

EQUINE FACILITATED PSYCHOTHERAPY:

From a neuropsychanalytic perspective, how can the horse-human bond assist the repair of early relational trauma that has lead to insecure attachment? A hermeneutic literature review.

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A dissertation submitted to Auckland University of Technology in partial fulfilment of the requirements for the degree of Master of Psychotherapy.

2018

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Abstract

Through a hermeneutic phenomenological review of the literature, I present a discussion of the role that the horse-human bond in Equine Facilitated Psychotherapy (EFP) plays in repairing relational trauma that has occurred through insecure attachment, which makes it difficult for the client to engage in the psychotherapy relationship (Wilson, Buultjens, Monfries, & Karimi, 2017; Karol, 2007). I am especially interested in how the establishment of the horse-human bond supports the client to engage in the therapeutic alliance, with a view to eventually entering into traditional psychodynamic psychotherapy. My discussion, presented from a neuropsychanalytic perspective, includes an explanation of the review process, a thorough exploration of the theory and application of EFP, and a succinct discussion of the positive and negative findings.

My research into this subject has shown that EFP can heal and resolve deficits in clients who have suffered early relational trauma, facilitate the development of social and emotional capacity in the right brain, and resolve the underdeveloped sense of self that results from early relational trauma by restoring emotional and social processing. Moreover, the efficacy of EFP is significant, with the potential to shorten the time required to establish a solid relationship between the client and therapist.

Keywords: equine-facilitated psychotherapy; neuropsychanalytic; attachment theory; neuroscience; self psychology; psychotherapy; early relational trauma; insecure attachment

Table of Contents

Abstract	2
Table of Contents	3
Table of Figures	6
Attestation of Authorship	7
Acknowledgements	8
Chapter 1: Introduction	9
Motivation for the research question	9
Personal journey	9
Inspirational bond	10
Professional correlation and curiosity	11
Formulation of my research question	11
The historic bond between horse and human and developing equine therapies	12
What is Equine-Facilitated Psychotherapy (EFP) and how does it work alongside traditional psychotherapy?	14
Chapter 2: Methodology and Method	16
Interpretivist paradigm	16
Methodology - a hermeneutic approach	16
The history of hermeneutic research	17
Subjectivities influence on interpretation	18
Hermeneutic circle of understanding	18
Critique of hermeneutics and other methodologies considered	19
Method - literature review	20
Text as dialogical partner	20
The experience of writing	20
Hermeneutic circle process	21
Searching and sorting	22
	3

Selecting and acquiring	22
Reading, identifying, and refining	23
Analysis and interpretation	23
Knowing when to finish	23
Chapter 3: Theory	25
How does relational trauma lead to insecure attachment?	25
The effect of relational trauma on the development of the social and emotional brain	27
The impact of relational trauma on the developing self	30
Why choose a horse?	31
Chapter 4: Application	34
Equine Facilitated Psychotherapy (EFP)	34
Structure	34
Setting	35
Design of a typical session	35
The role of the horse-human bond	36
The dual role of instructor and psychotherapist	37
The role of theory	38
Clinical application	38
Emotional development	38
Mirroring	38
Projective Screen	39
Communication with the horse	40
Non-verbal experiences	40
Preverbal experiences	40
Verbal experiences	41
Social development	41
Development of the core sense of self	41
Herd dynamics	42
Capacity to mentalise, reflect, and become mindful	43

A return to the traditional psychotherapy setting	44
Chapter 5: Discussion and Conclusion	45
Discussion	45
Broader implications of my research and implications for practice	46
Strengths, limitations, and recommendations for further research	48
Conclusion	50
References	52

Table of Figures

Figure 1: “Eyelashes horse” (n.d.)	10
Figure 2: Chauvet’s cave horses (Thomas, 2010).	13
Figure 3: The hermeneutic circle of reviewing literature and techniques associated with different stages of the hermeneutic circle (Boell & Cecez-Kecmanovic, 2010, p. 134).	21
Figure 4: Egyptian hieroglyphics: the symbol for the horse was an intertwined rope (Hamilton, 2011, p. 140).	36

Note on referencing:

Figures that do not have a known author are cited with “...” and listed in the references under their title, following the APA6 guidelines for items with no known author.

Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which, to a substantial extent, has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

A handwritten signature in black ink, appearing to read 'A Bentley', written in a cursive style.

Andrea Bentley

9 March, 2018

Acknowledgements

I would like to thank the lecturers for their ongoing support throughout my training as a psychotherapist. A special thanks to Paul Solomon for choosing to be my dissertation supervisor and for always making yourself available, especially in those times when I had lost my way. You gave me the space to create and the confidence to write a piece of work that reflects my passion.

I would like to thank my colleagues, particularly Yulia Porodina for her support and friendship – through tears and laughter we have come to the end of this journey together. We did it!

I would also like to thank my therapist John and supervisor Liz, for their undaunted belief in me.

To my clients, thank you for your dedication and inspiration.

A special thanks to Sandra, Christine, and Roxy for your friendship and chats. I am eternally grateful. And to the 21-year-old and her horse companion's stories that pointed me in the direction of this inquiry.

Finally, I would like to express my profound gratitude to my husband Gordon, who gave me the strength to continue with this work when life became challenging. To my family and children, Sam and Jess, thank you for your unfailing support and continuous encouragement throughout my years of study. This accomplishment would not have been possible without you all.

Chapter 1: Introduction

Motivation for the research question

My interest in this subject comes from many sources: personal and professional experiences; a relationship with a horse that supported my social development as a teenager; first-hand observation of the power of the human-horse bond to heal early relational trauma; and my experience with an animal-loving client who took more than a year to develop trust in therapy.

Personal journey

This journey begins with my own experience and love of horses, which started as an infatuation as a child. My grandfather made “hooves” for my brother and me out of coconut shells and rope, and we would spend hours clip-clopping around the driveway, fantasising that we were horse riding.

Later on, in my pre-teen years, I had the chance to look after a neighbour’s horse. I was grateful for the opportunity, since my father believed that having a horse of my own would interfere with my studies. This was the next best thing. I cherish the memories of the challenges of looking after this charismatic pony called Sabrina. This spirited pony taught me the beginnings of awareness, tolerance, trust, and mutual respect, providing the basis for interpersonal skills. Working with such a powerful yet vulnerable animal taught me how to be creative and flexible when faced with adversity. Sabrina showed me how to come into relationship and stay responsive to the needs of others and my own. Riding with friends and going to pony club also provided opportunities to develop ways of establishing friendships and working in a group.



Figure 1: "Eyelashes horse" (n.d.)

I found myself wondering how best to capture the power and vulnerability embodied in horses and was drawn to Figure 1 as a way to give readers an immediate felt sense of the horse's presence, bonding and healing potential in light of the research question.

Inspirational bond

More recently, I have watched the same passion for horses develop with a 21-year-old woman. In her late teen years, she struggled with depression. Now she has her own horse, and the bond with her horse has given her a sense of hope. I often hear, "he's my best friend" when she is struggling with life. The relationship with her horse gives her friendship and purpose through responsibility of caring for her companion while unknowingly taking care of herself.

Below is the story shared with me by the 21-year-old woman who found healing through the bond with her horse. This story became the motivation for my research:

A young woman was having a rough day and went to spend time with her horse. She was in tears while watching her horse play with others when the horse stopped, turned and looked at her, and made its way across the paddock to lay down beside her. She sobbed into the horse's neck and the world seemed a little more manageable.

There is something deeply moving about the nature of the horse-human bond in which – a shared understanding of each other through their working relationship. Witnessing these stories and observing this dynamic relationship has given me deep gratitude and respect for the healing bond of horses. It has also piqued my curiosity about how this bond could enhance therapeutic work.

Professional correlation and curiosity

While I was observing the healing properties of the horse-human bond with this young woman, a similar process was occurring in my professional life, which helped shape my dissertation topic. Many of my clients present with insecure attachment as a result of childhood trauma, abuse, and neglect. These adults struggle, in and out of the therapy room, to be in relationship because of breaches in trust and safety that has occurred in their early childhood relationships. I notice conversations around this client group's fondness of pets as they tell stories about how their pet companions kept them safe and hopeful for the future. I am also struck by how traumatic stories from clients' pasts come with ease as they speak of the supportive role their companions played. This leaves me curious about how I might use this unique bond with animals, in particular horses, to restore trust and safety in human relationships and especially the therapy relationship.

With these stories in mind, I started to think how working with horses may be expedient in healing relational trauma because of pre-existing bonds formed with childhood pets. This already-established bond could potentially provide clients with enough support to enter the therapeutic process and allow the alliance to develop. Similarly, the use of the horse-human bond has the potential to help clients access and process traumatic childhood events with more ease with their animal confidante by their side.

Formulation of my research question

My training at AUT has been psychodynamically informed in the broader perspective of psychoanalytic theories. It has had a strong emphasis on the therapeutic relationship, focussing on understanding unconscious processes of the client. Many of these theories employ talk therapy and thus rely on language, which creates issues when working with nonverbal phenomena. I needed a theory that would enter into and understand nonverbal communication and had a neurodevelopmental component to show the impact of early relational trauma and its effect on the brain, mind, and body. In addition, this theory needed a language to show the evolutionary development and characteristics of the horse and explain the nonverbal healing attributes of the horse-human bond. For these reasons I chose a neuropsychanalytical approach, which brings together neuroscience and psychoanalysis, and addresses these issues. Thus my research question: From a neuropsychanalytic

perspective, how can the horse-human bond assist the repair of early relational trauma that has led to insecure attachment within the context of Equine Facilitated Psychotherapy (EFP)?

The historic bond between horse and human and developing equine therapies

I have always been curious about my infatuation with horses and why they have held so much appeal. There is something inexplicable about their presence and a natural feeling of interconnectedness that I could never quite place. This bond feels like it extends beyond the physical realm, and I would like to look at the evolutionary nature of this relationship and its therapeutic trajectory.

The human-horse connection dates back over many centuries. In Greek mythology, horses are portrayed as having mystical healing power; as protectors from evil forces, disease, and danger (Mayberry, 1978). Mythological characters such as Pegasus, a winged white stallion in his role as a horse-god, were considered to bring good fortune and insight. Greek mythological creatures called centaurs, which had half horse and half human bodies, were reputed to have healing powers, and the word “chiropractor” derives its association to the healing god Centaur Chiron. In Greek, the word for horse, “hippo”, which is derived from the Greek physician Hippocrates, denotes the horse’s ability to heal (Burgon, 2014). From a metaphysical perspective, horses were considered to hold powers to move human souls across into the spiritual world. Across cultures, in different ways, horses have been celebrated as a spiritual guide and sacred while bringing good luck and health (Broersma, 2007).

Cave paintings (see Figure 2, p. 13) from as far back as 13,000 BCE, show horses in a multitude of roles with humans, as a source of food and clothing. Records of horses being ridden in 1500 BCE in Central Asia marked the change in the role of the horse leading to its domestication (Hallberg, 2008; Walker, 2008, as cited in Burgon, 2014). This change in relationship meant that horses became a form of transport resulting in these animals’ special traits contributing to the development of modern society and the evolution of our species (Frewin & Gardiner, 2005; Game, 2001; McCormick & McCormick, 1997, as cited in Burgon, 2014).

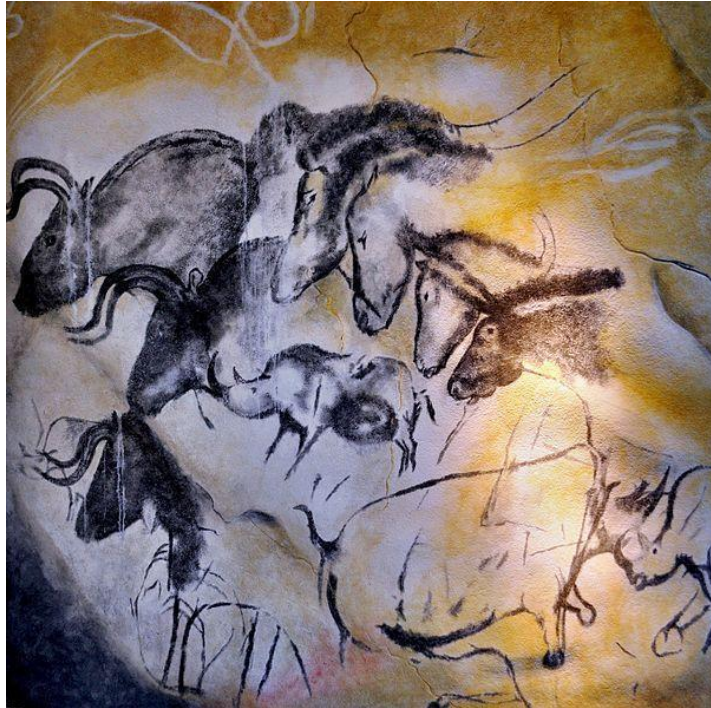


Figure 2: Chauvet's cave horses (Thomas, 2010).

Horseback riding as a treatment to support “physiological healing” (Parent, 2016, p. 30) was prescribed in ancient medicine by Hippocrates of Kos, the Greek philosopher and physician. The rhythm of horses to heal physical disabilities and a deeper healing of the soul informed Hippocrates’s therapeutic reasoning (Broersma, 2007; Burgon, 2014). The merits of horse riding and its therapeutic healing of disease in early modern medicine continued throughout the 16th and 18th centuries. By the early 1950s, therapists had redefined the purpose of therapeutic riding as an intervention purely for physical-movement issues, which continues to be the primary focus in hippotherapy today (Parent, 2016). Therapeutic riding extended to “educational, psychological, psychotherapeutic, rehabilitation and social-integrative interventions” by the 1960s (Parent, 2016, p. 28). This variant meant that therapeutic riding could be integrated into traditional therapies to extend to psychological disorders and disabilities.

Sigmund Freud (1909) wrote about the psychology of humans and horses in his famous case study of “Little Hans”, a boy who was brought to psychoanalysis and treated for his fear of horses. In Carl Jung’s depictions of archetypal dream symbols, the horse represents unconscious and conscious elements in therapy, providing deep healing at a collective unconscious level. In addition, psychoanalytic writings have explored the infatuation of girls and women with riding and horses, and considered the horse to be a transitional object or attachment figure through the human desire to seek out connection (Akhtar & Volkan, 2005; Levinson, 1997). Bowlby (1976) validated these “attachment systems” as being transferable to other attachment figures in order to overcome fears (as

cited in Parent, 2016, p. 29), which can be seen in the analytical works using animals and horses as attachment figures.

From an anthropomorphic perspective, horses have been seen by humans to hold abilities and characteristics similar to their own, attributing their own human traits, feelings, and intentions onto non-human entities (Burgon, 2014). Long-standing horse-human relationships have not only become ingrained in the human psyche (Game, 2001, as cited in Burgon, 2014) but have become linked in the same way that biophilia theory links humans' innate need to seek connection with nature and other forms of life (Wilson, 1984, as cited in Burgon, 2013).

The cohabitation between horses and humans in varying forms throughout the centuries highlights the importance of the relationship and how the horse has the potential to create deep emotional stirrings within our collective consciousnesses. It offers a way to reclaim lost aspects of the self. This partnership into psychotherapy supports a natural progression into the theoretical underpinnings of EFP.

What is Equine-Facilitated Psychotherapy (EFP) and how does it work alongside traditional psychotherapy?

Working with horses in a therapy relationship goes by various names. The generalised term is Equine-Assisted Activities and Therapy (EAAT), which takes into account therapeutic activities that involve interactions with horses that address physical, cognitive, and emotional issues (Bachi, 2013; Karol, 2007; McCullough, Risley-Curtiss & Rorke, 2015). EFP works on the basis that interaction with the horses in the "here and now" (Parent, 2016, p. 100) allow events from the past to emerge at a safe emotional distance from traumatic memories through facilitated techniques with the horse as part of the experiential process. The horse and therapist provide a growing, supportive, non-judgemental trusting relationship that allows the client to process past trauma safely, and find and experience their authentic self (Lac, Marble, & Boie, 2013; Parish-Plass, 2013). Ballureka, Muela, Amiano, and Caldentey (2014) extended on the effectiveness of introducing animal-assisted therapies as a complementary psychotherapeutic technique when working with childhood traumatic experiences that may restrict interactions in traditional talk therapies.

EFP can be used across various modalities to treat a wide range of presentations. It is versatile in its approach and duration, and can be concentrated and targeted according to specific needs for clients (Yorke, Adams, & Coadey, 2008). Parish-Plass (2013) referred to how animals within the therapy setting create opportunities to observe and reflect on relationships in general. Sable (2012) affirmed the strength of the human-animal bond and

how this “reflects certain dynamics of attachment” and its ability to access and work with trauma and relational issues (p. 93).

I have chosen to work with EFP as a treatment modality because it works well with traditional psychotherapeutic practices and provides opportunities to work from an established theoretical base that continues to support and inform the theoretical orientation and empirical validity that calls this modality into question (Bachi, 2013; McCullough et al., 2015). This can be seen in Karol's (2007) comments on the robustness of equine assisted therapies due to the focus being on the natural healing properties of the horse and less on theoretical orientation due to practitioners having more skilled knowledge about the horse. Karol went on to say that the absence of application of theory and practice of psychotherapy adds to the uncertainty around the success of this treatment. There are also various qualitative anecdotal accounts by practitioners as to the merits of equine therapy that continue to mention methodological problems that compromise its rigour (Bachi, 2013). I will therefore be using neuropsychanalytic theories to enhance EFP's validity when working with psychological issues.

Chapter 2: Methodology and Method

Interpretivist paradigm

A paradigm provides a set of underlying assumptions and values that help us understand the nature of reality. Research paradigms, according to Grant and Giddings (2002), make explicit the orientation of the researcher and the motivation and direction of the research so the reader can position his or herself within the context of the research relationship. There are, however, several key considerations that the researcher needs to keep in mind when selecting a paradigm. I needed to find a paradigm that:

- felt congruent to my own values to make it possible to position myself within the research;
- supported the process of resolving a particular problem more effectively than other paradigms; and
- employed methodology that develops ongoing inquiry and draws both reader and writer into a similar dynamic of continued thinking and questioning.

(Grant & Giddings, 2002; Smythe & Spence, 2012)

These selection criteria led me toward the interpretivist paradigm, as it seemed to fit my personal and professional worldviews. The assumptions underlying interpretivism align well in that meaning occurs within the unique human experience (Smyth & Spence, 2012). Similarly, this understanding of truth evolving within the intersubjective dialectic supports my own belief around how we make sense of human experience through our relationships and interactions, which provide opportunities for meaning making through reflexive thinking (Grant & Giddings, 2002). The interpretivist paradigm also supports my research question by allowing the truth to unfold through the intersubjective dialectic of interpretation. The researcher's relationship with a wide range of data creates a space to understand this silent healing phenomenon that occurs through the human-horse bond.

By contrast, I chose not to use a positivist approach as it ran the risk of entering into a scientific worldview, which can be “deterministic and reductionist” (Grant & Giddings, 2002, p. 13) in its approach and would rule out experience; this felt restrictive. Similarly, I did not choose a radical paradigm as I was not looking to bring about social and political reform (Grant & Giddings, 2002).

Methodology - a hermeneutic approach

Methodology is part of the research model that houses the values of the researcher and the guiding principles that orientate the research process. Although there are various research

methodologies that support an interpretivist approach, I found that the hermeneutic research methodology was a good fit with my research question as it provided a "...dynamic reflexivity..." and contextual nature of understanding (Smythe & Spence, 2012, p.14).

The history of hermeneutic research

"Hermeneutics" comes from the ancient Greek word *hermeneuein*, which means "to utter, to explain, to translate" (Zimmerman, 2015, p.4). It was considered a way of thinking and communicating messages from the divine and a method of translating and understanding "philosophical, religious and literary texts" (Zimmerman, 2015, p. 4). Over time, the term hermeneutics has come to refer to the process of human interpretation in contexts other than the religious one. Philosophical disciplines extended this to analysing the conditions by which understanding occurs, as well as the processes that support a hermeneutic way of thinking (Smythe & Spence, 2012).

Hermeneutics came about in the 16th century primarily as a way of interpreting text – in particular texts such as scriptures. It then expanded to take into account interpretation of all texts both written and oral (Zimmerman, 2015). Dilthey (1957) further extended hermeneutics to general understanding, and especially human understanding (Boell & Cecez-Kecmanovic, 2010). Nineteenth century hermeneutics continued to explore the question of human understanding.

More contemporary forms of methodical hermeneutics have been influenced by German born philosophers Edmund Husserl (1859-1938) and Martin Heidegger (1889-1936), who were central in the development of phenomenology. The difference between Husserl's works and Heidegger's was that Husserl focussed on a phenomenological understanding created through the study of meaning through experience. Heidegger moved away from Husserl's descriptive phenomenology as a philosophy and toward an interpretive phenomenology where the researcher is actively involved in the meaning making experience by using his own subjective interpretation of data in order to understand a particular phenomenon.

Heidegger's student Hans-Georg Gadamer (1900-2002) approached human understanding through language. He considered life experiences to be essential, stating that objective understanding about anything occurs through "an object [disclosing] itself through the meaningful relations within which it appears to us" (Zimmerman, 2015, p. 41). Participation with the experience provides the basis of understanding and knowledge. Gadamer's concepts of human understanding can be seen in the dialectic nature of interpretation with literature through "reader and the text, between readers and between texts" (Boell & Cecez-Kecmanovic, 2014, p. 262). Gadamer also considered socio-historical

and cultural context important so the reader can take in and extend the range of interpretation and understanding (Boell & Cecez-Kecmanovic, 2014). Gadamer offered a different perspective by extending the vision of the researcher and reader beyond the text through this dialogic movement between text and context.

Subjectivities influence on interpretation

Heidegger and Gadamer both acknowledged the human being as self-interpreting and that through otherness, human experience is understood (Smythe & Spence, 2008). The researcher is included in the research process and becomes the other. The researcher uses his or her own subjective experiences that contribute to the interpretive understanding of humanness (Smythe, Ironside, Sims, Swenson, & Spence, 2008). This makes it difficult for the researcher to be neutral and objective.

Gadamer and Heidegger recognised that the subjective nature of interpretation is unavoidable, but the researcher needs to be aware of his or her own subjectivity in order to stay open to the “otherness” of text so that the truth can emerge (Boell & Cecez-Kecmanovic, 2014, p. 263). Gadamer (1982) referred to this as “prejudice” and defined it as judgements we make before viewing all aspects of a situation (as cited in Smythe & Spence, 2012, p. 13). Gadamer also saw the potential for prejudice as a way of expanding our understanding by questioning and thinking about the context in which these prejudices arise (Gadamer, 1982, as cited in Smythe & Spence, 2012). Heidegger (1995) referred to this as a pre-understanding which occurs through:

- *fore-having*, pre-existing understanding that shapes our current understanding;
- *fore-sight*, understanding in advance that orientates our thinking in a specific direction; and
- *fore-conception*, a specific desired outcome is held in mind. (p. 16)

In these ways, Gadamer and Heidegger recognised the difficulty for researchers to become detached from their own prejudices and pre-understandings. However, in being aware through the dialogic conversation between reader and text, the researcher can explore limitations and potential for new understanding by staying reflexive and open.

Hermeneutic circle of understanding

Interpreters have always understood the nature of understanding to be circuitous, whereby meaning from a statement requires understanding of the parts which contribute to the understanding of a larger whole. Schleiermacher's (1838-1998) idea of the hermeneutic circle and textual concept of part and whole provided the basis to all aspects of human understanding. He believed that the parts of text and the reader's pre-understanding of context contributed to the greater understanding of the whole, and that the circular

movement between parts and whole is the basis for human reasoning (Zimmerman, 2015). Heidegger and Gadamer added to this concept by saying that the back-and-forth process between text (as part) and context (as whole) means that the reader is always revising and co-creating understanding (Boell & Cecez-Kecmanovic, 2014). They went on to describe the process as “moving from the whole of all (identified) relevant literature to particular texts and from there back to the whole body of relevant literature” (Boell & Cecez-Kecmanovic, 2014, p. 134), as broadening the perspective of text and reader (Boell & Cecez-Kecmanovic, 2014).

Critique of hermeneutics and other methodologies considered

Hermeneutics continues to be criticised as a research methodology structure because the process is considered “too open and responsive” (Smythe & Spence, 2012, p. 12) in its quest to seek understanding. Its nonlinear process may seem unruly because of its open-ended level of inquiry. Unlike quantitative methodologies, it offers the reader and writer a depth of understanding that reaches beyond the known. Quantitative methodologies also offer a more systematic, linear process that uses selected recent research to develop the nature of their inquiry, which, although attractive in its surety, runs the risk of confirmation bias and is limited in its perspective (Smythe & Spence, 2012).

A hermeneutic phenomenological approach felt congruent with my research question and clinical practice. It offered an openness to engage with a wide range of data so that I could move past language and use my own subjective experiences to interpret multisensory responses to data. This proved helpful in understanding phenomena that in essence felt primordial.

From a psychotherapeutic perspective, the dialectic nature of understanding through intersubjective experiences found in hermeneutics sits well with my own psychodynamic approach to understanding human experience (Schuster, 2013).

I chose not to use a heuristic methodology because its focus is on the stories of lived experiences, in particular the therapist’s experiences in light of my research question. In addition, I am not yet trained in EFP, nor do I have an existing practice in this field. Thus a simple matter of logistics ruled out a heuristic methodology.

Because of this, my research question inclined toward hermeneutic methodologies as I was interpreting other therapists’ interpretations, along with observing others engaging therapeutically with horses as clinicians or as owners. These experiences added to the interpretive mix.

Method - literature review

The method I have chosen is a literature review with a hermeneutic methodology, which means engaging with the literature through an interpretive lens. From a hermeneutic perspective, literature can include anything that incites thought in relation to the research question. The reading and writing process creates emergence of understanding through the dialogic partnership with literature (Boell & Cecez-Kecmanovic, 2010; Smythe et al, 2008; Smythe & Spence, 2012). This feels congruent with my values around understanding being co-created through the meaning-making experiences that occur within the intersubjective dynamic between therapist and client (Stern, 2004). The hermeneutic experience is a natural partnering because the dialogic nature of engagement creates further depth of understanding about a relationship.

Text as dialogical partner

A central concept of the hermeneutic literature review process is that the researcher allows texts to become “conversational partners through the literature” (Smythe & Spence, 2012, p. 13). The researcher then enters into a reflexive dynamic with literature by a “...reading, searching, intuiting, thinking, talking, writing, letting-come process...” (Smythe & Spence, 2012, p. 14). This dialogical engagement between reader and text creates opportunities to question, expand, and create new ways of thinking for the researcher (Boell & Cecez-Kecmanovic, 2014).

The experience of writing

Because my research question developed from a passion for understanding how horses heal, I needed to find a way to engage with literature that would give words to something that often felt indescribable. Smythe et al.’s (2008) description of writing in a philosophical manner feeling like a “primordial experience” (p. 1395), and how this unfamiliar place of thinking extends us beyond what is known into new ways of thinking, made sense of thinking outside of what is known. The hermeneutic writer must have a willingness to stay open to the writing process so that insights will emerge; developing trustworthiness through attunement to the literature that evokes questioning, thinking, and understanding; which leads the writer to experiencing “graced moments” – a Heideggerian term – where the essence of the insight feels congruent and true (Smythe et al., 2008, p.1396). I arrived at this insight after trying to make sense of my own lived experience of writing in a hermeneutic manner. The interpretations of other hermeneutic writers’ experiences led to insight of how the indescribable moments expand and deepen the writing process, which was my own “graced moment”.

Hermeneutic circle process

Boell and Cecez-Kecmanovic's (2014) hermeneutic literature review process helped me find a way to search for literature at depth and in context. My review of the literature occurred through the circular movement between parts (text) being reviewed in relation to the whole (relevant body of literature) (Boell & Cecez-Kecmanovic, 2010). This structure provided a strong foundation to work with, especially when I felt lost within the review process and the perplexing nature of my research phenomena. At other times, the framework felt inhibiting and step-wise in relation to analysis and interpretation of data, and I found myself moving more toward a hermeneutic phenomenological approach.

Smythe and Spence (2012) offered an alternate position to analyse and interpret multiple data sources. Their approach to a hermeneutic literature review allowed me to develop confidence to stay with my own human experiences as a researcher and invited me to be free to explore. From a Heideggerian perspective, this was created from "a manner free from rules and pre-thought plans" (Smythe & Spence, p. 1396).

Figure 3 illustrates the stages of Boell and Cecez-Kecmanovic's hermeneutic steps which, together with the process of reviewing literature described by Smythe and Spence (2012), informed my process of analysis and interpretation from a hermeneutic phenomenological perspective.

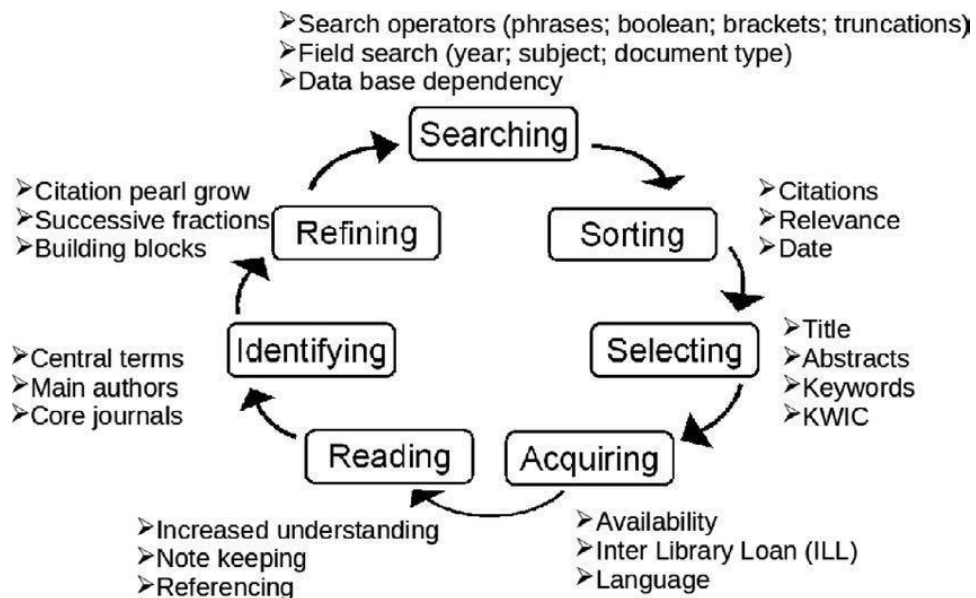


Figure 3: The hermeneutic circle of reviewing literature and techniques associated with different stages of the hermeneutic circle (Boell & Cecez-Kecmanovic, 2010, p. 134).

Searching and sorting

Heidegger says the manner in which we enter into the hermeneutic circle sets the context of our review of the literature (Boell & Cecez-Kecmanovic, 2014). My early orientation toward my research question led me to start with the search terms “horse-human bond” through Google Scholar. This opened up a broad swath of literature, so the next step was to narrow my search and focus on more relevant literature.

I then used the search engine Scopus, available through the AUT Library, which allowed me to access a wide range of publications and notice specialisations within databases. From here, I accessed review articles that focussed my search and terminology (Boell & Cecez-Kecmanovic, 2010). I then added the search terms “psychotherapy, attachment, horse-human bond” which narrowed my search within Scopus. This gave me access to psychological and animal behavioural journals and their citation lists, which I used to retrieve relevant research in engaging therapeutically with horses in the work of healing attachment-related disorders.

Selecting and acquiring

As part of the selection process, I looked at relevant cited works through review articles. I also read to identify relevance and expand my understanding of the topic and selection process. I relied on abstracts and keywords to establish the relevance of papers, and I was then able to focus on several key articles that were foundational in moving and expanding my understanding. These three articles looked at EFP and its relevance to working with clients with attachment deficits. Smythe (2012) referred to this process of selection as “inclining towards” text as if these papers were “*wise mentors*” and how they provoke and expand thinking and insight (p. 17). Phenomenologically, there were papers that resonated like an intuitive calling of the whole self toward certain texts that felt organic. Gadamer referred to this aspect of the hermeneutic approach being one that “springs forward in movement from the spirit of language and the power of intuition” (Gadamer, 2001, as cited in Smythe & Spence, 2012, p. 113).

As part of this process, I excluded articles that were not specifically orientated to working therapeutically with horses, but instead were more personal accounts of riding experiences. Equine therapies are often criticised for their apparent lack of robustness as a therapeutic treatment model. Consequently, I was drawn to research that was theoretically oriented toward psychotherapy, attachment, and neuroscience to understand and work with the healing qualities of the horse-human bond. I reviewed literature that showed how equine therapies address psychosocial issues and trauma, and in particular embodied trauma. As I wanted to understand the evolution of this connection between human and horse, I also

looked at historical and cultural literature. I extended this search to include animals in general and animal-assisted therapies that work specifically with the development of the attachment bond so I could get a general sense of how this bond develops and how it can be used therapeutically.

Reading, identifying, and refining

As I read through selected literature I continued to identify key concepts and began mapping out a structure for my review. I became aware of the extent of the literature and could identify similar strands of thinking and criticism in the research on the topic. This helped me position myself within the research area. I found relevant texts used by other writers, while being introduced to new concepts and literature at the same time. When I reread some articles, I noticed my own perspective had changed, and I returned to articles that I had initially discarded. I found myself always moving within and between the stages of the hermeneutic circle in no particular order, as the stages offered a cohesive process to review literature in a hermeneutic manner (Boell & Cecez-Kecmanovic, 2010).

Analysis and interpretation

The hermeneutic process of creation and interpretive understanding requires an openness and questioning arising from the reading, thinking, and writing process. Smythe (2012) referred to this “letting-come” process as an attuned, open, and engaged way of being with literature (p.14). The constant back-and-forth movement within the hermeneutic circle creates a way of analysing and interpreting resources that supports a deeper understanding.

At times, when I felt lost, it was the “writing as thinking” process that gave a voice to an “unutterable process” (Smythe et al, 2008, p. 1395). I turned to multiple data sources to access the embodied experience of the healing relationship with the horse as a way to understanding. I sat with horses and observed others’ relationships with their horses at pony clubs. I used imagery, poetry, music, and films, and attended a seminar to observe the healing work of horses – all in an attempt to make sense of this embodied healing between horse and human. Smythe and Spence (2012) described this as “knowing as an embodied experience” (p. 23), which is part of being hermeneutically engaged with the data in a way that brings depth to sourcing literature and insights.

Knowing when to finish

The time to leave the hermeneutic process, according to Boell and Cecez-Kecmanovic (2014), is when the “literature review process is as comprehensive as possible” (p. 272). I recognised the time to leave when I reached a saturation point in the research. This was marked by my repeated return to articles I had already obtained, together with movement away from the essence of my question. This constant searching was motivated by my

anxiety of finding the answer to my question in a groundbreaking article. And although the nature of hermeneutic inquiry is open-ended (Smythe & Spence, 2012), I did return to the search and acquisition process in an effort to deepen my understanding. Finally, I recognised that I had enough relevant literature and ended my process.

Chapter 3: Theory

“The youth walks up to the white horse, to put its halter on and the horse looks at him in silence. They are so silent, they are in another world”.

(Lawrence, 1885-1930, as cited in Hamilton, 2011, p. 296)

As my curiosity expanded into how to access and understand this silent world that exists within the horse-human relationship, Lawrence’s poem above, *The White Horse*, highlighted what felt like a primal, intimate space where a mutual understanding between two beings is experienced. I have noticed in myself a sense of this powerful connection and its ability to mute the distress of the outside world. This captivating communion holds the components of an intimate relationship, and for these reasons my exploration into how it works and its potential to heal early relational trauma feels relevant.

I will first look at how relational trauma leads to insecure attachment and the developmental consequences and clinical implications. I will then look at the attributes of the horse and the potential to heal disruptions in bonding experiences. My choice of theories is based on psychotherapeutic fit, as neuroscience and developmental psychotherapies offer a way of understanding the evolutionary nature of bonding in both humans and horses. However, it was difficult to maintain a hermeneutic dialogue with theoretical data, and I noticed myself disappearing into the minutiae of theory. I have tried to balance this by summarising guiding principles since I recognise that many readers will already have an understanding of these concepts and will access further reading if required.

How does relational trauma lead to insecure attachment?

Early relational trauma develops out of disrupted caregiving systems. Children who experience maltreatment from their caregivers are left feeling confused, since the drive to seek out safety and security and the drive toward self-preservation to avoid pain and fear are both active. Through these disrupted relational experiences, the child learns to develop coping mechanisms that maintain a sense of connection while protecting against the distress of not having a dependable, safe, and loving caregiver. This is the context in which relational trauma develops leading to insecure attachment styles (Caldwell, 2017; Cozolino, 2010; van der Kolk, 2014).

Attachment theory also provides context as to how relational trauma occurs and how it leads to insecure attachment. Bowlby (1988) stated that humans’ need for connection through close intimate relationships starts from the early bonds formed from birth between

the child and the parent or primary caregivers. These early bonding experiences develop the attachment relationship through the time spent together and the “face-to-face interactions, eye contact, physical proximity, touch and other primary sensory experiences such as smell, sound, and taste” (Perry, 2001, p. 3). Through these experiences the mother-infant attachment system develops, allowing the baby to communicate and call for the primary caregiver in times of distress, which is an inherent survival system in all living species. The vulnerable baby, therefore, becomes reliant on the quality of the caregiving system as a way to survive. These positive bonding experiences form the basis for overall wellbeing and these early attachment relationships form the basis for future interpersonal relationships (Bowlby, 1969).

Research methods developed by Mary Ainsworth and protégé Mary Main, concretised Bowlby’s theories and categorised children’s attachment behaviour through the *Infant Strange Situation* study. This study measured the responses of children’s reunion behaviour with their mothers and the infants’ level of expectation to be soothed in their distress. These call-and-response behaviours between mother and infant were rated and categorised as four different attachment styles: secure, avoidant, anxious-ambivalent, and disorganised (Cozolino, 2010; Holmes, 2001).

- *Secure* children had a relationship with their mothers that were responsive and nurturing in times of distress. They have “internalised their mothers as a source of comfort” (Cozolino, 2010, p. 199) giving children the capacity to feel safe to engage and explore (Holmes, 2001). As adults, they have healthy internal working models that translate into positive adult relationships.
- *Avoidant* children recognise that their calls for soothing are unheeded but they maintain proximity to the unavailable, and at times rejecting, caregiver as a way of maintaining some form of protection. These children have learned to take care of their own emotions to avoid further distress of an unavailable mother (Cozolino, 2010). As adults, being distant in relationships is a familiar but comforting place as they become self-sufficient yet unresponsive to others needs (Holmes, 2001).
- *Anxious-ambivalent* children find it difficult to soothe and exhibit erratic clinging behaviour (Barker, 2010) in part due to the mother’s own enmeshed relationship with the child and inconsistent care. As a result, the child’s clinginess makes it difficult for the child to explore and engage with the environment (Cozolino, 2010; Holmes, 2001). As adults, they are available yet rejecting (Barker, 2010).
- *Disorganised* children are chaotic, and at times “self-injurious behaviours were often present in children whose mothers suffered from unresolved grief or trauma” (Cozolino, 2010, p. 200). The inner turmoil of the mother’s world expresses itself in

the child's chaotic behaviours. Unfortunately, the parents' history of trauma comes across as "frightened and frightening" behaviour, inducing fear responses in the child (Cozolino, 2010, p. 200). These maladaptive ways of being in the world make it difficult for social engagement with other children, further adding to their already stressful world (Wallin, 2007). Not surprisingly, as adults emotional regulation, social engagement, and a fear of intimacy in relationships continues this fearful chaotic state of being in the world (Barker, 2010).

Trauma, which can be defined as "physical, sexual and psychological abuse; and emotional and physical neglect related to relationships" (Barker, 2010, p. 3) also has an effect on the development of attachment. Relational trauma can cause breaches in the child's feelings of safety and trust in the parents, which make it difficult for the child to develop a secure attachment style. These disturbances in developmental milestones leave deficits in the way a child develops and relates to the world (Cozolino, 2010; Perry, Pollard, Blakley, Baker, & Vigilante, 1995; Schore, 2012; van Der Kolk, 2014).

The developmental consequences of childhood relational trauma on attachment systems can be seen in the child's overall psychological and physiological development. The ongoing interactions between infant and caregiver become an internalised reference point to interpersonal relationships, which Bowlby called "internal working models" (Wallin, 2007, p. 27). These internalised ways of relating with the world shape the biological pathways in the brain and body, which help us to emotionally develop (Cozolino, 2010; Schore, 2012).

The effect of relational trauma on the development of the social and emotional brain

Attachment is considered a "primary driver" in understanding brain development (Schore, 2002, p. 434). Consequently, I will focus on the work of Cozolino and Schore, and others, that bring together affective neuroscience and psychoanalysis to understand the ongoing impact early relational trauma has on the social and emotional brain.

Cozolino discussed the impact of early childhood experiences. She sees child rearing as key in the development of neural processing and explains how these experiences affect gene expression. This intergenerational expression of caregiving becomes complex; these close interactions with the brain of the child in turn change the brain structures of caregiver and their ability to "support bonding, attachment, and nurturance" (Cozolino, 2010, p. 224). It is not surprising that these ongoing dynamics, in conjunction with natural selection, contribute to the impact on neural development in early brains and on the quality of care. The young brain also requires ongoing stimulation through social interactions and challenging dynamics that support the brain's capacity to survive, while at the same time developing

complexity through a “matrix of other brains” (Cozolino, 2010, p. 216). This complex caregiving system lays down the foundations for continued success in life.

The effect of relational trauma on the attachment system means that the developing child finds it difficult to depend on the caregiving structure because the trauma occurs within the very relationship they are dependent on to survive (Holmes, 2001). This makes the relationship equally difficult since the young child is at odds with “biological and behavioural” (Cozolino, 2006, p. 277) responses to be cared for and protect themselves at the same time. The infant learns to cope by staying away from dangerous relationships. This becomes detrimental to healing the trauma later in life because of concerns around trust and safety (Wallin, 2007). Entering into a healthy, healing relationship becomes even more difficult, and the ongoing nature of this “approach and avoidance” dilemma gathers momentum (Cozolino, 2006, p. 277). Relational trauma in the form of psychological and physical abuse, and neglect, affect the development and structural framework of the brain because these incidents inhibit the ability to learn from a social, emotional and intellectual perspective over a lifetime (Schoore, 2012).

As I take a closer look at the effects of relational trauma on the brain, I notice myself feeling drawn into the complex nature of the brain. At the same time, I recognise that for the purpose of this dissertation, I have a desire to present this as simply as possible given the depth of this subject matter. Barker (2010) simply described the brain’s complex processing systems as taking care of “emotional, cognitive, behavioral, social and physiological functioning” (p. 4). Within these systems, the brain houses and organises neurons into operating systems and networks that respond and process information. Each operating system has its own specific functions; however, as Barker pointed out, the systems vary in their functions depending on their organisation. In general though they follow the same rules developmentally.

Barker’s (2010) systems are:

- Systems in the **frontal cortex** are involved in abstract thought;
- Systems in the **brainstem** are responsible for regulating heart rate, blood pressure and arousal states;
- Systems in the **limbic areas** are responsible for attachment, affect regulation
- and aspects of emotion; and
- Systems in the **cortex** are responsible for abstract cognition and complex language (p. 4).

Human experience shapes our brain's ability to develop and process information. The quality of these sensory interactions in these early attachment relationships stimulates neuronal development and supports achievement of developmental milestones (Schore, 2002).

However, in the case of sensory deprivation in the early attachment relationship, the brain manages the distress of perceived threat by activating a different set of operating systems that are primitive and deeply embedded in our physiological and mental reactions to danger. These responses are known as 'fight or flight reactions' and have been well documented as being a characteristic stress response in both animals and man (Goldstein, 1995; Mason, 1971 cited in Perry et al., 1995).

Unfortunately, the traditional fight or flight responses are not practical in early childhood, and the response patterns vary in light of developmental level and type of stressor. However, once the alarm systems are cued, the neural systems become activated in response to the perceived threat. The brain enters into a primitive state of regulation, while the sympathetic nervous system attends to the physiological systems in order to defend against threat, and non-crucial information processing systems are disabled (Cozolino, 2010; Perry et al., 1995; Schore, 2012).

The sympathetic nervous system, immune system, and neuroendocrine system are all designed to regulate reactions to stress. The latter in particular releases adrenocorticotrophic hormones and cortisol, and activates other stress-response neural systems within the brain (Perry et al., 1995). The young child's response to fight/flight can be seen in the initial hyperarousal state in attachment systems when caregivers are cued to respond to the child's need for safety. If this state remains unattended the child shifts into either hyperarousal or dissociative states to handle the chronic recurrence of failed attempts and distress of threat (Holmes, 2001; Wallin, 2007). Unfortunately, early childhood relational trauma leaves children in this hyperarousal continuum as a standard mode in response to perceived danger in the attachment system, resulting in long periods of over-arousal (Schore, 2002). This energy-sapping state leaves little for young brains to use to develop, and screens off opportunities to grow socio-affective experiences that would normally occur in a safe, nurturing attachment system (Schore, 2002; van der Kolk, 2014).

Developmental trauma from this chronic hyperarousal and dissociative state means that the dysregulation that occurs through traumatic attachments caused through abuse and neglect, impact right brain organization (Schore, 2002). Since the right hemisphere is concerned with "primitive and emotional functioning" (Cozolino, 2010, p. 28), brainstem

functions and limbic systems come into play when under distress. The right side of the brain is the social and emotional regulator, especially in relation to attachment behaviours. For processing to occur, withdrawal states are required for growth and forming synaptic connections, especially in the early stages of infancy. This lays down the neural pathways that create interconnectivity, which happens at a phenomenal rate within the first two years of life (Cozolino, 2010; Schore, 2002; van der Kolk, 2014). Without rest and with an over-expenditure of energy required by constantly being in survival states, relational trauma stunts the foundational growth of neuronal pathways, making it difficult for social and emotional functioning to occur. Relational trauma also has an impact on the developing sense of self, as these processes occur in the high functioning cortical parts of the brain housed in the right hemisphere (Schore, 2012).

The impact of relational trauma on the developing self

The sense of self develops through regulation of the self through self-object exchanges that occur in an intersubjective space (Kohut, 1984, as cited in Schore, 2002). However, the impact of relational trauma on the social and emotional brain impedes development of a sense of self when right-brain processing is in a state of paralysis. Schore (2001) argued that the energy required for the brain to enter a dissociative state means that a cohesive self cannot develop.

Unfortunately, unresolved trauma in the mother is a common contributing factor that induces trauma states experienced by the infant (Wallin, 2007). The maternal gaze and facial gestures mirror and communicate expressions of love or aggression. The latter is communicated to the infant in a trauma episode, and the infant's own chaotic response is expressed in the infant's body (Perry et al., 1995). Each episode sees the infant matching the gaze and facial gestures of the mother, creating dissociative defence structures that transmit vicarious trauma experiences to the infant (Cozolino, 2006; Perry et al., 1995). The child therefore repeats this hyperarousal-dissociative state mirrored from the mother in response to traumatic experiences. These exchanges are stored in the implicit procedural memory in the limbic brain (Cozolino, 2006).

Without an empathically attuned parent, the child's self-object exchanges affect emotional languaging and integration, and organisation of experiences within the self (Schore, 2002). The child has difficulty building neural networks that develop self-awareness processes that support regulation and growth of the social and emotional self (Cozolino, 2002). A deep suffering within the self becomes pervasive as the child – and ultimately the adult – feels inherently bad or empty. The internalised experiences of early trauma lead to insecure attachment, which continues to impact developmental milestones over a lifetime

(Bowlby, 1988). Opportunities for mutual regulation do not occur, and without these experiences there is no intersubjective field to experience the subjective self or intersubjective dyad (Schore, 2002). Without this space to develop and learn through self-other experiences, social and emotional processing becomes difficult, affecting right brain regulation and repair (Kestenberg, 1985, as cited in Schore, 2002; Schore, 2012).

Over a lifetime, ongoing hyperarousal and dissociative states continue to paralyse social and emotional processing due to the amount of energy required to sustain these states (Schore, 2002). Coupled with this, are difficulties to carry out high-level processing because of the absence of an internalised regulating self-object (Schore, 2002). The risk of developing empathy disorders increases due to the deficits in processing internal and external core states within the self, contributing to a general feeling of helplessness and despair (Schore, 2002). In addition, continued threats to safety affect the natural expression of resilience, which leads to a lack of confidence. The net result is a despairing sense of self which potentially leads to limbic and anxiety disorders (Schore, 2002).

There have been substantial studies that reflect the importance of having healthy supportive systems that provide protective loving relationships that avoid traumatisation (van der Kolk, 2014). However, when the trauma occurs within the very relationship that is designed to keep one safe and protected, the double bind of receiving care from the parents who induce fear and terror requires alternate ways of coping which are found within the hyperarousal-dissociation continuum (Cozolino, 2002; Wallin, 2007). Disconnection from feeling helps manage the fear and terror of these early attachment relationships. However, this unresolved early relational trauma extends into all future relationships. Since relationships are vital to the developing brain and core self, recovery becomes difficult as relationships continue to be feared because of the risk of being hurt (van der Kolk, 2014). The challenge becomes finding security in relationships so that these individuals can feel safe enough to heal the terror and fear of being in relationship and enter into new attachment relationships that feel mutually fulfilling and freeing from their relational pasts (Cozolino, 2006; Schore, 2002; van der Kolk, 2014; Walden, 2007).

Why choose a horse?

Reflect for a moment on the ancient and unique bond that has been established between humans and horses; a relationship that extends over a period of 15,000-30,000 years (Hamilton, 2011). Stories about this historical relationship have attached symbolic meaning to the nature of this bond. As Akhtar and Volkan (2005) pointed out, the long-standing symbolism embedded within our psyche may offer clients a way to overcome issues around fear, control and love as it "... offers a way of fulfilling and working through wishes and fears

that are displaced from parents” (p. 94). Let us look at the natural characteristics of the horse and its potential to heal relational trauma.

The healing attributes of animal relationships with humans have been well documented. However, the horse also offers attributes which naturally align themselves with psychotherapeutic work. As prey animals, their natural vulnerability gives them a primal quality that makes their hypersensitive survival instincts highly attuned to their environments (Bachi, 2013; Burgon, Gammage, & Hebden, 2017; Parent, 2016). This type of attunement makes them responsive communicators and a complementary addition to the psychotherapeutic relationship.

Horses have learned how to survive and be part of the pack; and in this hierarchy, tolerance and sociability through interactions within the herd can be translated into their interactions with humans (Wilson, 2012). Their size, stature, and weight make their presence something to be feared, yet at the same time the experience of working with horses offers the opportunity for humans to feel empowered and motivated (Wilson, 2012).

As prey animals, horses’ vulnerability and instinct to survive predators in their natural environment makes them hypersensitive. It is this very quality that makes them sought after in psychotherapy. This prey-like attunement means that horses are like “divine mirrors” (Hamilton, 2011, p. 234) that can reflect our inner emotional truth. The highly attuned right brain of the horse can provide opportunities for validation of feelings, development of trust and intuitive responses through this responsive relationship. Coupled with this is the horse’s “right-brain sensibility” (Hamilton, 2011, p. 1915) which brings about a perspective of freedom from life experiences.

As pack animals, horses need a leader that can prove its worthiness through its ability to protect and maintain the survival of the herd. Horses are constantly watching for leadership traits to see who is in charge and place value in “command, control, compassion, communication” (Hamilton, 2011, p. 1817) in either horse or human. Leaders exude a persona of authority that gives a sense of command. Horses experience control by the leader as the ability to make practical choices under threat and directing the herd to maintain safety from danger. Compassion is an important attribute of leaders and can be seen in the leader’s ability to place the herd’s safety foremost. Empathy is also present in this skillset as the leader balances the position of leader while making sure the herd continues to be successful in its ability to stay together and lead a peaceful existence (Parent, 2016).

As a prey species, horses have developed a soundless language. State of mind is expressed through posture and gesture. Body language and intuition become their primary form of communication, which is far reaching and effective in remaining undetected. Horses’

abilities to read body language to this degree means that their awareness of their environment is attuned for survival through their interconnectivity within the herd and with their surrounds and predators (Burgon, 2014; Hamilton, 2011; Parent, 2014).

Humans rely on verbal communication to logically analyse and understand each other, and intuitive means of communication are underdeveloped (Hamilton, 2011). Since the right brain is involved in intuition, this finely attuned state of the horse is conducive to humans being taught how to listen from the gut rather than through language. Horses use intuition as an effective way to communicate and survive as a herd, and they can do the same with humans. Humans can develop connectivity through this bond and subsequently develop the right-brain function through developing closeness, empathic attunement through intuitive listening and nonverbal gesturing, and communication that leads to increased self-awareness (Hamilton, 2011; Parent, 2016).

These natural qualities of the horse can create opportunities to develop a loving and supportive relationship that grows acceptance and tolerance through the horse-human bond. This partnering between horse and human offers the qualities of a surrogate attachment relationship that could potentially heal the wounds of early relational trauma.

Chapter 4: Application

The literature shows the difficulty in treating attachment relational trauma because breaches in trust and safety that have occurred in early childhood create a barrier to entering into relationships such as the therapeutic alliance. The absence of a primary caregiver who can be “psychobiologically attuned” (Schoore, 2012, pp. 228) to the child’s internal states induces stress in both child and mother, disrupting attachment dynamics and the capacity for the child to self-regulate, which creates issues in emotional/social development. These issues are expressed in anxiety and avoidance in relationships (Mikulincer, Shaver, & Berant, 2013). Distrust in getting their needs met by others makes it difficult for clients to enter into the therapeutic relationship, and a safer relationship may be better found in animals.

The horse offers a unique healing capacity for clients who struggle with traumatic histories. As a therapeutic tool it offers a partner who has a highly attuned communication system designed for survival, since horses are always in a state of high alert. As a result, horses have found an effective way to clearly communicate their feelings and thoughts through their body language. For clients who struggle with traumatic histories, this finely tuned communication system creates healing opportunities. The client recognises in the horse his/her own trauma responses, and through this shared experience a bond ensues out of compassion mutual trust and respect.

Equine Facilitated Psychotherapy (EFP)

EFP is a type of animal-assisted therapy used with clients who present with mental health issues. Interactions with the horse in and around a stable setting allow the client to engage in an interactive and experiential learning process. The dynamic relationship with the horse, assisted by an experienced equine facilitator/psychotherapist, sets the stage for clients to engage in psychotherapeutic work (Bachi, 2013).

Structure

EFP creates a controlled setting where the client-therapist-horse relationship supports the insecurely attached client to come into relationship. Through this dynamic, trust and safety develop in a way that allows clients to explore traumatic experiences from their past (Bachi, 2013; Burgon, 2014; Parent, 2013). This unique bond between client and horse creates opportunities for engagement with the therapist during the interactions with the horse and opens the door for a relationship between the client and the therapist. Obstacles around traditional psychotherapy interventions become less threatening as the client develops trust

in the therapist and the work. At the same time, the client can process difficult emotional content and gradually gain trust in relationships.

Setting

The natural setting of the stables and being outside with nature offers healing and a holding environment for clients. This is similar to Winnicott's (1960a) concept of the holding environment where a "good enough" parent can provide a safe environment in the maternal holding so that infants can express and tolerate frustration and anxiety. EFP provides an environment that offers a relaxing, safe, non-threatening place for clients to stay authentically attuned to the therapist, the horse, and feeling states. This openness created through the triadic relationship and expanded holding through the setting allows the client to experience a secure base to explore while growing trust through the reassuring comfort of the EFP setting (Bachi, 2013).

Design of a typical session

Session design may vary according to the personal preferences of the therapist or possible limitations of the client. However, the general structure of a session usually includes the following.

The client is given the choice to begin talking about his/her concerns in an office setting or in the stable with the co-therapist horse or herd. Initial assessment sessions can feel imposing and threatening and trigger issues from the past; the change in setting can help alleviate this. Talking while walking to the paddock and saddling up the horse to ride provide these alternate non-threatening ways to relate to the therapist. The client and therapist then talk while riding the horse, often using metaphor to provide mechanisms for the client to express his/her internal world in a non-threatening way. After the riding session and returning to the stables, the client and therapist can continue therapeutic discussions while grooming the horse and returning the horse to the paddock (Karol, 2007).

The setting and format for sessions provide experiences for the client to stay present and mindful, while internalising the therapeutic relationship with the horse, client, and therapist creates new internal dynamics for the client in the experience of being in relationship. EFP provides real-time learning through experiential activities that set the stage for therapeutic intervention in a natural setting. This allows clients to be free to express what is on their minds in a safe and holding environment while having the experience of a secure base through the psychotherapeutic alliance.

The role of the horse-human bond

Horses have a unique way of connecting both socially and emotionally with humans, offering a deep spiritual connection. The Egyptian hieroglyphic shown in Figure 4 symbolises this interconnected way of being through an intertwined rope (Hamilton, 2011). Greek mythology talks about this bond as being deeply emotional and evoking spiritual feelings through the horse's physical stature and spiritual power. As teachers, horses provide opportunities to silence our internal voices and learn through a state of being. Horses' evolved right brains help humans to tap into an elaborate communication system that houses social and emotional attunement.



Figure 4: Egyptian hieroglyphics: the symbol for the horse was an intertwined rope (Hamilton, 2011, p. 140).

Boris Levinson, a psychoanalytically trained child psychologist, recognised this unique human-animal bond. By introducing pets into the therapy session, he became aware of how children projected distressing feelings onto their pets while the pets offered a non-judgemental friendship. Children gained mastery and developed a sense of self from this special human-animal bond (Levinson, 1997).

Similarly, the client's attachment to the horse in EFP is central to treatment outcomes, as the horse offers a healing relationship in its role as co-therapist (Karol, 2007). The horse-client bond starts through the special and mutual choosing of each other during initial sessions. Through perceived similarities clients can recognise themselves within the horse, and in the joining of this relationship there is a mutual empathic understanding between client and horse that creates a safe haven to develop and experience a mutually satisfying relationship (Kern-Godal, Brenna, Kogstad, Arnevik, & Ravndal, 2016). The horse then becomes the point of connection for the client by providing the functions of a secure base from which the client can explore from (Bachi, 2013; Parent, 2016). Safety and trust then allow the bond to develop through the client's experience with the horse. Similarly, the attachment arousal system found in humans and horses starts as each seek out "inborn

need” in the other, giving rise to the horse-client attachment bond (Parish-Plass, 2013). Once established, this bond creates a bridge for the client to enter into relationship with the psychotherapist so that work can begin. The therapist is then able to work alongside the client-horse relationship and access distressing events and emotions through interactions with the horse. In this way the client can use the horse as an object of projection and the therapist can work with the client to understand and create a healthier synthesis of the self through these interactions with the horse (Bachi, 2013; Parent, 2016; Parish-Plass, 2013).

The dual role of instructor and psychotherapist

Traditional dynamics that occur between the client and psychotherapist still exist within the EFP structure. However, the experiential nature of the work means that the dynamic between the client and therapist becomes interchangeable with that between the client and horse due to the focus on the work being based on real time experiences (Parent, 2016). These experiences become a place for the client to explore and for the therapist to offer analysis and interpretation while using transference and countertransference dynamics. Because of the complexity of this concept and the extent of writings on this dynamic, I will touch on this concept only briefly but focus on other relational concepts that occur within this unique context.

The experiential nature of EFP extends the office space to the outdoors, creating with it challenges but presenting opportunities for catalytic change (Burgon, 2014; Karol, 2007; Parent, 2016). The dual position as instructor and psychotherapist therefore requires a balancing of the two positions, while continuing to work therapeutically. Sound judgements are called for in the work so that treatment objectives can be reached. Consequently, the therapist needs to have a “clear understanding of his or her countertransference dynamics” to make these decisions (Karol, 2007, p. 83). Enactments that occur within this triadic dynamic provide important feedback for the therapist through transference dynamics, which create learning opportunities for the client.

The EFP structure provides initial assessment opportunities in the first interactions between therapist and horse. Observation of the client in relationship with the horse, the natural surroundings, and the therapist provide vital feedback for initial assessment and treatment planning. From an attachment perspective, the therapist becomes aware of the client's internal working models and defensive structures through the relational dynamics that occur within this setting (Bachi, 2013). From an object relations perspective, these interactions, particularly with the therapist and horse, indicate the client's inner world and object relationships in an unobtrusive way. Relational history of family pets can also indicate the nature in which animals were used as surrogate attachment figures, giving a clearer

picture of early attachment dynamics. John Bowlby affirms this dynamic by saying that children and people alike look to animals to assist in their suffering of grief and loss by attaching to their pet after loss of being rejected by parents (Bowlby, 1988 as cited in Parish-Plass, 2013). As assessment tools, pets and horses as surrogate attachment figures can clearly show the absence of nurturing parenting and support the initial assessment of the client.

The role of theory

EFP offers the therapist an integrative structural model to work in. Applying psychotherapeutic concepts within the context of EFP enriches the environment and rigour of the therapeutic outcomes (Karol, 2007).

Neuropsychodynamically informed theories bring together neuroscience and psychoanalytic theories which support clients' developmental insights and self-awareness around social and emotional functioning (Cozolino, 2010). The goals for clients who present with a history of early relational trauma that has led to insecure attachment focus on strengthening a strong sense of self through self and object representations and developing internal and external relationships (Schore, 2012). Bonding experiences in the horse-client-therapist triad offer ways to increase ego strength, develop emotional regulation skills, and achieve a sense of mastery through experiential learning (Burgon, 2014). Communication skills that are highly evolved through the nature of engagement with the horse and therapist create a self-awareness that is unique, as the mind/body and brain come together to make sense of the human experience (Hamilton, 2011).

Clinical application

Under the umbrella of neuropsychodynamics, I will be focussing on neurobiology, attachment, and self psychology concepts to show how the horse-client bond and therapist relationship offer the potential to heal attachment relational trauma.

From an attachment perspective, the horse can offer a responsive relationship, which supports the client's sharing of emotions and thoughts with the therapist. The client can use this context of the horse relationship to process and integrate evoked feelings and behaviours, in the presence of the horse (Bachi, 2013).

Emotional development

Mirroring

Mirroring affect through the attachment relationship allows the infant to develop a social biofeedback system where "the mother's face is the mirror in which the child first begins to find himself" (Winnicott, 1971, as cited in Bachi, 2013, p. 191). The infant finds his or herself

in the reflective capacity of the mother's expression, and the caregiver's attuned responses to the infant develops the infant's capacity to "see" and "own" his/her feelings (Holmes, 2001, p. 192). Mirroring develops the capacity to emotionally self-regulate and develop a core sense of self through this responsive relationship. When this relationship has been traumatic, anxiety-provoking, disappointing, or met with disapproval, painful feelings of low self-esteem, inadequacy, and shame arise. Feelings of being inherently flawed become pervasive (Hayes, 2015; Holmes, 2001).

EFP offers the same opportunities for an attachment relationship through nonverbal communications of the horse, which mirror the affect of the client while the therapist languages these interactions. The ability of the horse to reproduce the experience of mirroring affect in response to the client is a central feature that occurs in the human-horse bond, because the horse is highly sensitive to others and its surroundings based on its limbic system (Hamilton, 2011). Therefore, the horse can potentially provide emotional feedback in ways that a therapist perhaps is not able to because the experience of mirroring creates opportunities for the clients to "feel felt" (Siegel, 1999, as cited in Bachi, 2013).

From a neurobiological perspective, mirror neurons are stimulated, which develop the client's emotional capacity (Hayes, 2015; Schore, 2012). This highly attuned feedback system within the horse-client interactions creates opportunities for the developing sense of self, as clients enter into a reflexive state from the horse mirroring and gesturing the behaviours and emotions of the client (Burgon, 2014; Hayes, 2015). The horse's body language reflects the client's behaviours and emotions by reading the intent within the relationship (Kern-Godal et al., 2016). The client can then see his or herself in the behaviour of the horse as the horse consistently mirrors the exact feelings, attitudes, and intensity in response to the client's most insignificant interactions (Hayes, 2015).

Projective Screen

Projection is a psychoanalytic primitive defence mechanism in which the client misinterprets the source of discomfort by denying its presence within the self, and copes by attributing his/her own unconscious impulses onto another (McWilliams, 2011). EFP creates opportunities for the client to use the horse as an object of projection. The therapist can gain insight into the client's internal object relations by observing the characteristics of the connection between client and horse. Horses, therefore, offer clients ways to increase self-awareness through seeing themselves in the other, which may be difficult to replicate in human relationships (Parent, 2016).

Communication with the horse

Non-verbal experiences

Working with horses allows us to return to a primal, nonverbal state of awareness without the interference of language. We learn to connect in a way that extends beyond the self and other and into life forces shared with other species. This way of connecting is visceral and fast as we explore our interconnections with the horse, which Hamilton (2011) refers to as being “equal parts body and spirit” (p. 244). In these ways, horses connect with our souls and show us a different way of being on a much grander scale. As horses have highly developed right brains, they allow us to have right-brain experiences that let us leave our egos behind. This partnership with the horse’s brain creates an “intuitive, spiritual core with the right side of our own brains” (Hamilton, 2011, p. 641).

Since humans’ right brains are underdeveloped due to the evolutionary reliance on language, humans continue to remain disconnected and separate from a universal connectedness. Therefore, experiences with horses offer a way to reconnect with this larger system and develop instinctual capacities within the self. In the here-and-now experience, horses’ nonverbal cues offer an interpretive language through their immediate feedback. Clients become aware of the quality of their communications through the body language of the horse. These transferable skills can be applied to human relationships as the client develops awareness through self and other experiences with the horse (Karol, 2007).

At the same time, the client develops his/her emotional and instinctual capacity through right-brain interactions with the horse and embodied experiences in these nonverbal exchanges. It is through these experiences that the therapist can offer corrective learning experiences by getting the client to focus his/her attention accordingly.

Preverbal experiences

EFP offers unique preverbal experiences through clients engaging various sensory systems, in particular tactile experiences through riding and grooming. They are key in creating a sense of self, and in these ways clients who have traumatic histories will revert to “tactile and rhythmical comfort to avoid feeling disorganized” (Karol, 2007, p. 85). A return to preverbal comforting invokes a return to mothering.

From an object relations perspective, Ogden (1989) stated that individuals will endeavour to return to these states of being held or nursed through the experience of “skin surface and rhythmicity” (p. 128) to avoid disintegration of the self. Tactile experiences with the horse in EFP can be found in the interactions of grooming and extended caring to the horse through touch and expressions of care and contact with the horse’s coat. Riding and the rhythmic movement of the horse replicate the soothing states of maternal nurturance, which support healing aspects of the self that require reintegration (Bachi, 2013). The

experience of the horse's cadence and gait offer unique, refined ways of the client becoming aware of his/her own emotional rhythms, providing regulating experiences in which the client can create his/her own internal sense of control (Karol, 2007).

Verbal experiences

Verbal expression is vital in psychotherapeutic work and offers key insights and understanding around arising issues. Although it is no different from the methods used in traditional talk therapy settings, the horse provides a way to enter the client's inner and outer worlds through enacted experiences and the use of metaphor (Karol, 2007).

EFP provides a rich setting for metaphoric expression, and through interactions with the horse, clients are able feel safe in the way in which they verbally express themselves. Learning to express emotions such as anger or needs can be difficult for clients who experienced early relational trauma because of associations with risk to survival. Therefore, interactions with the horse and therapist offer a safe place to process and express anger and hurt without criticism and judgement. The horse or herd will respond through body language through disengagement from the client, offering critical feedback, and simply mirroring back the anger by walking away (Hayes, 2015). Through these experiences the client learns to find a way to express needs and process painful emotions within the safe attachment relationships with the horse and therapist.

Social development

Development of the core sense of self

Horses are facilitators of a positive core sense of self through the attachment relationship within the horse-human bond (Kern-Godal et al., 2016). Horses and humans share the same capacity to build harmonious relationships through good parenting. The personality attributes acquired through the dependency on the other to survive and maintain this harmonious connection require certain qualities. Hayes (2015) listed these as "acceptance, tolerance, patience, kindness, understanding, forgiveness, honesty fairness, truthfulness, respect, and compassion" (p. 1224). The horse can provide a way to heal early relational trauma by offering these qualities, which develop the capacity to enter into meaningful relationship and grow a core sense of self. Developing a trusting relationship with a horse inspires clients to do the same in their human relationships (Hayes, 2015).

Horses do not have left-brain conscious self-awareness so they never fear feeling "good enough" and are devoid of pretence. The right-brain approach to existence relies on intuitive responses, removing intellectual thinking and reasoning that humans have developed within the left brain (Cozolino, 2006). This left-brain approach leads to self-judgement and defence systems, which create a "false self" (Winnicott, 1965, as cited in

Hayes, 2015). The horse provides the cure to damage in the self by offering genuine, unconditional acceptance and love through this powerful healing relationship.

Herd dynamics allow clients to observe and model the same social harmony that is required to enter into healthy relationship with others. Horses make us think about who we are in relation within the horse dynamic. Experiences of the self, through the horse's responses, allow clients to work through unacceptable behaviours within themselves in a relationship that feels responsive and safe from judgement and shame. This respectful relationship allows self-acceptance, self-awareness, and a stronger sense of self for clients recovering from damage to the self.

Herd dynamics

Experiences of fear and love through evolutionary tendencies of the horse give rise to opportunities for compassion, true self-awareness, and profound emotional healing unlike any other interspecies relationship (Hayes, 2015). As prey animals, horses have developed survival instincts that require them to be in a constant state of high alert. Always scanning for danger and checking for safety has developed appraisal behaviours that seek out distance and moving toward as part of their assessment. This behaviour has become hardwired in the horse's ability to assess danger (Hayes, 2015; Parent, 2016).

Early relational trauma creates similar hardwired responses that are triggered by threats to survival. Consequently, the ongoing suffering that remains unprocessed from original wounds evokes fight/flight responses. Since these responses can be difficult to heal, the client can experience a mutual understanding through interactions with the horse, and mutual trust can be established in their understanding of each other (Burgon, 2014; York et al., 2008).

From a neurobiological perspective, right-brain interactions in the horse-client bond mute the client's left brain thinking processes. The focus shifts to the body and movement with the horse, which helps discharge painful energy retained within the body while unprocessed feeling states emerge. The therapist can work with the client to process and language these body responses that become crucial in reintegrating and healing wounds from the past. Talk therapy supports connection and emotional regulation through social exchange with the therapist while the horse develops the client's right-brain capacities (Hayes, 2015). Horses' prey instincts and hyper-alert sensory systems offer unique healing properties that create shifts to right brain functioning. This shift from the left, thinking brain to the right, emotional and social brain, allows clients to access and integrate emotional and social states that develop the right brain's capacity to create new neural networks through experiential learning, allowing healing to occur.

Equine herd dynamics offer opportunities to heal social deficits that make it difficult to enter into human relationships. Social skills learned through the horses' mutual care for each other within the herd allow the client to experience the herd's methods of conflict resolution with a focus on harmonious relations. Horses who stay together survive. Consequently, the herd has developed social qualities that can be useful in teaching clients how to relate based on experience and observation. They are "accepting, tolerant, kind, respectful, honest, fair, nonjudgmental, compassionate, and forgiving" (Hayes, 2015, p. 478), which can be seen in their response to the herd. All of these qualities show the expression of love and, as horses are naturally inclusive, the client can experience of these herd dynamics. This deep love and compassion for self and other brings about self-acceptance and teaches the client how to be in relationship (Hayes, 2015; Schore, 2002).

Capacity to mentalise, reflect, and become mindful

Mentalising is defined as being a "holding mind in mind" (Allen, Fonagy, & Bateman, 2008, p. 3). It is a mental activity or mental state that defines the way we perceive and interpret self and other experiences and behaviours. It requires a secure attachment to develop this capacity (Allen et al, 2008). In the absence of a secure base to explore from, mentalisation is impaired and is a contributor to psychological disorders (Bachi, 2013). The ability to be reflective is an awareness of mental states within ourselves and others (Allen et al., 1998 as cited in Bachi, 2013) and with it comes the capacity to be insightful and empathic. Through the mentalisation processes, we learn to respond to the needs of self and other in interactions. The horse provides experiences to develop these skills in the client through the bond and nonverbal exchanges, which in turn allow the client to reflect on the nature of the exchanges and what they evoke in self and other. The safe environment and developing attachment with the horse provide opportunities to explore, reflect, and mentalise what is happening in the real time interactions with the horse.

Mindfulness, according to Jon Kabat-Zinn (1994), is defined as "...paying attention in particular way: on purpose, in the present moment and non-judgmentally" (as cited in Segal, 2013, p. 39). Clients who have experienced trauma struggle to be in the present moment because of a loss of the self and emotional regression. Horses' right brain functioning creates mindfulness states through highly attuned sensory processing (Burgon et al., 2017). Clients are therefore forced to enter mindful states through nonverbal communications with the horse, leaving behind left-brain critical thinking and self-judgement. This mindful state created through the horse's natural ability to sense and provide responsive attunement to the client means that the horse can feel the client's anxiety states, which sends a message to the horse that the rider has lost their confidence. The horse responds to the loss of confidence in the rider's leadership as it would to loss of confidence in the leader of the herd: it runs to

safety. The horse's responsive feedback to the client's emotional states creates mindfulness in the client. Together with the therapist, the client can access and process these changes and return to a space where the client and horse are responsive to each other's needs, improving the quality of their relationship (Hayes, 2015). The responsive feedback provided by the horse, develops mindful states and the capacity to self-regulate as a result (Hayes, 2015).

A return to the traditional psychotherapy setting

EFP offers an integrative model for psychotherapeutic approaches using horses to explore painful, distressing events in the client's life. Clients who present with attachment difficulties arising out of relational trauma find it difficult to engage in relationships due to social and emotional developmental issues, which impact on the client's ability to experience safety and trust in relationships (Barker, 2010; Burgon, 2014). The horse-human bond can offer a way in which the client can experience a safe and trusting attachment relationship. Relationships become the key focus of the work, so healing of attachment deficits can occur through positive relational experiences that occur in the horse-client-therapist dynamic. Bowlby affirmed this concept by saying that developmental issues can be healed through changes in the environment, and that recreating similar conditions to the secure base provides opportunities to process and heal deficits in the attachment system (Bowlby as cited in Holmes, 2001; Burgon, 2014; Wallin, 2007).

The relationship with the horse offers a bridge to the therapist in the therapeutic nature of this triadic relationship (Burgon, 2013). The therapist becomes a "good object" (McCullough et al., 2017, p. 161) through his/her honest, authentic, responsive engagements with the client, building the client's confidence in the therapeutic alliance. The therapist-client dyad becomes a place in which the client can experience safety while having his/her needs met, which allows the client to develop a trusting bond with the therapist. Intimacy, empathy, and the sensitive nature of the issues explored, along with the capacity of the therapist to articulate and language embodied buried wounds, continue to develop this secure attachment to the therapist while working through attachment deficits (Parish-Plass, 2008). This natural interchange between horse and therapist continues to build the client's sense of self by being in relationship with the horse and therapist. Winnicott (1971) highlighted this concept of a developing true self that occurs in relationship: "when I look, I am seen, therefore I exist" (cited in Burgon, 2013, p. 54). Through this three-way dynamic, the client can re-enter human relationships because of his/her positive experiences with the horse and therapist. In this way, the client might find traditional therapeutic settings a little less daunting, and opportunities might arise where the client is open to having sessions without the horse.

Chapter 5: Discussion and Conclusion

Discussion

Like horse riding, writing hermeneutically has its own cadence and rhythm, and in the movement between parts and whole meaning is derived through this ongoing “open-ended process of understanding” (Boell & Cecez-Kecmanovic, 2010, p. 132-133). As I find my own rhythm to enter this final chapter, I notice myself wanting to return to the beginning to understand the process that has emerged.

I would like to revisit the story told by a 21-year-old woman who was struggling with depression and found healing through the bond with her horse. This became the motivation for my research:

A young woman was having a rough day and went to spend time with her horse. She was in tears while watching her horse play with others when the horse stopped, turned and looked at her, and made its way across the paddock to lay down beside her. She sobbed into the horse's neck and the world seemed a little more manageable.

Intrigued by this bond and its potential to heal, I found myself curious about its practical application with clients who, because of early relational trauma, struggle to be in relationship and engage in the therapeutic alliance. Because I have been trained in talk therapies, where understanding occurs through language, I became perplexed and confronted by the idea of working with nonverbal phenomena, as is the case when using horses. However, this story continues to motivate me to understand this healing bond and the clinical implications for working with this client group.

In addition, I needed a language to make sense of this phenomenon and its potential to heal. Neuropsychoanalytic concepts provided this language. My question therefore became “Equine facilitated psychotherapy: From a neuropsychoanalytic perspective, how can the horse-human bond assist the repair of early relational trauma that has led to insecure attachment?”

As I re-engage with my own writing, I find myself making connections and specific relationships between texts, and in the re-interpretation another layer emerges offering a broader perspective. Smythe (2012) referred to this process as a way to “re-think and re-say ... to go back, and in so doing to find the way forward” (p. 23). These layers in my research have broader implications.

From a neuropsychoanalytical perspective, I have discovered three keys to how the horse-human bond can potentially heal early relational trauma:

- Attachment - Clients with early relational trauma struggle to enter into intimate relationships because of ruptures in their early attachment relationships caused through abuse, neglect, and trauma. This makes it challenging for clients to engage in therapeutic work. The horse can offer pre-verbal experiences that can shift internal working models so that the client is able to have the experience of a secure sense of self (Bachi, 2013). The client can use the unique attributes of the presence of the horse to build relational confidence. The horse therefore offers a bridge for the client to develop trust in the therapist through experience.
- Neuroscience - Developmental trauma creates states of hyperarousal and dissociation detrimental to right brain development. Social and emotional capacities are impacted by the lack of stimulation from a responsive, secure attachment relationship, which affects neural development. Approach/avoidance behaviour in early relationships creates conflict in current relationships, impeding social, emotional, and intellectual development. The attachment effect that is created through the horse-human relationship provides opportunities to develop right brain capacities through the bond and nonverbal communication, which accesses a primal intimate space where clients learn to develop instinctual and emotional capacities. This right brain shift for clients allows them to access and integrate emotional and social states that develop new neural connections.
- Self psychology - Early relational trauma affects the ability to develop a sense of self, because of the absence of a regulatory self-object (Schore, 2002). Unresolved trauma in the mother is taken in by the infant as hyperarousal-dissociative states. Paralysis of social and emotional processing occurs because the energy required to sustain these states is diverted, creating an absence of an internalised regulating self-object. This makes it difficult to enter into relationship. Horses offer experiences that activate the right brain and mute the left brain and its analytical processes. This regulatory system supports healing experiences which develop a sense of self.

Broader implications of my research and implications for practice

Humans' ability to develop love and affection for animals has been well documented (Julius, Betz, Kotrschal, Turner, & Uvnäs-Moberg, 2013). Clients who present with early relational trauma are fearful of human relationship because breaches in trust and safety make it difficult to develop secure attachment with the therapist, impeding entry into exploration and healing relational wounds. The horse-human relationship may therefore offer clients a less inhibiting experience as they are able to bond with the horse more quickly. In EFP the client develops a trusting relationship with the horse because the fear and anxiety of being in a human relationship is removed; this can aid the creation of a relationship between client and

(human) therapist. In studies involving dogs and children, Julius et al. (2013) found that the time required to establish a “secure relationship with the therapist may be shortened by up to one third” (pp. 151-152). Although no equivalent studies have been done with horses, it is reasonable to believe in the potential for similar results.

The client’s relationship with the horse develops a primary attachment quickly through the horse’s unconditional acceptance, and a sense of trust and safety ensues. The client can slip into experiential learning with the horse. As a result, the therapist is offered a bridge by the horse to enter into this therapeutic dyad as he/she investigates and explores the internal world of the client. This intimate exchange opens the door for the attachment system to be extended to the therapist through the relational exchanges that develop trust and safety between this three-way partnership. This quick response to enter into relationship for such a challenging client group, who fear human relationship, means that the developmental repair on a neurobiological level occurs more quickly. This chain of events allows repair of right-brain function, and with it comes the capacity to socially and emotionally process to enter back in relationship with self and other and a return to traditional talk therapy settings.

In my own work with clients, I have noticed how pets have played a central role in their early childhood relationships, especially in the absence of a responsive human attachment figure. Often these clients, who had insecure attachments with their caregivers, found a safe haven with their pet companions. They found a love object through care, attention, and protection in mutual reciprocity through their bond. This internalised pet-object seemed to have its own presence in the therapy room, giving clients the courage and strength to engage with their past traumas through this unique internalised attachment bond. In his ‘pet-oriented child psychotherapy’ approach, Levinson (1997) referred to this as the work with “reconnecting humans and animals and nature in an attempt to rehumanize them and as a means of assisting them in their own developmental processes is also strongly represented in the work” (p. x111).

Similarly, clients who struggle with insecure attachment because of abuse, neglect, and trauma may find the horse-client bond less threatening. Consequently, working with horses can be used as an alternative yet effective way to repair attachment ruptures as the client develops a primary attachment relationship more quickly in their interactions with the horse (Burgon, 2014; Julius et al., 2013; Parent, 2016). The horse can provide a bridge to develop a trusting relationship between the client-therapist dyad in the psychotherapeutic exploration of the client’s inner worlds. This primary attachment to the horse and its ability to draw the therapist quickly into the therapeutic work suggests that this bond can offer an opportunity for more expedient outcomes than traditional talk therapy settings as a result (Burgon, 2014; Julius, et al., 2013).

Strengths, limitations, and recommendations for further research

Engaging in a hermeneutic phenomenological process has had its strengths and limitations as a research methodology. I was looking for a way to remain open and engaged that felt intuitive, creative, and natural as I embarked on exploring a phenomenon that was sensory and embodied, and that lived in the nonverbal and preverbal realm. The subjective nature of this engagement with a broad range of literature created a freedom to look for insight in the most unlikely places (Smythe & Spence, 2012).

I recognise that employing a hermeneutic process created a bias in my approach to this question based on my worldviews, which has created one perspective through my subjective experience. It has orientated my work in a particular way, but others may find a different way. However, it is within this subjective nature that meaning occurs which parallels the psychotherapeutic experience. The hermeneutic approach also creates opportunities to see things differently and offers a fresh perspective or insight that may otherwise remain unseen (Smythe & Spence, 2012). For these reasons this methodology offers a way to broaden horizons of the reader and researcher and remains open to different perspectives in light of the question.

My subjective interpretation of the literature has revealed strengths and limitations in my research. The nature of language created bias in this inquiry and influenced the outcome of this research. The terms used to search literature on the horse-human bond oriented the focus of this research on the phenomenon and the ways that it could potentially be expedient in healing relational deficits that make therapeutic engagement difficult. Although it was beyond the scope of this research inquiry, perhaps the focus could have been broader through a change in the theoretical orientation and client group. An exploration of the interpersonal dynamics that occur within the three-way dynamic might have also been considered. My own professional bias toward relationships as a central tenet in healing also contributed to the way in which I engaged with the literature. Other researchers may have focussed on different healing attributes of the horse that step outside of the horse-human bond. Recommendations for further research might consider the use of movement and rhythm as a contributor to neural development and integration of traumatic experiences.

I discovered that hermeneutic understanding requires a substantial amount of time, and I am aware that the degree of inquiry has had limits placed on it. For example, I would have liked to have had more of a phenomenological engagement with horses to fully understand the embodied experience of being in relationship with them, which might have added a further dimension to this inquiry and which remains unknown at this point. However, I realise that this inquiry is open-ended and, in response to this limitation, I would suggest

that further research could focus on the therapist's embodied experience of EFP and its contribution to healing early relational trauma.

The literature presents a Western worldview toward working with horses which shows as an absence of consideration as to how other cultures might consider working with horses in a therapeutic setting. Bi-cultural understanding and integration within equine therapy in consideration of cultural sensitivity offers the potential for further research in this area.

Much has been written on anecdotal explanations of the reparative nature of the horse-human bond and the application of psychotherapeutic theories to understand this phenomenon. However, the argument remains that there is a lack of empirical evidence, which calls the robustness of equine therapy as an effective intervention into question. My bias toward using neuroscience, attachment, and self psychology was intended to show how the application of theory could support the validity of EFP. Consequently, the scope of theory was broad which may have sacrificed depth in the findings. This has revealed the potential for further research that focuses on the neuroscience aspect of psychotherapy that looks at the horse-human-client connection and the influence this dynamic has on right brain neural development and its ability to develop the intersubjective field through self and other experiences.

Schore's (2002) research commented on the advances in neuroscience joining with developmental psychoanalysis, and how this can "potentially bridge the relational and intrapsychic realms of the unconscious mind [while] identifying the brain systems involved in the development of the dynamic unconscious" (p. 434). The combination of these theories within the broader context of equine theories may expand the argument that supports the effectiveness of EFP in addressing developmental delays that occur through trauma.

The strength of this research has been in my curiosity and openness to be free to explore phenomena that has felt palpable but inexplicable at times. Through the broad use of theory and embodied experiences, I was able to find a language that showed me a way to enter into and understand how this nonverbal bond has the potential to heal. In my own work, this research has had an influence in the way that I work with clients who experience developmental deficits from early childhood relational trauma. A neuropsychanalytic approach and an awareness of embodied experiences offer a different language to work with preverbal and nonverbal communication. In this way the potential to develop secure attachment with this challenging client group can be found possibly more quickly because of these findings and their application to my work. This experience has left me open and curious about the potential for healing and the introduction of EFP into my own work with clients.

Conclusion

This journey started from a personal and professional parallel process that left me wanting to understand how the horse-human bond could potentially heal early relational trauma that has led to insecure attachment, and application and implications to therapeutic work. Along the way, I discovered the challenges and delights of the hermeneutic research methodology as applied to a literature review. The understandings arising from this process have given me insight into this subject that I would have struggled to attain otherwise. The findings from this research can be divided into three rough but overlapping perspectives: attachment, neuroscience, and self psychology.

From an attachment perspective, the horse-human bond that develops in EFP can heal and resolve deficits in clients who have suffered early relational trauma. Developing a healthy attachment relationship with the therapist is an effective means to repair attachment ruptures. However, clients who have experienced early relational trauma often have difficulty trusting people, which can impede and delay this process. If the client develops a safe, trusting relationship with the horse, the therapist can use it as a bridge to create a similar relationship between the client and the therapist.

From a neuroscience perspective, EFP facilitates the development of social and emotional capacity in the right brain that may have been impacted by early relational trauma. Horses lack language and the concomitant left-brain logic and reasoning functionality. Consequently, any interaction with a horse must rely on nonverbal communication, which is based in the right brain. Right-brain function can be improved, which leads to healthy access and integration of emotional and social states.

From a self psychology perspective, the underdeveloped sense of self that results from early relational trauma may be resolved by restoring emotional and social processing. Interactions with the horse help to mute left-brain analytical processes in favour of a more intuitive approach. This entry into a relationship through intuition and emotion leads to reflection free from self-judgement and grows the client's sense of self.

The strengths of EFP are numerous - far too numerous to recount in full here. Foremost in this regard is its speed, with the potential to significantly shorten the time required to establish a solid relationship between the client and therapist. However, the efficacy of EFP has yet to be quantified, and there is an opportunity for further research in this area.

My use of a hermeneutic phenomenological process also has advantages and disadvantages. Some may view the lack of statistical rigour in this method as less than ideal. However, the opportunities for fresh learning and new perspectives on the subject outweigh

these supposed deficits. A hermeneutic approach may in fact reveal areas of interest that were previously unrecognised. In the case of my research into EFP, one such area of exploration is the neuroscience-based enquiry into the effect of the horse-human-client connection on neural development in the right brain.

The broader research and practice implications indicate that working with animals and horses can be used to more quickly repair attachment ruptures due to early relational trauma. The horse can provide a bridge to develop a trusting relationship between the client and therapist. The horse's ability to draw the therapist and client quickly into the therapeutic work can offer an opportunity for more expedient outcomes than traditional talk therapy settings (Burgon, 2014; Julius, et al., 2013). From a practice perspective the research findings indicate the importance of including an embodied approach when healing developmental deficits that have occurred through attachment relational trauma. Adopting a brain, mind, and body approach to therapeutic work through nonverbal communication supports healing of the right brain social and emotional neural development (Schoore, 2002). As this is where the internalised sense of self develops, and the ability for clients to feel competent in relationship, healing the past attachment deficits using EFP facilitates this attachment connection to the therapist. Outside of the EFP environment, an embodied approach to the work in conjunction with talk therapies has proved helpful in the work with my clients, as I have found a different way of listening that supports healing and a contribution to the psychotherapy community as a whole.

References

- Akhtar, S., & Volkan, V. D. (2005). *Mental zoo: Animals in the human mind and its pathology*. London, UK: Karnac.
- Allen, J. G., Fonagy, P., & Bateman, A. W. (2008). *Mentalizing in clinical practice*. Arlington, VA: American Psychiatric Publishing.
- Bachi, K. (2013). Application of attachment theory to equine-facilitated psychotherapy. *Journal of Contemporary Psychotherapy*, 43, 187-196.
- Ballureka, N., Muela, A., Amiano, N., & Caldentey, M. (2014). Influence of animal-assisted therapy (AAT) on the attachment representations of youth in residential care. *Children and Youth Services Review*, 42, 103-109.
- Barker, G. A. (2010). *The effects of trauma on attachment*. Retrieved July 12, 2017, from <http://traumaresources.wikispaces.com/file/view/The+Effects+of+Trauma+on+Attachment+-+Dr+Graham+A+Barker.pdf>
- Boell, S. K., & Cecez-Kecmanovic, D. (2010). Literature reviews and the hermeneutic circle. *Australian Academic and Research Libraries*, 41(2), 129-144.
- Boell, S. K. & Cecez-Kecmanovic, D. (2014). A hermeneutic approach for conducting literature reviews and literature searches. *Communications of the Association for Information Systems*, 34, 257-286.
- Bowlby, J. (1969). *Attachment and loss*. London, UK: Hogarth.
- Bowlby, J. (1988). *Attachment, communication, and the therapeutic process. A secure base: parent-child attachment and healthy human development*. New York, NY: Basic Books.
- Broersma, P. (2007). *Riding into your mythic life: Transformational adventures with the horse*. Novato, CA: New World Library.
- Burgon, H. L. (2014). *Equine-assisted therapy and learning with at-risk young people*. London, UK: Palgrave Macmillan.
- Burgon, H., Gammage, D., & Hebden, J. (2017). Hoofbeats and heartbeats: Equine-assisted therapy and learning with young people with psychosocial issues - theory and practice. *Journal of Social Work Practice*. Retrieved May 3, 2017, from <http://dx.doi.org/10.1080/02650533.2017.1300878>
- Caldwell, J. (2012). *Attachment theory and the developmental consequences of relational trauma*. Retrieved June 4, 2017, from <https://www.themeadows.com/blog/item/308-attachment-theory-and-the-developmental-consequences-of-relational-trauma-by-dr-jon-caldwell-d-o>
- Cozolino, L. (2006). *The neuroscience of human relationships: Attachment and the developing social brain* (2nd ed.). [Kindle DX version]. Retrieved from www.amazon.com.
- Cozolino, L. (2010). *The neuroscience of psychotherapy: Healing the social brain* (2nd ed.). New York, NY: Norton.
- Eyelashes Horse. (n.d.). [Image - Figure 1]. Retrieved February 20, 2018, from <https://pixabay.com/en/eye-eyelashes-horse-animal-close-3048526/>. CCO Creative Commons.
- Freud, S. (1909). Analysis of a phobia of a five year old boy. In *The Pelican Freud library* (1977), *Case histories 1* (vol 8., pp. 169-306). Harmondsworth, England: Penguin.

- Grant, B. M., & Giddings, L. S. (2002). Making sense of methodologies: A paradigm framework for the novice researcher. *Contemporary Nurse*, 13, 10-28.
- Hamilton, A.J. (2011). *Zen mind, zen horse: The science and spirituality of working with horses*. [Kindle DX version]. Retrieved from www.amazon.com.
- Hayes, T. (2015). *Riding home: The power of horses to heal*. [Kindle DX version]. Retrieved from www.amazon.com.
- Holmes, J. (2001). *The search for the secure base: Attachment theory and psychotherapy*. Hove, UK: Routledge.
- Julius, H., Beetz, A., Kotrschal, K., Turner, D., & Uvnäs-Moberg, K. (2013). *Attachment to pets: An integrative view of human-animal relationships with implications for therapeutic practice*. Göttingen, Germany: Hogrefe Publishing.
- Karol, J. (2007). Applying a traditional individual psychotherapy model to equine-facilitated psychotherapy (EFP): Theory and method. *Clinical Child Psychology and Psychiatry* 12(1), 77-90.
- Kern-Godal, A., Brenna, I. H., Kogstad, N., Arnevik, E. A., & Ravndal, E. (2016). Contribution of the patient-horse relationship to substance use disorder treatment: Patients' experiences. *International Journal of Qualitative Studies on Health and Well-being*, 11(1), 1-44.
- Lac, V., Marble, E., & Boie, I. (2013). Equine-assisted psychotherapy as a creative relational approach to treating clients with eating disorders. *Journal of Creativity in Mental Health*, 8, 484-493.
- Levinson, B. M. (1997). *Pet-oriented child psychotherapy* (2nd ed.). Springfield, IL: Thomas.
- McCullough, L., Risley-Curtiss, C., & Rorke, J. (2015). Equine facilitated psychotherapy: A pilot study of effect on posttraumatic stress symptoms in maltreated youth. *Journal of Infant, Child and Adolescent Psychotherapy*, 14(2), 158-173.
- McWilliams, N. (2011). *Psychoanalytic diagnosis* (2nd ed.). New York, NY: Guilford Press.
- Mayberry, R. (1978). The mystique of the horse is strong medicine: Riding as therapeutic recreation. *Rehabilitation Literature*, 38(6), 192-196.
- Mikulincer, M., Shaver, P. R., & Berant, E. (2013). An attachment perspective on therapeutic processes and outcomes. *Journal of Personality*, 81(6), 605-616.
- Ogden, T. H. (1989). On the concept of an autistic-contiguous position. *International Journal of Psychoanalysis*, 70, 127-140.
- Parent, I. B. (2016). *Fundamentals of equine assisted trauma therapy. With practical examples from working with members of the Armed Forces*. CreateSpace Independent Publishing Platform.
- Parish-Plass, N. (2008). Animal-assisted therapy with children suffering from insecure attachment due to abuse and neglect: A method to lower the risk of intergenerational transmission of abuse? *Clinical Child Psychology and Psychiatry*, 13(1), 7-30.
- Parish-Plass, N. (2013). *Animal-assisted psychotherapy: Theory, issues, and practice*. West Lafayette, IN: Purdue University Press.
- Perry, B. D. (2001). Bonding and attachment in maltreated children: Consequences of emotional neglect in childhood. Retrieved August 5, 2017, from https://childtrauma.org/wp-content/uploads/2013/11/Bonding_13.pdf
- Perry, B. D., Pollard, R. A., Blakley, T. L., Baker, W. L., & Vigilante, D. (1995). Childhood trauma, the neurobiology of adaptation, and "use-dependent" development of the brain: How "states" become "traits". *Infant Mental Health Journal*, 16(4), 271-291.

- Sable, P. (2012). The pet connection: An attachment perspective. *Clinical Social Work Journal*, 41, 93-99.
- Schore, A. N. (2002). Advances in neuropsychoanalysis, attachment theory and trauma research: Implications for self psychology. *Psychoanalytic Inquiry*, 22(3), 433-484.
- Schore, A. N. (2012). *The science of the art of psychotherapy*. New York, NY: Norton.
- Schuster, M. (2013). Hermeneutics as embodied existence. *International Journal of Qualitative Methods*, 12(1), 195-206.
- Segel, Z. V., Williams, J. M. G., & Teasdale, J. D. (2013). *Mindfulness-based cognitive therapy for depression* (2nd ed.). New York, NY: Guilford Press.
- Siegel, D. (2012). *The developing mind: How relationships and the brain interact to shape who we are* (2nd ed.). New York, NY: Guilford.
- Smythe, E. A., Ironside, P. M., Sims, S. L. Swenson, M. M., & Spence, D. G. (2008). Doing Heideggerian hermeneutic research: A discussion paper. *International Journal of Nursing Studies*, 45, 1389-1397.
- Smythe, E., & Spence, D. (2012). Re-viewing literature in hermeneutic research. *International Journal of Qualitative Methods*, 11(1), 12-25.
- Stern, D. N. (2004). *The present moment in psychotherapy and everyday life*. New York, NY: Norton.
- Thomas, T. (2010). *Chauvet's cave horses* [Image - Figure 2]. Retrieved February 2, 2018, from https://commons.m.wikimedia.org/wiki/File:Chauvet%C2%B4s_cave_horses.jpg
- Van der Kolk, B. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York, NY: Penguin Books.
- Wallin, D. J. (2007). *Attachment in psychotherapy*. New York, NY: Guilford Press.
- Wilson, K. (2012). *Equine-assisted psychotherapy as an effective therapy in comparison to or in conjunction with traditional therapies*. Unpublished honors thesis, University of Central Florida, Cocoa, Florida, United States. Retrieved from <http://stars.library.ucf.edu/honorstheses1990-2015/1377>
- Wilson, K., Buultjens, M., Monfries, M., & Karimi, L. (2017). Equine-assisted psychotherapy for adolescents experiencing depression and/or anxiety: A therapist's perspective. *Clinical Child Psychology and Psychiatry*, 22(1), 16-33.
- Winnicott, D. W. (1960a). The theory of the parent-infant relationship. *International Journal of Psychoanalysis*, 41, 585-595.
- Yorke, J., Adams, C., & Coady, N. (2008). Therapeutic value of equine human bonding in recovery from trauma. *Anthrozoös*, 21, 17-30.
- Zimmerman, J. (2015). *Hermeneutics: A very short introduction*. [Kindle DX version]. Retrieved from www.amazon.com.