your thoughts about The Horse Course changed since finishing? What are your thoughts about this? How do you understand that?)

- 6) Is there anything else that you think it would be important for us to talk about today?

(Prompts: Is there anything about your experience of the Horse Course that we haven't touched on? Is there anything you would like to add? Is there anything else you want to tell me about?)

Appendix G. Ethical approval

Salomons Centre for Applied Psychology

Suzanne Watson
Trainee Clinical Psychologist
Canterbury Christ Church University

27 October 2017
Direct line 01227 92 7094
E-mail margie.callanan@canterbury.ac.uk
Our Ref V:\075\Ethics\2017-18

Dear Suzanne,

Exploring how parents make sense of change in an equine assisted intervention

Outcome: Full Approval

The panel would like to thank you for your submission and we are pleased to offer you approval for your proposed study. The panel would like you to note the following and confirm in an email that these minor changes have been made.

- 1) Page 16, on first line of 6th paragraph please replace 'recording' with 'recorded'.
- 2) On consent form, point 2, please insert 'having to provide a' before the word 'reason' and delete the word 'legal'.

Yours sincerely,

Appendix H. Research Diary

(Removed for online version)

Appendix I. Bracketing interview with colleague - 22nd February 2018**QUESTIONS**

- Tell me about you (gender, race, beliefs, religion, our own value system)
- What led you to choose this project?
- What are your hopes around this type of work?
- Is this something that you have any personal experience of?
- Do you have much experience with animals or horses? What do you think of them?
- What do you think of this type of intervention?
- Do you believe this type of intervention is helpful?
- What do you think makes this type of intervention effective?
- How have animals been an influence in your own life?
- What do you think you might find?
- What would you hope to be able to contribute to this field of work?
- Service user voices/experiences
- Why research method /analysis design
- Any own personal interests/conflicts of interest in this project (e.g. successfully getting qualification)?
- What are your assumptions about animals?
- Is there a potential role conflict (i.e. between collecting and analysing data and organising)
- What would you be worried about happening/what could go wrong/happen that we don't want to happen?
- How do we feel about the people that we are interviewing?

Bracketing Interview recorded - and notes made based on listening back and reflecting on this.

- I (researcher) am white, female, late 20's
- Family is massively important to me, particularly sibling and parental relationships
- I am not a parent myself, but I will be interviewing parents. I'm really interested in attachment in parent-child relationships
- Pets also come into family for me - animals as loving and comforting species to relate to
- Pets a big part of my life growing up - personally find domesticated pets like dogs and cats therapeutic but a horse seems different to me, more intimidating - I have few experiences with horses, and one experience of being thrown off a cart on the back of a young wild untrained horse! Always been very aware of danger of horses - beautiful, intelligent but also you need to respect them!
- When discussing my beliefs and values, creation and religion also came up. I was considering my underlying motivations for caring for people and animals and seeing them both as part of God's creation! I am quite surprised how this came up, but as it did, it'll be important for me to keep in mind.
- Conflict in role - I am wondering about how I will balance the needs of project, with the needs of participants, the HorseCourse etc... Concerns about 'exploiting' participants.

March 2019 – Reflections; bracketing at end of process.

With hindsight, I was amazed at how willing parents were to share their stories, so many wanted to talk about change at THC as they had such positive things to say. I wonder about what impact this might have had on them, further reinforcement of the change story. I really look forward to sharing the poster overview with THC and families. So many of my values and ideas stay the same but I think as a psychologist I will pay so much more attention to approaches beyond words for those who may not be engaging in talking therapies.

Appendix J. Annotated Transcript – initial notes and emerging themes

(*all identifiable information change to protect anonymity)

(Removed from online version)

Appendix K. Diagram showing progression of theme development



Emergent Theme examples	Sub Themes	Super-ordinate theme
Help not helping Starting with skepticism Sense of desperation Parent limitations	The right time to start	Change as a journey
Progress but challenges continue HC starting change Hope for what is to come	It's not over yet	
Putting things into practice Apply learning to new contexts Transferability of skills Using tools	Tools to take with you	
Seeing results Horse response Seeing child in new light Witnessing new body language Child wants an audience Non-verbal elements Embodiment Using the body Body language	Instant feedback Parent as a witness Doing, not talking	Seeing is believing
Child's confidence Proud of progress Exceeding expectations	Achievement	A chance to shine
Finding neutral Child in control	Self-regulation	
Anthropomorphism Horse to people, transfer Child as 'special' Building up and encouraging Welcoming environment Acceptance, inclusive Role of the environment Relaxed atmosphere Time for parent and child Parent self-discovery Parallel process Role of remembering Parent role reminding child	Horse-child connection Facilitator support Connecting with calm Shared experience Reconnecting	Making connections

Appendix L. Table of themes with example quotes

(Removed from online version)

Appendix M. Poster of Research Summary sent to participants and The HorseCourse



Exploring how parents make sense of change in The HorseCourse



WHY?

We know that the The HorseCourse has great outcomes in helping people; they have also published a Theory of Change¹. This study was conducted to try to understand perspectives of families who have taken part. Our research questions were

- 1) How do parents make sense of change in The HorseCourse
- 2) What meaning does this change experience have for them?
- 3) What do parents think may have facilitated or hindered the change

RESULTS

Sub-themes	Superordinate Themes
-Right time to start -It's not over yet -Tools to take with you	Change as a journey
-Instant feedback -Parents as a witness -Doing, not talking	Seeing is believing
-Achievement -Self-regulation	A chance to shine
-Horse-child connection -Facilitator support -Connecting with calm -Shared experience -Reconnecting	Making connections

"The tools he was given were fantastic and that helped the rest of the school year"

"Is he did something what happened was instant, he could see the results"

"He got to shine a bit there which he liked"

"And the horse just completely went, "OK, you're great... you know the horse just completely got him! It was marvellous"

WHAT DID WE LEARN?

- There were lots of similarities in how parents made sense of change and the HorseCourse theory of change.
- Parents saw change as a journey and tools they learned at the HorseCourse continued with them.
- We also learned that parents and the environment seem to play an important part in change processes.
- Parents thought the fact that focus was on *doing*, and not talking – helped their child see results which led to change.

1. The HorseCourse (2015). *The HorseCourse working with offenders. Evidence Review: Theory of change and contribution analysis*. London: New Philanthropy Capital

2. Smith, Flowers, & Larkin (2009). *Interpretative Phenomenological Analysis: Theory, research and research*. London: Sage

Research was conducted by Trainee Clinical Psychologist, Suzanne Watson under supervision of Dr Alex Hassett. Ethical approval was granted from Salomons Ethics Panel, Canterbury Christ Church University

WHAT'S NEXT?

- A BIG thank you to everyone who made this research possible (The HorseCourse and parents involved).
- Future research might involve children over a longer period of time to learn more about how the HorseCourse can help people

Appendix. N End of study notification to ethics panel

Dear Ethics Panel,

Please see below an overview of research findings of completed project.

Study Title: Exploring how parents make sense of change in an equine assisted intervention for their child: The HorseCourse

Change process research in talking therapies continues to develop practice and deepen understanding of what works for whom, and how and why (Elliott, 2010). Change processes in alternatives to talking therapy, such as equine assisted interventions (EAI) have not been widely researched. This study aimed to explore how parents make sense of change in an EAI (The HorseCourse, THC) and what meaning that change held for them.

This research was carried out in line with BPS code of ethics and conduct (BPS, 2018) and Yardley's (2000) guidelines were followed to enhance the quality of the research. Eight semi-structured interviews were conducted with parents of children who had completed THC. Interpretative Phenomenological Analysis led to the development of four superordinate themes: 'Change as a journey', 'Seeing is believing', 'A chance to shine' and 'Making connections' which overarched 13 sub-themes. Results highlight that for parents interviewed change was experienced as a journey; and was facilitated through seeing and believing in the moment progress and tools which participants took with them and used after the intervention. Additionally, giving children a chance to achieve and shine created new strength based narratives for parents on their child's ability; this linked to previous research into participant experiences where themes of mastery and positive self-construct were highlighted in EAI.

The results resonated with other EAI research that highlight making connections (including relationships with facilitators and horses) plays a role in change, and this study adds that parents felt shared experiences, the environment (calm and nature based) and

memories (photos and certificates) may also play as part in facilitating change. Practice implications include giving children audiences to witness change processes and opportunities to shine through mastering new skills. Given that parents made sense of change as a journey, future research could explore children's experiences of change over a longer period time.

You may be interested in the attached poster illustrating the research study and key findings which was sent to participants and THC charity where the research was carried out.

[Poster, appendix M attached]

Appendix O. Journal Submission Guidelines

– Journal of Child Psychology and Psychiatry

Manuscript preparation and submission

Papers should be submitted online. For detailed instructions please go to: <http://mc.manuscriptcentral.com/jcpp-camh>. Previous users can check for existing account. New users should create a new account. Help with submitting online can be obtained from the Editorial Office at JCPP@acamh.org

1. The manuscript should be double spaced throughout, including references and tables. Pages should be numbered consecutively. The preferred file formats are MS Word or WordPerfect, and should be PC compatible. If using other packages the file should be saved as Rich Text Format or Text only.
2. Papers should be concise and written in English in a readily understandable style. Care should be taken to avoid racist or sexist language, and statistical presentation should be clear and unambiguous. The Journal follows the style recommendations given in the *Publication manual of the American Psychological Association* (5th edn., 2001).
3. The *Journal* is not able to offer a translation service, but, authors for whom English is a second language may choose to have their manuscript professionally edited before submission to improve the English. A list of independent suppliers of editing services can be found at http://authorservices.wiley.com/bauthor/english_language.asp. All services are paid for and arranged by the author, and use of one of these services does not guarantee acceptance or preference for publication.

Layout

Title: The first page of the manuscript should give the title, name(s) and short address(es) of author(s), and an abbreviated title (for use as a running head) of up to 60 characters.

Abstract: The abstract should not exceed 300 words and should be structured in the following way with bold marked headings: Background; Methods; Results; Conclusions; Keywords; Abbreviations. The abbreviations will apply where authors are using acronyms for tests or abbreviations not in common usage.

Key points: All papers should include a text box at the end of the manuscript outlining the four to five Key (bullet) points of the paper. These should briefly (80-120 words) outline what's known, what's new, and what's clinically relevant.

Headings: Articles and research reports should be set out in the conventional format: Methods, Results, Discussion and Conclusion. Descriptions of techniques and methods should only be given in detail when they are unfamiliar. There should be no more than three (clearly marked) levels of subheadings used in the text.

Acknowledgements: These should appear at the end of the main text, before the References.

Correspondence to: Full name, address, phone, fax and email details of the corresponding author should appear at the end of the main text, before the References.

References

The *JCPP* follows the text referencing style and reference list style detailed in the *Publication manual of the American Psychological Association* (5th edn.)i.

References in text: References in running text should be quoted as follows:

Smith and Brown (1990), or (Smith, 1990), or (Smith, 1980, 1981a, b), or (Smith & Brown, 1982), or (Brown & Green, 1983; Smith, 1982).

For up to five authors, all surnames should be cited in the first instance, with subsequent occurrences cited as et al., e.g. Smith et al. (1981) or (Smith et al., 1981). For six or more

authors, cite only the surname of the first author followed by et al. However, all authors should be listed in the Reference List. Join the names in a multiple author citation in running text by the word 'and'. In parenthetical material, in tables, and in the References List, join the names by an ampersand (&). References to unpublished material should be avoided.

Reference list: Full references should be given at the end of the article in alphabetical order, and not in footnotes. Double spacing must be used.

References to journals should include the authors' surnames and initials, the year of publication, the full title of the paper, the full name of the journal, the volume number, and inclusive page numbers. Titles of journals must not be abbreviated and should be italicised.

References to books should include the authors' surnames and initials, the year of publication, the full title of the book, the place of publication, and the publisher's name.

References to articles, chapters and symposia contributions should be cited as per the examples below:

Kiernan, C. (1981). Sign language in autistic children. *Journal of Child Psychology and Psychiatry*, 22, 215-220.

Thompson, A. (1981). *Early experience: The new evidence*. Oxford: Pergamon Press.

Jones, C.C., & Brown, A. (1981). Disorders of perception. In K. Thompson (Ed.), *Problems in early childhood*(pp. 23-84). Oxford: Pergamon Press.

Use Ed.(s) for Editor(s); edn. for edition; p.(pp.) for page(s); Vol. 2 for Volume 2.

Tables and Figures

All Tables and Figures should appear at the end of main text and references, but have their intended position clearly indicated in the manuscript. They should be constructed so as to be intelligible without reference to the text. Any lettering or line work should be able to sustain reduction to the final size of reproduction. Tints and complex shading should be avoided and colour should not be used unless essential. Figures should be originated in a drawing package and saved as TIFF, EPS, or PDF files. Further information about supplying electronic artwork can be found in the Wiley-Blackwell electronic artwork guidelines at http://authorservices.wiley.com/prep_illust.asp

Nomenclature and symbols

Each paper should be consistent within itself as to nomenclature, symbols and units. When referring to drugs, give generic names, not trade names. Greek characters should be clearly indicated.