

# **European Journal of Psychotherapy & Counselling**



ISSN: 1364-2537 (Print) 1469-5901 (Online) Journal homepage: http://www.tandfonline.com/loi/rejp20

# A healing relationship: Clients' experiences of the long-term relational significance of the horse in horse assisted psychotherapy

Marianne Tuuvas, Jan Carlsson & Joakim Norberg

**To cite this article:** Marianne Tuuvas, Jan Carlsson & Joakim Norberg (2017) A healing relationship: Clients' experiences of the long-term relational significance of the horse in horse assisted psychotherapy, European Journal of Psychotherapy & Counselling, 19:3, 307-328, DOI: <u>10.1080/13642537.2017.1348375</u>

To link to this article: http://dx.doi.org/10.1080/13642537.2017.1348375



Published online: 06 Jul 2017.

C	
	67.
<u>ر</u>	

Submit your article to this journal  $\square$ 

Article views: 7



🔾 View related articles 🗹



View Crossmark data 🗷

Full Terms & Conditions of access and use can be found at http://www.tandfonline.com/action/journalInformation?journalCode=rejp20



Check for updates

# A healing relationship: Clients' experiences of the long-term relational significance of the horse in horse assisted psychotherapy

Marianne Tuuvas<sup>a</sup>, Jan Carlsson<sup>b</sup> and Joakim Norberg<sup>c</sup>

<sup>a</sup>SAPU, Stockholm, Sweden; <sup>b</sup>Department of Law, Psychology, and Social Work, Örebro University, Örebro, Sweden; <sup>c</sup>Department of Psychology, Uppsala Universitet, Uppsala, Sweden

#### ABSTRACT

Horse assisted psychotherapy is a type of treatment for mental ill-health in which the client forms a relationship with a horse. Research suggests that the relationship to a horse is very helpful to clients, but how the horse is experienced many years after the end of treatment has not been investigated. The aim of the present study was thus to investigate how former clients from horse assisted psychotherapy experienced the horse several years after treatment was completed. Former clients (n = 5; all females) from one and the same treatment center were interviewed and the data was analyzed with an inductive thematic approach. The analysis showed that many years after completion of treatment, the horses were still remembered as the most important individuals in the informants' lives during the time of treatment. This was captured by the core category 'A healing relationship'. These findings are in line with previous research that found that patients in horse assisted psychotherapy and their family members attributed improvements from treatment to the patients' relationship to the horses, but adds that the clients also keep these views at follow-up several years after termination of treatment.

# UNA RELACION SANADORA: Experiencias de clientes acerca del significado relacional del caballo en psicoterapia de larga duración asistida por un caballo

La psicoterapia asistida por un caballo es una forma de tratamiento para enfermos mentales, en la cual el cliente establece una relación con un caballo. La investigación sugiere que la relación con un caballo es de gran ayuda para el paciente, pero no se ha investigado qué sentimientos se experimentan hacia él años después que el tratamiento ha finalizado. La meta del presente estudio fue investigar cómo los clientes en este tipo de terapia recordaban o no al caballo después de varios años de terminado el tratamiento. Se entrevistaron cinco mujeres que habían tenido este tipo de terapia en un centro de tratamiento y los resultados fueron analizados con un Método Temático-Inductivo. El análisis mostró que muchos años después de la terminación del tratamiento, los caballos eran aun recordados como los individuos más importantes en la vida de las informantes durante la duración del tratamiento. Esto fue conceptualizado en la categoría central de"una relación sanadora". Estos resultados corroboran previas investigaciones que han encontrado que los pacientes en terapia asistida por un caballo y sus familias, han atribuido mejorías derivadas de este tipo de tratamiento y agrega que los pacientes conservan estas opiniones en el seguimiento después de varios años de concluir el tratamiento.

# La relazione terapeutica: le esperienze dei pazienti circa il significato della relazionale con il cavallo nella terapia equestre

La terapia equestre è una tipologia di trattamento adatta a soggetti con problemi di salute mentale in cui il cliente instaura una relazione con il cavallo. La ricerca suggerisce che la relazione con il cavallo è molto utile per i pazienti, ma ancora poco studiato è il modo in cui il cavallo è esperito molti anni dopo la fine del trattamento. Lo scopo del presente studio è guindi studiare come soggetti che hanno effettuato una terapia equestre sperimentino i cavalli ad anni di distanza dalla fine del trattamento. Sono state intervistate ex-pazienti (n = 5; tutte donne) provenienti da uno stesso centro di trattamento, i dati sono stati analizzati con un approccio induttivo di analisi tematica. Si evidenzia come, anche molti anni dopo il completamento del trattamento, i cavalli siano ricordati come gli attori più importanti nella vita dei soggetti durante il periodo del trattamento. Questo è stato evidenziato dalla categoria centrale "rapporto di guarigione". Tali risultati sono in linea con una precedente ricerca che ha evidenziato come i miglioramenti siano attribuiti dai pazienti e dai loro familiari al rapporto paziente-cavallo, ma aggiungono che guesta relazione è mantenuta a follow-up realizzati diversi anni dopo la fine del trattamento.

# Une relation qui soigne: impact sur le long terme des aspects relationnels entre cheval et clients dans l'équithérapie

La thérapie médiatisée par le cheval est un type de traitement des troubles mentaux au cours de laquelle les clients forment une relation avec un cheval. Les recherches suggèrent que la relation au cheval est très aidante pour les clients mais l'expérience du cheval des années après la fin du traitement n'a pas été étudiée. L'objectif de cette étude était donc d'investiguer l'expérience que les anciens clients de l'équithérapie avaient du cheval plusieurs années après que le traitement se soit terminé. D'anciennes clientes (n=5 ; toutes des femmes) issues du même centre de traitement ont été interviewées et les données ont été analysées suivant une approche thématique inductive. L'analyse a montré que plusieurs années après la fin du traitement les participantes se souvenaient des chevaux comme les individus les plus importants dans leurs vies au moment du traitement. C'est ce que reflète la catégorie centrale « une relation qui soigne ». Ces résultats sont consistants avec des recherches existantes ayant montré que les patients de l'équithérapie et leurs familles attribuent les améliorations au cours du traitement à la relation que les patients ont avec les chevaux, mais ajoute cependant à ces recherches le fait que les clients conservent également ces opinions lorsqu'on les interroge plusieurs années après la fin du traitement.

## Μια θεραπευτική σχέση: Οι εμπειρίες πελατών γύρω από τη μακροχρόνια σχεσιακή σπουδαιότητα του αλόγου στη θεραπευτική ιππασία

#### ΠΕΡΙΛΗΨΗ

Η θεραπευτική ιππασία είναι μια μορφή θεραπείας για θέματα ψυχικής υγείας στην οποία ο πελάτης αναπτύσσει μια σχέση με ένα άλογο. Η έρευνα προτείνειότι η σχέση με το άλογο είναι πολύ βοηθητική για τους πελάτες, αλλά ακόμη δεν έχει διερευνηθεί ο τρόπος με τον οποίο το άλογο βιώνεται πολλά χρόνια μετά την ολοκλήρωση της θεραπείας. Ο στόχος της παρούσας έρευνας ήταν η διερεύνηση του τρόπου με τον οποίο πελάτες που είχαν συμμετάσχει στο παρελθόν σε θεραπευτική ιππασία βιώνουν τη σχέση με το άλογο χρόνια μετά τη λήξη της θεραπείας. Πρώην πελάτες (n=5, όλες γυναίκες) που προήλθαν από το ίδιο θεραπευτικό κέντρο συμμετείχαν σε συνεντεύξεις, οι οποίες αναλύθηκαν σύμφωνα με μια επαγωγική θεματική ανάλυση. Η ανάλυση έδειξε ότι πολλά χρόνια μετά την ολοκλήρωση της θεραπείας, τα άλογα θεωρούνταν τα πιο σημαντικά άτομα στη ζωή των συμμετεχόντων κατά τη διάρκεια της θεραπείας. Αυτό αποτυπώθηκε στην κεντρική κατηγορία «μια θεραπευτική σχέση». Τα αποτελέσματα αυτά συνάδουν με την υπάρχουσα έρευνα η οποία έδειξε ότι οι ασθενείς που συμμετείχαν σε θεραπευτική ιππασία και οι συγγενείς τους απέδιδαν τη βελτίωση στη σχέση των ασθενών με τα άλογα, αλλά προσθέτει το εύρημα ότι οι πελάτες διατηρούν αυτές τις απόψεις πολλά χρόνια μετά τη λήξη της θεραπείας.

ARTICLE HISTORY Received 4 October 2016; Accepted 20 April 2017

**KEYWORDS** Psychotherapy; horse assisted; human-animal relations; long-term

PALABRAS CLAVE psicoterapia; asistida por un caballo; relaciones entre los humanos y los animales; larga duración

PAROLE CHIAVE psicoterapia equestre; relazione a lungo termine uomo-animale

MOTS-CLÉS psychothérapie; médiation par le cheval; relations homme-animal; long terme

**ΛΕΞΕΙΣ-ΚΛΕΙΔΙΑ** ψυχοθεραπεία; υποβοηθούμενη από άλογα; σχέσεις ανάμεσα στον άνθρωπο και στο ζώο; μακροχρόνια

Horse assisted psychotherapy is a type of treatment for mental ill-health in which the client forms a relationship with a horse (Chandler, 2012; Trotter, 2012). Horse assisted psychotherapy is thus a relationship-focused form of psychotherapy that involves several different activities with the horse, such as riding and caring for him or her. Horse assisted psychotherapy also includes a human psychotherapist and usually also a human horse professional. Research suggests that horse assisted psychotherapy is an efficient treatment for psychiatric conditions such as affective disorders or clinical depression (Berget & Braastad, 2011; Kendall et al., 2015) and anxiety (Berget, Ekeberg, Pedersen, & Braastad, 2011), and may also help to improve self-efficacy, social behavior, and coping skills (Berget, Ekeberg, & Braastad, 2008; Bizub, Joy, & Davidson, 2003; Burgon, 2003; Forsling, 2003; Shultz, 2005; Trotter, Chandler, Goodwin-Bond, & Casey, 2008).

Several schools of psychotherapy and lines of research suggest that mental ill-health is related to early traumatic relational experiences (Castonguay & Beutler, 2005; Duncan, Miller, Wampold, & Hubble, 2010; Norcross, 2010, 2011). In the history of psychotherapy, this interest in the association between early relationships and mental health started with the psychoanalytic theory of object relations (Gomez, 1997). In this theory, 'object' refers to a person (the term derives from Freud's original theory, in which people were thought of as mere objects for the libido; with object relations theory, the focus shifted from the libido to the object itself). According to object relations theory, the subjective experience of people in the child's surroundings – primarily the caregivers – become so-called inner objects' in the child's subconscious that he or she carry into adulthood, and that in this way influence later relationships (Gomez, 1997).

Object relations theory in psychoanalysis was succeeded by attachment theory that has since become an almost universally accepted theory of early human relationships (Slade, 2008). According to attachment theory, all children are genetically preprogrammed to form attachment bonds to their caregivers (Bowlby, 1988). This has been shaped by evolution in order to help children to stay alive during the early years when they are most vulnerable. When children experience danger, their attachment systems will become activated, thereby interrupting play and exploration. For children with a secure attachment style (Ainsworth, 1967; Ainsworth, Blehar, Waters, & Wall, 2014), the child will then seek out caregivers for support and comfort. This will in its turn usually activate a corresponding preprogrammed response in the caregiver to care for the distressed child (Bowlby, 1988). However, if the child's needs are not met by the caregivers, he or she will develop an insecure attachment, leading to avoidant or ambivalent reactions to caregivers in the presence of danger (Ainsworth, 1967; Ainsworth et al., 2014), and also deficient mentalization skills (Fonagy, Gergely, Jurist, & Target, 2002).

It is a common belief in psychotherapy that mental ill-health caused by such traumatic relational experiences can be healed in the relationship to a therapist. The relationship between therapist and client was first emphasized by Freud

in classical psychoanalysis (Freud, 1917/2001). The client's inner objects was thought to influence the relationship to the therapist (so-called 'transference'), and working with this part of the therapeutic relationship was considered to be fundamental to treatment progress (Freud, 1917/2001). Object relations theorists (e.g. Melanie Klein, Ronald Fairbairn, Donald Winnicott, Michael Balint; see Gomez, 1997) later proposed that the therapist also becomes an inner object in the client's subconscious, thereby influencing the client's relationships in a positive way outside psychotherapy. Several modern forms of psychotherapy (e.g. relational psychoanalysis, psychodynamic short-term psychotherapy, and mentalization based psychotherapy) now emphasize the relationship between therapist and client in an attachment theory framework (e.g. Fonagy, 2001). Also, psychotherapy research has found that the relationship between therapist and client is a so-called 'common factor' that contributes to outcome in psychotherapy of all modalities (Wampold & Imel, 2015). Indeed, studies suggest that psychotherapists with better facilitative relational skills produce better outcome with clients (e.g. Anderson, Crowley, Himawan, Holmberg, & Uhlin, 2016; Anderson, McClintock, Himawan, Song, & Patterson, 2016).

Proponents of horse assisted psychotherapy suggest that also the relationship with a horse can facilitate the process of psychotherapy (Forsling, 2003; Hallberg, 2008; Knapp, 2013). Like humans, horses are social animals that spend their lives with other horses (Hallberg, 2008; Knapp, 2013; Wathan, Burrows, Waller, & McComb, 2015). They are also peaceful animals that prefer to avoid open conflicts (Bachi, Terkel, & Teichman, 2011; Hallberg, 2008). Further, it has been argued that because horses in the wild are prey, they have developed a high sensitivity for detecting affect in predators, including humans (Frewin & Gardiner, 2005; Hallberg, 2008; Knapp, 2013). This sensitivity can benefit clients in horse assisted psychotherapy by making them aware of their own affective reactions (Hallberg, 2008; Trotter, 2012).

Some of these ideas are corroborated by recent research that suggests that horses are social animals in possession of social skills that may be used also to facilitate relationships with humans. Not only are horses able to recognize conspecifics (Proops, McComb, & Reby, 2009), but also to recognize facial expressions in conspecifics associated with social context (Wathan, et al., 2015). Importantly, horses are also able to recognize individual humans (Proops & McComb, 2012) and recognize affect in human facial expressions (Smith, Proops, Grounds, Wathan, and McComb (2016).

Indeed, studies on horse assisted psychotherapy showed that clients' experience that it is the relationship with the horse that did indeed help them recover from mental ill-health (Forsling, 2003; Whittlesey-Jerome, 2014). Interviews with clients in horse assisted psychotherapy showed that the horse helped to calm and comfort clients, and made them feel less lonely (Forsling, 2003). For clients with difficulties with trust, the relationship with a horse can also be helpful to learn how to relate with other people (Bachi et al., 2011; Hallberg, 2008; Knapp, 2013; McCormick & McCormick, 1997; Trotter, 2012). Both young clients and their primary caregivers experience that also relationships outside psychotherapy benefit when the clients get the opportunity to recognize maladaptive strategies in the relationship with a horse in psychotherapy (Shultz, 2005). Clients also experience that the relationship to the horse in psychotherapy help to enhance their mentalization skills (Traeen, Moan, & Rosenvinge, 2012).

Research suggests that horse assisted psychotherapy holds much promise in particular for child and adolescent social and behavior issues (Forsling, 2003; Kendall et al., 2015; Shultz, 2005; Trotter et al., 2008). Further, interviews with both clients and their families support the underlying theories that good treatment results are related to clients' positive bond with the horse (Forsling, 2003; Whittlesey-Jerome, 2014). Theories on the psychotherapeutic relationship suggest that the relationship to the psychotherapist has the potential to heal clients' mental ill-health. According to these theories, the therapist becomes an 'inner object' (Gomez, 1997) or becomes a new attachment figure (Fonagy, 2001). In these cases, clients' carry the memory of the therapist with them for many years after therapy has ended, and this may help them to handle times of distress in the future. If horse assisted psychotherapy also helps to heal clients through a therapeutic relationship, also the horse may become such an inner object or attachment figure that clients' will keep in their memories after the end of therapy. However, no research has investigated how the horse is experienced many years after the end of horse assisted psychotherapy (Schultz, Remick Barlow, & Robbins, 2007; Shultz, 2005). To fill this gap in the literature, the aim of the present study was to investigate how former clients from horse assisted psychotherapy experienced the horse several years after psychotherapy was completed.

# Method

#### **Participants**

A convenience sample was used with the following inclusion criteria: experience of horse assisted psychotherapy, and at least 15 years passed since end of treatment. Names of former patients were provided by a treatment center and efforts were made to find contact information to them. All those who were approached agreed to participate. The sample consisted of five individuals (all females; typically, horse assisted psychotherapy in Sweden only includes female patients) who had participated in horse assisted psychotherapy at one and the same Swedish treatment center, where MT had previously been employed. All participants at the start of treatment had psychosocial problems, including psychiatric diagnoses such as ADHD, Asperger's syndrome, and depression. Several of the informants had lived with negligent parental care, and some had experienced severe trauma in interpersonal relations. Several participants had also suffered from substance abuse and been involved in delinquent activities, which were part of the reason to enroll them in treatment.

Participants had stayed at the treatment center between one and a half to three years (two years on average). The informants were between 15 and 16 years old at the start of treatment and between 18 and 19 years at the end. At the time of the interviews, the informants were between 31 and 37 years of age. At that time, all participants had a well-functioning life, with employment or ongoing training, and their own residence. One participant had had contact with a psychologist for some time after treatment, and one was still in contact with psychiatry.

#### The treatment and treatment setting

The horse assisted psychotherapy that the informants had undergone at the treatment center is called The Frossarbo Therapeutic Model (FTM) (Forsling, 2003). This model is based on Equine Assisted Psychotherapy (EAP) in which treatment is a collaborative effort between a therapist, a horse, and a horse professional working with the client (Hallberg, 2008). In EAP, clients learn about themselves and others by participating in activities with the horses, and then processing (or discussing) feelings, behaviors, and patterns with their therapist. Individual therapy encounters between therapist and client could take place anytime and anywhere, whenever an opportunity for talking would arise during the daily work, but also in weekly classes where discussion of personal issues were not only allowed but also encouraged. In FTM, psychodynamic theory has been added as a conceptual base for treatment, which is also carried out in a therapeutic community. The clients resided at the treatment center, where there was a stable with approximately 10 trotters which were trained and tended to by the clients together with the staff. The horses were used as co-therapists in the treatment. This means that the horse was viewed not as on object, but as a person who interacts with the therapist. The horse has many good qualities, but sometimes difficulties arise that need to be dealt with. Through the work with the horse a therapeutic meeting ground emerged, where a conversation could take place between clients and therapists. The psychotherapy conversations thus often occurred in the stables or in the horse wagon, when the therapist and the girl drove the horse together, and the conversations arose and proceeded naturally. The method also included a horse tender education where the clients got to learn about horses but also about interplay and understanding oneself and others.

# Procedure

The participants were initially contacted by mail and asked to take part in the study. All agreed to participate. The interviews were carried out in the homes

of the participants or at a place of their own choosing. The interviews were semi-structured and included four areas that were covered in all interviews. These areas were: the horses' significance for the individuals own problems, the horses' significance for the relations to other people, the relation to the horse, and the memory and experience of the horse today. The interviews were carried out by MT with supervision by JN and JC, and the analysis was carried out jointly by all authors in a spirit of mutual respect. The evolving result was discussed and challenged with the aim of reaching consensus between the authors.

# Analysis

An inductive thematic analysis was chosen to analyze the interviews (Hayes, 2000; Langemar, 2008). Thematic analysis is a suitable type of analysis for studying psychological and social phenomena, and an inductive approach issued to explore an area, rather than test the fit of preconceived ideas (Langemar, 2008). In this way, inductive analysis may also control for preconceptions. Thematic analysis aims at developing so-called 'themes' that summarizes the data. The process is conducted in several steps. The first four interviews were transcribed verbatim, and then read through several times in order to get a good understanding of the content. The transcribed interviews were sent to the informants for acceptance. The parts of the interviews regarded as relevant to the research question were then divided into meaning units that were given names ('codes'). For example, the excerpt 'Like I've previously said, before I had no boundaries at home but through the responsibility for the horse then ...' was considered a meaning unit and coded as 'responsibility'. The codes were then grouped into subcategories based on similarity. For example, codes such as 'always there', 'experienced an inner calm', 'self-confidence', and 'breaking patterns' were placed under the subcategory 'the horse's significance in the relationship'. These subcategories were subsequently sorted into three main categories, also based on similarities ('relations', 'inner strengths', and 'coping strategies'). To examine if the final main categories were sufficient to encompass all of the material, the fifth interview was analyzed. No change had to be made in regards to the main categories. This indicated that the analysis had reached saturation, that is, that no more data was needed. The three subcategories were finally summarized in a core category which was named 'a healing relation'. The study's participants were given the opportunity to comment on the final result (a so-called 'member check'). The participants stated that the result accurately captured their experiences during treatment and that they were happy to have been able to take part in the study, with the hope that it may contribute to other people getting the same help that they got. The member check did not call for any changes of the results.

# The authors' preconceptions

MT is a certified psychotherapist with several years of experience working with horse assisted psychotherapy. She had met the participants during their time at the treatment center as she worked there at the time. However, she had not been part of their treatment. MT expected that the study's results would show that the horses had had a positive effect and were of significance to the participants. JN and JC are PhD psychologists with experience from qualitative research related to psychotherapy. JC is also a certified psychotherapist. JN and JC expected that the horses would be perceived as significant to the participants at the time of the interviews.

# **Ethical perspectives**

The study was conducted in compliance with principles of research ethics of the Swedish Research Council (Vetenskapsrådet, 2002, 2011). The informants were initially informed via mail about the purpose of the study and about their right to discontinue their participation whenever they wanted to. This information was also repeated at the time of interviewing. Participants were guaranteed confidentiality and that their interviews would be de-identified.

# Results

The analysis resulted in 12 sub-categories that were subsequently merged into three main categories, finally resulting in one core category that summarized the analysis (see Figure 1). In the following, the main categories are presented with their respective sub-categories, followed by a presentation of the core category.

#### Main category 1: Relationships

The informants all described that the horse was important to making them stay and participate in treatment. Further, they described how they, through the responsibility given and felt toward their horse, developed a sense of significance. Together with the horse, difficult emotions could be let out and be processed, which previously had not been possible. The informants could, through the horse, begin to build trust toward the staff that subsequently resulted in important lasting relationships. One informant said: 'It was like talking through the horse in some way. I thought all adults were idiots [...] the horse could channel somehow, the emotions could go through him'

#### Sub category 1.1: A reciprocal relationship

The relationship toward the horse was described by the informants as crucial for a positive change to be possible. The horse was a great security and someone who was always there, and who would never betray them. The horse was



Figure 1. Graphical display of the results (core category, categories, and sub categories).

significantly meaningful to the informants, and the informants also felt that they were significantly meaningful to the horse in return. Several of the informants described that they felt needed by the horse, and therefore a strong sense of responsibility emerged in them. One informant stated:

I had had no restrictions at home, but through the responsibility for the horse one got, well, if I wouldn't get out of bed, for example, if I had the stable duty, then he wouldn't get any food! These consequences do occur.

The horse was also described as someone who took care of the informants, and also as someone from whom one could seek comfort and strength. One informant expressed how she perceived that her horse had helped her to express sadness and comforted her: 'All my life I've had a tough time showing that I'm sad, like to show myself weak, and then, just to sneak into the stables and sit and cry in the horse box as a help on the way...'

A reciprocal care was described between the informants and the horse. One informant said: 'he was there for me and I was there for him'. Sometimes the horse was described as large and dangerous, but not to the informants. They were the ones who could handle the horses. The horses listened to them. The informants described that they had a special connection with the horses and that they understood each other. For example, the horse was described as 'my

best friend', 'my security', 'almost like my boyfriend', 'my everything'. One informant described how this reciprocal relationship made her able to tend to this big and strong creature: 'It's so cool with horses, to manage, even though one doesn't manage it because one is strong, but because one gets a relationship, trust and all that'.

The relationships have been lasting and the informants have in different ways followed their horses even after the time of treatment, for example by visiting the horse regularly for some time after the treatment had ended.

#### Sub category 1.2: The horse's significance in the treatment

All the informants described that what had been crucial for them to take part in the training was that there were horses there. They all had previous horse experience and thought of horses in a positive way. They described feeling unsafe and much stressed inside at the beginning of treatment. However, together with the horse they experienced a sense of calm and that a sense of well-being emerged. Thus, they often sought out the horses and stables. The horses were like great and warm friends: 'When I think about the horse I think of gratefulness and love'. The horses functioned as a bridge between the informants and the staff, and helped them to become receptive to the staff's care. The relationship to the horse would lead to a conversation with the staff where the informants could eventually open up:

when we rode in the carriage behind the horse we could be talking about the horse and then begin talking about me [...] and what would not have happened if we hadn't begun talking about the horse because then I would've been, ksssch, spikes out!

There was a voiceless communication with the horse when the informant cared for and tended to the horse. These moments were described as serene and the informants became calm when they were with their horses. Destructive patterns could also be disrupted and a functioning day to day life could emerge through the horses. The daily routines with the horses at central stage attracted participation. Due to the bond between them a sense of being important and needed emerged in the informants which contributed to a sense of responsibility. Through the horse, they learned to endure different fears. For example, one informant described how she learned not to flee from setbacks and conflicts, but decided to stay and handle difficult situations, because she did not want to leave her horse. Another example concerned an informant who noticed that the horse was scared and that she was able to handle her own fear in order to calm the horse. Together with the horse, she felt less lonely and therefore it became possible to endure. One informant stated: 'I would never blow him off, if I would have been somewhere else and homesick I would have just left! There was a freedom there, so I could have, but then he was there'. By spending time with different horses, some of the informants described that they got the opportunity to develop a greater perceptiveness toward others and the self, through the interplay with the horses and perceiving how they were all different.

Several individuals described that their self-confidence has increased through the handling of the horse.

# Sub category 1.3: The relations to the staff via the horse

The informants distanced themselves to the staff at the beginning of treatment. Several of the informants described a sense of distrust and disinterest toward them. For example, one informant said: 'I thought: What are they smirking at?! Like, why are they so servile? I don't remember when that changed, but suddenly I didn't feel like that any more and then it was just nice'. Through the joint responsibility for the work with the horses, a work on equal terms for the informants and the staff, a trust began to grow. The informants described that the staff that also worked with the horses were the staff with whom they developed close relationships. Several individuals described how they experienced a sense of being validated by the staff, in the way that their emotions and opinions were understood. Through seeing how the staff handled the horses with love and respect, a trust grew: 'with the staff I remember, like, they were so different compared to where I've lived before, that hierarchy wasn't there, that it was them and us, no, we worked together!'

# 1.4. Sub category: From loneliness to a sense of belonging

The informants described that through the daily work with the horses, a strong sense of belonging emerged between them and the other individuals present in the stables. Several of the informants underline that it was the joint responsibility for the horses that led to feeling a sense of 'us', and that the staff and the informants worked on equal terms. Through living together, a sense of belonging emerged between them. 'We girls became family', one informant described. The informants described situations where they got joint experiences, i.e., at competitions with the horses, through traveling together or in their down-time at the treatment center. One informant said: 'a sense of community was when we sat outside the stables in sweaty socks, smoking, with the helmet off'. The strong bond between the informants and the horse, to not feel lonely, was also described as a sense of 'us' by the informants. 'It was us! Me and him against the world!', *as* one informant described it.

# Main category 2: Inner strengths

This main category contains sub-categories which describe inner strengths that the informants got from their time with the horses. They all described that they changed significantly during the placement. Positive emotions, such as safety, happiness, and warmth got increasingly more prominent in their lives. A sense of 'accomplishing' became more frequent in their stories: 'I was calm and liked it there, it was so undemanding in some way. You're there and you feel able, you feel better, you feel that you grow as a person', as one informant put it.

# Sub-category 2.1: Sense of safety

The informants described that the sense of safety was something which they often experienced together with the horse. They sought out the horse in the stable when they felt sad or anxious. Several of them described that it was the fact that the horse was always there that provided a sense of safety. One informant expressed:

Then I didn't go home on the weekends but stayed in the stable and was responsible for the morning feeding, in order to be with the horses. I grew quite a lot then. I kind of cast aside the bad life for the sense of security in the stable.

One of the informants disclosed that sometimes when she was sad she would lie there, in the horse's box, knowing he could never do her harm. Another informant described that nowadays she can feel a sense of calm and safety only thinking about her horse. The treatment center became associated with positive emotions for the informants to the extent that they have saved all their memories from these times, such as photos and diplomas from the horse tender education they received there. Several of them disclosed that they still have these memories posted on the walls in their homes. Through the horse, a sense of security in regards to the staff emerged. Some of the staff have been there for the informants long after the treatment finished. Some are still there. Some described it as a great sense of safety to know that they are still there. One informant described it as 'a life line'.

#### Sub category 2.2: Self-confidence

The majority of the informants described that they got a greater sense of self-confidence through the horses. They described that their faith in their ability to withstand difficulties has been magnified through the interaction with the horses. One informant said:

I still regard it to be one of the most important periods in my life. So much happened during that time, I progressed a lot, I got self-confident, I learned so much, not just about the horses but about life over all.

They also described discovering being able to do things they would not have previously thought possible: 'The sense of being able to tend to another being, as a broken black little girl, kind of, and such a large creature too', as one informant explained. The informants described that their self-confidence was strengthened by them noticing how important they were to their horses. That the horses showed them this by for example neighing to the sight of them or by calming when handled:'I got self-confidence by her [i.e., the horse] showing that she felt better and the more I tended to her the happier she became. She behaved differently towards me than towards others'.

The horse tender education which the informants participated in is described as another arena where self-confidence was strengthened. They all had bad experiences from school and non-functioning school situations, when arriving at the treatment center. Via the horse tender education, which focused on their

320 👄 M. TUUVAS ET AL.

interest - the horses - the informants realized that they could manage to study. They proudly describe their diplomas from the completed training, exemplified with this statement from one of the informants:

If I hadn't received the horse tender education I would only have had the image of how eight grade was, and ninth grade, and it wasn't very good. It was an important piece! I don't use the horse tender education to apply for employment, but more like a knowledge that I can manage to study

# Sub category 2.3: Motivation

The category motivation concerns what made the transformation possible. All the informants described that making a choice was important, that they on some level got to say yes to the treatment. They all described that it was the horses that were crucial to their compliance. One informant stated:

I remember that I had decided that I didn't want to be there, and then I came to the horse, he was standing at the far edge of the paddock and then he ran to me and didn't want to leave my side and held his muffle against me, then I decided and said: I'm coming here! When should I arrive?

Through the relationship with the horse, a motivation to learn more in order to be able to care for one's horse even better grew. The work with and the training of the horses motivated the informants to a struggle, which led to greater perseverance. Several of them described that it was fun to tend to the horses and that it motivated them to deal with challenges that sometimes could feel a bit intimidating. Such examples could be competitions, driving fast behind the horse, or riding.

# Sub category 2.4: Will to live

Some of the informants described that they placed themselves in situations of life threatening amplitude at the beginning of the treatment. Some of them described being shut down emotionally or that they previously had attempted to commit suicide on several occasions. Some had had alcohol and drug abuse. Through different events with the horses and the staff, they became connected to their will to live. Several informants described that they have their horses to thank for their lives. One informant disclosed that it was through a situation where the horse bolted, which made her scared in a way she had never been before:

Well when I lost control over him, I became scared, and it was good for me because I was rarely scared for my life, because I didn't care much about it, but the times when he bolted I became scared, it was somehow automatic, you get reminded in some way that you actually fear for your life

# Main category 3: Coping strategies

Within this main category, the informants described new experiences which they carry with them today. They described that they now understand themselves

and their needs better. Some described that they, through the treatment, got insight into alternative ways of living in comparison to the way they grew up. Further, all the informants described that through the experiences during treatment, they gained more constructive solutions to problems that occur. One informant described: 'I was used to doing exactly like I wanted and then suddenly, my horse has taught me what I do today, taking responsibility!'

One informant said that she knows that she needs horses in her life to feel well, and she is currently employed to work with horses. Several of the informants described that because of the horse they could build a trust toward the people at the treatment center and that they currently have several good relationships in their lives.

#### Sub category 3.1: Insights and reflections

The informants described that they, through the time at the treatment center, together with the horses and the staff, had received new alternative ways of living. One informant described that she had met a different reality which helped her break old patterns: 'and then I got a true aha-experience. It was the first time I was at a festivity with grown-ups who were sober'.

Some of the informants described that they received insights later in life when thinking back of the horse. They had developed an understanding as to how important the horse was in order to make them start taking better care of themselves. They described a feeling of deep gratitude toward the horse, but also toward the people who decided to place them at the treatment center: Now, in retrospect, I can feel gratitude towards that they saw, that they chose to spend all that money on me, they must've seen that there was a chance, as one informant said. Some of them made reflections concerning the problems they had at the beginning of treatment. They described how their self-image had changed through their interactions with the horse, and how they could see a resemblance between themselves and the horse. Further, they described that they currently have an understanding as to how they felt and behaved at that time. A negative self-image has been replaced with self-compassion. Also, they found a sense of calmness with the horse. They had been scared and lonely and needed someone, but was so let down by adults that they rejected most attempts at contact. The contact with the horses changed this.

#### Sub category 3.2: Executive skills

The informants described that the experience and knowledge they attained together with the horse was of great use to them. Examples of this, which are previously mentioned, are learning to take responsibility, putting routines in place, learning to plan, learning to deal with consequences. Today they all have a functioning day to day life. One informant described that she learned to withstand frustration and how to stress less, which enables her to make wiser decisions today, and not make impulse decisions: 'the calm, one has to be calm in order for one's day to day life to work'.

Through working with the horse, some of the informants described that they learned plenty of useful things for parenthood. The structure in the stables resembles how one cares for a home and a child. One needs to be able to plan and see to everyone's needs. By being helped by horses themselves, the informants now try to give their children the same possibilities to have horses around. They want to give to their children that which made themselves feel well and that which they greatly valued. Several of them described that they now have a faith in their abilities to study through the horse tender education.

# Sub category 3.3: Self-care

Several of the informants described having difficulties to seek out adults for help, but instead used the horse when they were sad or anxious. They sought out the stables and with the horse they felt less lonely as this statement exemplifies:

I cared for myself by staying, I could find, could seek out myself somewhere in all of that there, where I was. And who I was and what I liked. It was the horses! It was not really the other person I was, not really!

The informants described that they are now better at asking for and receiving help from their surroundings when they need it; they turn to friends, boyfriends or parents when they need to talk to someone.

# Sub category 3.4: Handling of stress-inducing situations

The informants disclosed that they have used the experiences from the treatment center during different times of crisis after their time in treatment. For example, one informant said that she, at a time of personal crisis, when she had become burnt out and depressed, found a strategy to escape the situation she was in. She thought about what had been good for her at the treatment center and built a similar structure around her. She used being needed by someone: 'What I'm doing now is a direct translation of what happened at the treatment center, then I got that responsibility, to care for someone. Like, it didn't revolve around me, but I had to get up in the morning'.

The informants described that they in difficult situations, after the end of treatment, have been able to turn to staff that they have had good relations with, and that they through an email or a phone call have been able to get the support they felt they needed. This close relationship with the staff seemed to have been an effect of their joint work and care for the horses. They also described that they understand their needs better and to that effect also can make healthier choices, such as avoiding relationships which are not sound. They described learning different techniques to manage stressful situations, such as finding a sense of calm by visualizing the horse, or in order to get strength in situations where they want to give up by thinking of how they struggled with the horses and how well it turned out. They also described different emotional crises that they've gotten through due to the fact that they today have greater inner safety and several functioning relationships around them. One of the informants said

that she, through an increased sense of safety and satisfaction with her life, had the ability to deselect situations which could have placed her at risk: 'I had so much, my life was now in order'.

#### Core category: A healing relationship

The core category described what is most obvious and conclusive from the informants' experiences. A healing relationship is what best describes this. The informants described how the horses provided a sense of safety, were always present, caring creatures, which provided a sense of security, comfort, and recognition, and never let them down. One of the informants described it thus:

all the times I was with him, he became like a vent, to stand there and cry in the horse box, to just receive, that specifically – just receive – and not have to concentrate on anything else, but just brushing and tending to him, that was important, maybe the most important part.

In addition, they described that they learnt how to withstand difficult emotions, and that that became possible due to the fact that they never felt alone with the horse. In the relationship with the horse they experienced that they were important and significant to him, and that lead to feeling responsible for him. They disclosed in the interviews how the life with the horse made it possible for a trust toward the therapists to grow. As a result of the interactions between the horse, the therapist, and themselves, self-confidence grew and a motivation for amongst other things education, and daring to try new challenges in life.

### Discussion

Many years after completion of treatment, the horses were still remembered as the most important individuals in the informants' lives during that time. The informants attributed their improvements to the healing relationships that they developed with the horses. Through these relationships, the informants developed a sense of security that helped them to trust other people. It also helped them to develop the necessary inner strengths and coping skills that they needed to better deal with the problems they faced in their lives.

These findings are in line with previous research that found that patients in horse assisted psychotherapy and their family members attributed improvements from treatment to the patients' relationship to the horses (Bachi et al., 2011; Berget & Braastad, 2011; Berget et al., 2008, 2011; Bizub et al., 2003; Burgon, 2003; Kendall et al., 2015; Knapp, 2013; Shultz, 2005; Trotter, 2012; Trotter et al., 2008; Whittlesey-Jerome, 2014). The present findings thus add to previous research in showing that patients also keep these views at follow-up several years after termination of treatment.

The experienced importance of the horses can be explained from several different theoretical perspectives in psychotherapy. Object relations theory emphasizes the development of good inner objects (Gomez, 1997; Klein, 1984).

From this perspective, the horses – much as human psychotherapists – are still after several years parts of the informants' inner worlds as helpers who can sooth and comfort them (i.e. the horse has been internalized and now functions as a good inner object). Further, patients' relationships to horses differ from those to humans in that they are purely non-verbal. It may thus resemble the primary relationship between a baby and caregiver, and that could have a deep impact on future development (Stern, 2005). Attachment theory describes that attachment styles are consolidated at an early age in this relationship (Ainsworth et al., 2014; Bowlby, 1988; Fonagy, 2001; Wennerberg, 2010). Research on attachment has shown that when the attachment behavior is activated, infants stop exploring the world and instead focus on seeking security (Ainsworth et al., 2014). The horses – again, much like human psychotherapists – seemed to have had a very important part to fill in changing the informants' attachment styles and enabled them to further explore their world and relationships. The treatment provided the informants with a new relational experience – possibly with the horses serving as a secure base and a safe haven (Ainsworth et al., 2014; Bowlby, 1988; Broberg, Risholm Mothander, Granqvist, & Ivarsson, 2008) – through which inner working models could change. It seems that the relationship with the horse helped to build new and more developed working models, also including a feeling of a mutual relationship.

Psychotherapy research suggests that the relationship between a therapist and patient is more important for outcome then technique (e.g. Wampold & Imel, 2015). The present results suggest that such a helpful therapeutic relationship can be formed also to a horse. One way to conceptualize the relationship is the therapeutic alliance, and research has indeed shown that (patient-rated) alliance is predictive of psychotherapy outcome (Duncan et al., 2010). Bordin (1994) suggested that the therapeutic alliance consists of three parts: agreement on goal (what is to be achieved), agreement on task (how it is going to be achieved), and a bond (client's trust and confidence in the therapist). Research has also shown that the negotiation between therapist and client about the alliance is also predictive of outcome (Safran & Muran, 2000). The informants in the present study described the relationship to the horses as including the bond-part of the alliance (see main category 1), as defined by Bordin (1994), but it is not clear to what extent this non-verbal relationship also included what Bordin referred to as agreement on tasks and goals. However, through the common work with the horses, an alliance consisting of all these three parts seems to have developed with the staff (see primarily sub categories 1.3 and 1.4).

Several proposals can be made to explain why horses make good companions in treatment. Humans tend to perceive horses as caring and empathetic (Hallberg, 2008). Horses are also highly social creatures, heard-oriented, and live close together in highly organized and relatively sophisticated family groups (Hallberg, 2008; Knapp, 2013; Wathan et al., 2015). Importantly, it has been noted that horses in the wild tend to form strong dyadic friendship bonds ('pair-bonding'). Such pairs spend as much time together as possible and seem to trust and feel safe with each other (Hallberg, 2008; Knapp, 2013; Waring, 2003; Wathan et al., 2015). This may make them well suited to pair-up with patients in a treatment center.

The present results indicated that the horses were tuned to the informants' emotional needs. This is in agreement with psychotherapy research that shows that therapists' facilitative social skills are predictive of outcome in psychotherapy (e.g. Anderson, Crowley, et al., 2016; Anderson, McClintock, et al., 2016). It is also corroborated by research on horse behavior. For example, studies have shown that horses not only recognize other horses' facial expressions (Wathan et al., 2015), but also human facial expressions (Smith et al., 2016). Indeed, horses have a high sensitivity for detecting affect also in humans and adapt themselves to those feelings (Frewin & Gardiner, 2005; Hallberg, 2008; Knapp, 2013), possibly because they in the wild tend to be prey and thus have developed a high sensitivity for detecting affect in predators, including humans (Frewin & Gardiner, 2005; Hallberg, 2008; Knapp, 2013).

The informants also interacted with other humans during their time at the treatment center. It seems that the relationship to the horse enabled these relationships. Indeed, Forsling (2003) has pointed out that many young men and women often show strong resistance to treatment. The horses seemed to have been crucial to break through such resistance in the present study. Still, it is not clear to what extent those interactions also contributed to treatment outcome in their own right.

Although this study only included a small sample, the analysis was saturated. Still, only informants who had improved significantly from treatment were included. Also, this study focused on the memory of the horse several years after treatment had been completed, meaning that no strong conclusions about what actually transpired during treatment can be made. Future studies should focus also on those patients who did not benefit from treatment to find out to what extent their experiences with the horses differ from those in the present study. More information is also needed about the impact of other aspects of the treatment settings (i.e. other humans, including the psychotherapists) contribute to the treatment outcome in horse assisted psychotherapy.

This study showed that the horses were indeed remembered by former patients in horse assisted psychotherapy more than 15 years after treatment had ended. More specifically, the horses were remembered as significant others with whom they had – sometimes for their first time – been able to develop a mutual and trusting relationship. This is in line with psychotherapeutic theories of healing that focus on how the psychotherapist becomes a so-called 'good inner object' or attachment figure to the patient. In these cases, the horses took that place. The clinical implications from this are to provide stronger support to the use of horse assisted therapy, especially with at risk youth.

326 👄 M. TUUVAS ET AL.

### Acknowledgment

The authors would like to extend their thanks to Rebecca Lennartsson who did a wonderful job in helping with translations from Swedish to English.

### **Disclosure statement**

No potential conflict of interest was reported by the authors.

# **Notes on contributors**

*Marianne Tuuvas* is a licensed psychotherapist with experience from horse-assisted psychotherapy and president of the Swedish Association for Relational Psychotherapy.

*Jan Carlsson*, PhD, is a licensed psychologist, licensed psychotherapist, and supervisor; also an assistant professor in clinical psychology. The author's interests are in psychotherapy research and psychotherapy training.

*Joakim Norberg*, PhD, is a licensed psychologist and also an assistant professor in neuropsychology. The author's interests are in psychotherapy research and psychotherapy training.

# References

Ainsworth, M. D. (1967). Infancy in uganda. Baltimore, MD: Johns Hopkins.

- Ainsworth, M. D., Blehar, M. C., & Waters E., Wall S. (2014). *Patterns of attachment*. New York, NY: Psychology Press.
- Anderson, T., Crowley, M. E., Himawan, L., Holmberg, J. K., & Uhlin, B. D. (2016). Therapist facilitative interpersonal skills and training status: A randomized clinical trial on alliance and outcome. *Psychotherapy Research*, *26*, 511–529. doi:10.1080/10503307 .2015.1049671
- Anderson, T., McClintock, A. S., Himawan, L., Song, X., & Patterson, C. L. (2016). A prospective study of therapist facilitative interpersonal skills as a predictor of treatment outcome. *Journal of Consulting and Clinical Psychology*, *84*, 57–66. doi:10.1037/ccp0000060
- Bachi, K., Terkel, J., & Teichman, M. (2011). Equine-facilitated psychotherapy for atrisk adolescents: The influence on self-imagine, self-control and trust. *Clinical Child Psychology and Psychiatry*, 17, 298–312. doi:10.1177/1359104511404177
- Berget, B., & Braastad, B. O. (2011). Animal-assisted therapy with farm animals for persons with psychiatric disorders. *Annali dell'Istituto Superiore di Sanità*, *47*, 384–390. doi:10.4415/ANN\_11\_04\_10
- Berget, B., Ekeberg, Ø., & Braastad, B. O. (2008). Animal-assisted therapy with farm animals for persons with psychiatric disorders: Effects on self-efficacy, coping ability and quality of life, a randomized controlled trial. *Clinical Practice and Epidemiology in Mental Health*, *4*, 9. doi:10.1186/1745-0179-4-9
- Berget, B., Ekeberg, Ø., Pedersen, I., & Braastad, B. O. (2011). Animal-assisted therapy with farm animals for persons with psychiatric disorders: Effects on anxiety and depression, a randomized controlled trial. *Occupational Therapy in Mental Health, 27*, 50–64. doi: 10.1080/0164212X.2011.543641

- Bizub, A. L., Joy A., & Davidson L. (2003). "It's like being in another world": Demonstrating the benefits of therapeutic horseback riding for individuals with psychiatric disability. *Psychiatric Rehabilitation Journal*, *26*, 377–384. doi:10.2975/26.2003.377.384
- Bordin, E. (1994). Theory and research on the therapeutic alliance: New directions. In A. Horvath & L. Greenberg (Eds.), *The working alliance: Theory, research, and practice* (pp. 13–37). Oxford: Wiley.
- Bowlby, J. (1988). A secure base: Clinical applications of attachment theory. London: Routledge.
- Broberg, A., Risholm Mothander, P., Granqvist, P., & Ivarsson, T. (2008). *Anknytning i praktiken, Tillämpningar av anknytningsteorin* [Attachment in practice, applications of attachment theory]. Stockholm: Natur och Kultur.
- Burgon, H. (2003). Case studies of adults receiving horse-riding therapy. *Anthrozoös, 16*, 229–240. doi:10.2752/089279303786992099
- Castonguay, L. G., & Beutler, L. E. (Eds.). (2005). *Principles of therapeutic change that work*. New York, NY: Oxford University Press.
- Chandler, C. K. (2012). Animal assisted therapy in counseling (2nd ed.). New York, NY: Routledge.
- Duncan, B. L., Miller, S. D., Wampold, B. E., & Hubble, M. A. (Eds.). (2010). *The heart and soul of change* (2nd ed.). Washington, DC: American Psychological Association.
- Fonagy, P. (2001). Attachment theory and psychoanalysis. London: Karnac Books.
- Fonagy, P., Gergely, G., Jurist, E. L., & Target, M. (2002). Affect regulation, mentalization, and the development of the self. New York, NY: Other Press.
- Forsling, S. (2003). The girl and the horse. Gauteng: Book Art Productions.
- Freud, S. (1917/2001). The complete psychological works of Sigmund Freud Vol. 16: "Introductory Lectures on Psycho-Analysis, Part 3". Great Britain: Random House Vintage Classics.
- Frewin, K., & Gardiner, B. (2005). New age or old sage. A review of equine assisted psychotherapy. *The Australian Journal of Counselling psychology*, 6, 13–17. Retrivied from http://www.marleysmission.com/pdf/new\_age.pdf

Gomez, L. (1997). An introduction to object relations theory. London: Free Association Press.

- Hallberg, L. (2008). Walking the way of the horse, exploring the power of the horse-human relationship. Bloomington: iUniverse.
- Hayes, N. (2000). Doing psychological research. Buckingham: Open University Press.
- Kendall, E., Maujean, A., Pepping, C. A., Downes, M., Lakhani, A., Byrne, J., & Macfarlane, K. (2015). A systematic review of the efficacy of equine-assisted interventions on psychological outcomes. *European Journal of Psychotherapy & Counselling*, 17, 57–79. doi:10.1080/13642537.2014.996169
- Klein, M. (1984). *Love, guilt and reparation and other works 1921–1945*. New York, NY: The Free Press.
- Knapp, S. (2013). More than a mirror: Horses, humans, and therapeutic practice. Marshall, NC: Horse Sense of the Carolinas.
- Langemar, P. (2008). *Kvalitativ forskningsmetod i psykologi att låta en värld öppna sig* [Qualitative research methods – To let a world open up]. Stockholm: Liber.
- McCormick, A., & McCormick, M. D. (1997). *Horse sense and the human heart*. Deerfield Beach, FL: Health Communications.
- Norcross, J. C. (2010). The therapeutic relationship. In B. L. Duncan, S. D. Miller, B. E. Wampold, & M. A. Hubble (Eds.), *Heart & soul of change in psychotherapy* (2nd ed., pp. 113–141). Washington, DC: American Psychological Association.
- Norcross, J. (Ed.). (2011). *Psychotherapy relationships that work: Evidence-based responsiveness* (2nd ed.). New York, NY: Oxford University Press.

328 👄 M. TUUVAS ET AL.

- Proops, L., & McComb, K. (2012). Cross-modal individual recognition in domestic horses (Equus caballus) extends to familiar humans. Proceedings. Biological sciences / The Royal Society, 283, 1–8. doi:10.1098/rspb.2012.0626
- Proops, L., McComb, K., & Reby, D. (2009). Cross-modal individual recognition in domestic horses (*Equus caballus*). *Proceedings of the National Academy of Sciences*, 106, 947–951. doi:10.1073/pnas.0809127105
- Safran, J. D., & Muran, J. C. (2000). *Negotiating the therapeutic alliance*. New York, NY: Guilford.
- Schultz, P. N., Remick Barlow, G. A., & Robbins, L. (2007). Equine-assisted psychotherapy: A mental promotion/intervention modality for children who have experienced intrafamily violence. *Health and Social Care in the Community, 15*, 265–271. doi:10.1111/ j.1365-2524.2006.00684.x
- Shultz, B. (2005). The effects of equine-assisted psychoterapy on the psychosocial functioning of at-risk adolecents ages 12–18 (Unpublished master thesis). Denver Seminary, Denver, CO. Retrieved from http://www.keulseweg.nl/media/onderzoek1.pdf
- Slade, A. (2008). Attachment theory and research: Implications for the theory and practice of individual psychotherapy with adults. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications* (pp. 762–782). New York, NY: Guilford Press.
- Smith, A. V., Proops, L., Grounds, K., Wathan, J., & McComb, K. (2016). Functionally relevant responses to human facial expressions of emotion in the domestic horse (Equus caballus). *Biology Letters*, 12(2), 1–4. doi:10.1098/rsbl.2015.0907.
- Stern, N. D. (2005). Ögonblickets psykologi, om tid och förändring i psykoterapi och vardagsliv [The psychology of the moment, on time and change in psychotherapy and everyday life]. Stockholm: Natur och Kultur.
- Traeen B., Moan, K., & Rosenvinge, J. H. (2012). Terapeuters opplevelse av hestebasert behandling av pasienter med spiseforstyrrelse [Therapists experience of equine-based treatment for patients with eating disorder]. *Tidskrift för norsk psykologförening, 49*, 351–557. Retrivied from http://www.psykologtidsskriftet.no/pdf/2012/348-355.pdf
- Trotter, S. K. (2012). Harnessing the power of equine assisted counseling : Adding animal assisted therapy to your practice. New York, NY: Routledge.
- Trotter, S. K., Chandler, C. K., Goodwin-Bond, D., & Casey, J. (2008). A comparative study of the efficacy of group equine assisted counseling with at-risk children and adolescents. *Journal of Creativity in Mental Health*, *3*, 254–284. doi:10.1080/15401380802356880
- Vetenskapsrådet. (2002). Forskningsetiska principer inom humanistisk-samhällsvetenskaplig forskning [Principles for research ethics in humanistic and social research]. Stockholm: Vetenskapsrådet. Retrivied from http://www.codex.vr.se/texts/HSFR.pdf
- Vetenskapsrådet. (2011). *God forskningssed* [Good ethical conduct in reseach]. Stockholm: Vetenskapsrådet. Retrivied from https://publikationer.vr.se/produkt/god-forskningssed

Wampold, B., & Imel, Z. E. (2015). The great psychotherapy debate. New York, NY: Routledge.
Waring G. H. (2003). Horse behavior. Norvich, NY: Noyes Publications/William Andrew Pub.
Noyes Series in Animal Behavior, Ecology, Conservation, and Management.

- Wathan, J., Burrows, A. M., Waller, B. M., & McComb, K. (2015). EquiFACS: The equine facial. Action coding system. *PLoS One, 10*, e0131738. doi:10.1371/journal.pone.0131738
- Wennerberg, T. (2010). Vi är våra relationer, om anknytning, trauma och dissociation [We are our relationships, on attachment, trauma and dissociation]. Stockholm:. Natur & Kultur.
- Whittlesey-Jerome, W. K. (2014). Adding equine-assisted psychotherapy to conventional treatments: A pilot study exploring ways to increase adult self-efficacy among victims of interpersonal violence. *The Practitioner Scholar: Journal of Counseling and Professional Psychology, 3*, 82–101. Retrieved from http://www.keulseweg.nl/media/onderzoek11.pdf