

Psychotherapy Incorporating Equines: Addressing Complex Trauma in Children and Adolescents

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Biography

1985 Old Dominion University Bachelor of Science in Counseling

1989 Regent University Master of Arts in Counseling

1999 National Certified Counselor (NCC)

2002 Licensed Clinical Mental Health Counselor (LCMHC)

2008 Rostered provider of trauma-focused cognitive behavioral therapy

2013 Certified therapeutic riding instructor with the Professional Association of Therapeutic Horsemanship Intl (PATH)

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Learning Objectives

- This workshop is designed to help you:
 - 1. Understand the key concepts of complex trauma and how to identify treatment needs/evidence-based treatment goals.
 - 2. Understand how equine-assisted therapy can uniquely address complex trauma
 - 3. Review a specific evidence-based program design to address complex trauma with psychotherapy incorporating equines.

Need for Treatment

- **One-half of mental disorders** develop by age 14, strongly associated with lower educational achievement, substance abuse, and violence (Kessler et al., 2007)
- **A little over one in four** youth seeking mental health Tx are exposed to trauma and Dx with PTSD (Huang et al., 2017)
- **Prolonged trauma** impacts neurodevelopment, impacts IQ and regulation of emotions (National Child Traumatic Stress Network, 2020)

Complex Trauma

- **Exposure to multiple traumatic events, frequently severe and pervasive**
 - Abuse/profound neglect that impacts development
 - Invasive and interpersonal
 - Interrupts the formation of self/ability to develop secure attachment (NCTSN, 2020)
- **Adverse caregiving/life-long impact**
 - Difficulty with attachments/positive internal constructs
 - Chronic health problems, lower education/income
 - Damage to neurodevelopment/cognitive function
 - (Fonagy, et al.,2007; Kearns-Bodkin & Leonard, 2008;Lanier et al., 2017; Teicher, et al., 2012)

Program Focus

- Incorporates **emerging evidence for Tx**, especially for psychotherapy incorporating equines
- **Attachment theory** as the theoretical framework for interventions
- Review types of equine-assisted therapy to propose a program for complex trauma Tx
- Consider the **Attachment, Regulation, and Competency (ARC)** framework for structured interventions.

(Blaustein & Kinniburgh, 2019)

Traditional Treatment for Trauma

- **Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)** the gold standard for PTSD (Cary & McMillen, 2012)
- Traditional (talk) Tx may **seem unsafe**, survivors overwhelmed (Buck et al, 2017)
- **Chronic trauma** can leave the stress response on continually rendering talk therapy ineffective; somatic regulation is needed (van der Kolk & McFarlane, 2012)
- **Non-verbal approaches** to help therapeutic relationship and safety/trust can improve cognitive function/affect regulation (Bray et al., 2017)

Psychotherapy Incorporating Equines(PIE): An Alternative

- **Partners a horse, therapist, and possibly equine handler** as experiential psychotherapy to address mental health
(Mueller & McCullough et al., 2017)
- **Still in its infancy** as evidence-based practice (Lee et al., 2016), but still growing rapidly due to demand.
(Vincent & Farkas, 2017)
- Presence of animals **increases oxytocin** (affiliation), which can lead to reduced anxiety/hyperarousal/aggression and increased trust/empathy.
(Beetz et al., 2012)

Psychotherapy Incorporating Equines(PIE): An Alternative

- **Cortisol** in the horse positively correlates to the child (Yorke et al., 2013).
- Horses provide **safe positive touch** including emotional touching (Denworth, 2015), and **immediate feedback** (attunement) (Earles, et al., 2015).
- **Key mechanism** is the unique dyad in attunement/bonding in the horse-human relationship (Scopa, et al., 2019).

Theoretical Framework: Attachment Theory

- Helps to explain and predict outcomes; **attachment theory** explains the critical component of the horse-human bond, how **deficits of the child are met by the assets of the horse.** (Vincent & Farcas, 2017)
- Attachment to the horse is **similar to a caretaker attachment** and provides a corrective experience. (Vincent & Farkas, 2017).
- **Horse is a secure base/safe haven** for the child needed to attach (Bachi, 2013), and increases ability to **understand others and self** through **affect mirroring** increasing greater body awareness (Chardonnes, 2009).
- **Rebuilding** of personality or sense of self and **transfer of attachment** to people. (Burgon, 2011).

PIE Program and Interventions

- Defining specifics: **groundwork versus riding activities**
(standardization is needed)
- **PIE includes both** which is consistent with attachment theory, physical touch and movement to address lack, and for corrective attachment (Hallberg, 2018).
- Manualized approach: **12-week programs** are more successful than shorter programs (Lee, et al., 2016).
- **Safety, attachment, and regulation** are core issues to address
 - Safety through routines and rituals
 - Clear boundaries by teaching how to behave around the horse
 - Attachment through clinician coaching and modeling affect mgmt. and participant attunement to the horse
 - Body awareness, co-regulation, and rhythm

Treatment Needs

- **Neurochemistry of Trauma and Impact on Development**
 - **MRIs revolutionized** the understanding of how trauma impacts the brain and how to treat it, not just a past event. (van der Kolk, 2014)
 - Understanding **how trauma imprints on the body/brain** is key to understanding treatment needs for healing. (Forbes & Post, 2007)
- **Overview of Trauma**
 - Trauma activates the **mid-brain limbic system** (amygdala) for fight, flight, freeze, and submit. (Blaustein & Kinniburgh, 2019)
 - **Left frontal lobe shuts down** (speech center/reasoning) while right brain visual and sensory) center is activated. Trauma is stored in images.
 - **Loss** of organization, sequencing, cause and effect, and planning
 - Survivors struggle with managing symptoms/inner chaos, with **no learning or growth.** (Pittman & Karle, 2015)

Treatment Needs

- **Brain Development**

- From the “**bottom up**” starting in the brain stem, active at birth
- **Midbrain, limbic system** is the emotions center, activates survival, and key in coping with stress (shaped by use).
- **Mirror neurons** (at the temples) create synchronicity between two people (smile when you see someone smile) and are important for attunement/attachment (Bonini, 2017; Forbes & Post, 2007)
- **Early regulatory interaction** with a caretaker establishes individual ability to regulate and tolerate stress (Schore, 1996)

Treatment Needs

- **Safety Response**

- Children must **feel safe** before any healing can occur.
(Forbes & Post, 2007)
- **The thalamus** sends sensory info to the **midbrain (amygdala)** and **frontal lobes** where it is assessed for survival response; threats will trigger the release of stress hormones. (van der Kolk, 2014)
- The frontal lobes also **judge the sensory information** to determine a false alarm. Balance is needed between the amygdala and frontal lobes to manage stress.
- **Therapeutic strategies** can either start from the **top down** with an awareness of thoughts and cognitive coping, or the **bottom up** in the brain stem with sensory awareness (breathing, muscle relaxation).
- **Trauma Tx should include both strategies** (Pittman & Karle, 2015).

Treatment Needs

- **Trauma Response**

- **Triggers** for trauma activate danger during a false alarm, giving feelings of being a passenger, out of control. (Pittman & Karle, 2015)
- **Disassociation** when overwhelmed/**flashbacks** at same original intensity. (van der Kolk, 2014)
- Somatic symptoms are not understood with the **body-brain disconnect and a lack of awareness of the physical response.**
- **Healing occurs** with sensory integration, being grounded in the present with brain function restored.
- **Prolonged exposure to neurotransmitters** will cause neuron cell death, dendrite shrinkage, and stunting of the development of children. (Leslie, 2002; Rock et al., 2018)

Treatment Needs

- **Body-Brain Connection**

- The **vagus nerve** originates in the brain stem connecting several major organs. (van der Kolk, 2014)
- **Social engagement** makes one feel **seen and heard**, bringing calmness/relaxation/safety.
- Danger brings a cry for help and **no response** creates physical stress internally.
- **Healing occurs** with an ability to create physical self-awareness. (van der Kolk, 2014)

Attachment, Regulation, and Competency

- An evidence-based treatment to provide **a treatment structure** for children who have experienced trauma. (Blaustein & Kinniburgh, 2019)
- Can be applied to **any treatment setting**.
- **Main goal** is for the client to integrate trauma experience rather than remain stuck in the past.
- **Three core concepts:**
 - **Attachment:** establishing routines and rhythms, learning effective responses, and learning attunement
 - **Regulation:** Identify emotions and modulate
 - **Competency:** relational connections explored/developed, self-development, discovery of identity, executive function developed.

Attachment Framework: Dyadic Developmental Psychotherapy

- Child and primary caretaker participate. (Becker-Weidman, 2008)
- Relationship qualities of **PACE** for therapist (Playful, Accepting, Curious, and Empathetic)
- A secure base established for the child to explore feelings and thinking errors, and work through issues of loss.
- Compatible with ARC, which also encourages caregiver participation

Treatment Goals

- **Safety** at home and in the therapeutic milieu: routines.
- Animals are present, there is **no longer danger**/safe touch.
(Yount et al., 2013)
- **Engagement** creates being seen and heard therefore **calmness**.
- Participation of **primary caretaker** as able.
- Coaching and modeling **emotions regulation** (horse and therapist).
- Success and **mastery** in tasks with the horse.

Treatment Goals and Treatment Measures

- **Discovery of self-identity.** Trauma narrative and learning how to thrive!
- **Caregiver goals:** management of affect, attunement (understanding and responding to the child's needs), and effective response (**understanding the role of the past in current functioning and creating appropriate, safe predictable responses**)
- **Pre- and Post-treatment measures:**
 - UCLA-PTSD Stress Reaction Index (PTSD-RI; Steinberg, et al., 2013)
 - Child Behavioral Checklist (CBCL; Achenbach & Rescorla, 2001)
 - The Human-animal Bond Scale which measures the short-term impact of interacting with horses. (HABS; Terpin, 2004)

The Program

- **Twelve weeks**/1.5 hour session each week
 - 45 min equine-assisted activity: sensory (“bottom up” strategies)
 - 45 min office time: CBT processing, psychoed, journal, “top down” strategies
(Pittman & Karle, 2015; van der Kolk, 2014)
- **Intended for use by licensed professionals**
- **Treatment for survivors of complex trauma**
 - Diagnosis of PTSD and a history of chronic trauma
- **Starts with a comprehensive assessment/intake interview (90 min)**
 - Pre-treatment measures are completed before the initial interview
 - Parent: Child Behavior Checklist/PTSD-RI
 - Child: PTSD-RI (with therapist)
 - Child/Therapist: HABS after the first equine session
 - Assess amenability to equine-assisted therapy

PIE Comprehensive Clinical Assessment

- **Interview with parent/child, complete ecomap with child**
- **Information gathered:**
 - Presenting problem/precipitating events
 - Health/behavioral history/medications
 - Psychological/Familial/Social/Developmental dimensions and strengths, needs and risks for each (suicidal/homicidal)
 - **Belief system, survival skills, stress responses, triggers**
- **Assess attachment issues/style with connections in ecomap**
 - **regulation** through stress responses, triggers, and safety
 - **competency** through social skills functioning (ecomap) and identification of personal strengths
- **DSM-5 Diagnosis, case formulation, case plan**
(NCDHHS, 2016: Blaustein & Kinniburgh, 2019)

PIE Comprehensive Clinical Assessment

- Review of symptoms and checklists can bring relief through understanding.
- Assessment will help the parent to understand how the past neglect/abuse impacts their child's current functioning
 - (a primary goal in the ARC framework and Dyadic Developmental Psychotherapy).

(Becker & Weidman, 2008; Blaustein & Kinniburgh, 2019)

Equine Activities

- **First 3 sessions are groundwork** (grooming, leading, driving), establishing connection through Natural Horsemanship.
(Edwards, 2007; Steve Young Horsemanship, n. d.)
- **Remaining 9 sessions** start with 15 minutes of grooming, then 30 minutes of riding
- **Reflections** are made about the feelings/thoughts of the horse and child is encouraged to do the same.
- **Parent is encouraged to observe the first six sessions and/or engage in self-care and participate in the final six sessions.**
- **Presence of the horse creates a release of oxytocin** (Beetz et al., 2012)
 - Increase of relaxation, affiliation, trust, empathy
 - Decreases hyperarousal, anxiety, aggression

Equine Activities

- Horse's presence reminds that **danger is not present** and gives safe touch. (Yount et al., 2013)
- **Immediate feedback** from the horse on emotions increases self-awareness of emotions and physiological responses in the body. (Bachi, 2013)
- **Being seen and heard** by the horse/therapist signals the social engagement system (vegas nerve) creating feelings of calmness, relaxation, and safety. (van der Kolk, 2014).
- Equine-assisted therapy **addresses attachment** in the horse-human bond, **regulation** in grounding and reflecting, and **competency** in building social skills, mastery, and identity. (Blaustein & Kinniburgh, 2019)

Office Time

- **Increasing cognitive awareness** of internal processes/feelings through **CBT strategies**.
- **Building executive function** is an integral part of resolving trauma since it was shut down during the trauma (Pittman & Karle, 2015).
 - Planning, reasoning, and problem solving
- **Identify and challenge thinking errors** gives mastery and increased social skills, connection.
- **Defining self** through the “About Me” workbook also helps to process thoughts and feelings with the thought bubble, feeling id, and trauma narrative.

Office Time

- **Psychoeducation topics:**
 - feeling id/modulation, body awareness, alarm system, trauma triggers, false alarms, and social skills.
- **Individual parent sessions (4):**
 - psychoed in “**PLACE**” concepts, managing affect, and attuning empathetically to respond to child’s needs/create safe, predictable responses, and understanding the impact of the past on current behavior. (Becker-Weidman, 2008)
- **Six 30–40-minute dyad sessions:**
 - strengthen the parent-child relationship and set a pattern to apply treatment at home; feeling/thought id, triggers, cognitive coping, and processing trauma narrative with parental support.

Natural Horsemanship as a Therapy Tool

- **Philosophy and training method** for horses based on the psychology of the horse. (Jessop, 2017)
- The horse views the world as a **prey animal**, responds to pressure (eye contact), and is rewarded by the release of pressure (looking away). (Edwards, 2007; Steve Young Horsemanship, n. d.)
- **“Join-up”** is the moment the horse decides it is better to be with the person than to go away. (Roberts, n. d.)
- **Child is taught:**
 - Maintain the boundary on their personal bubble
 - Pressure/release
 - Help the horse relax
 - Leading/driving (Edwards, 2007; Steve Young Horsemanship, n. d.)

Implications for Practice and the Future

- **PIE is not yet evidence-based** as a stand-alone therapy
(Hallberg, 2018; Lee et al., 2016)
- There is such a **wide variety of interventions** that research cannot be compared (therapeutic activities vs. therapy)
(Hallberg, 2018)
- There are **differing opinions on definitions** of equine-assisted therapy even among professionals in the field.
- **Standardization is needed** and the development of community in equine-assisted therapy, and a need to be more research-minded.

Program Strengths

- **Accessible**, only one mile from town
 - 17.4% of the population living below the poverty level
 - 32.4 % of the population are children 0-17 years old (ARHS, 2018).
- **Supported by research**, based on attachment theory and the ARC framework (evidence-based).
- Inclusion of the parent supports **consistency of the treatment** philosophy in-home and increased parent support a primary goal of **strengthening the parent-child relationship**.
- There is **flexibility** to adapt to the developmental level of the child/adolescent.
- The initial 12-week sessions can be followed by a second 12-week intervention.

Program Challenges

- There is **limited research** about PIE combined with CBT, especially for children and adolescents.
- The few studies available about children/adolescents and complex trauma discuss concepts, **not specific programming.**
- **Client engagement:**
 - Amenability of child/adolescent to equine-assisted activities
 - Parents may be resistant to new strategies that are different from traditional parenting.

PIE Combined With CBT: A New Approach

- **CBT is the gold standard** in trauma treatment (Cary & McMillen, 2012).
- Resistance to traditional talk therapy indicates benefit for **combining** CBT and PIE.
- PIE can help unlock trauma stored in visual/sensory regions of the brain and **create capacity** for cognitive processing.
- **Non-verbal approaches** support developing the therapeutic relationship and safety/trust, which improves cognitive processing and affect regulation. (Bray et al., 2017)
- **PIE can create capacity for CBT** rather than replace it.
- **Bowlby (2005)** saw the overarching goal of attachment therapy as bringing an understanding of the impact of trauma on functioning and **exposing and shifting thinking errors.**

Conclusions

- **Early intervention is key:** one-half of all mental disorders develop by age 14, and are associated with lower educational achievement, substance abuse, and violence. (Kessler et al., 2007)
- MRI imaging shows the **impact of chronic trauma on brain structure** and functioning.
- **The horse seems perfectly** suited for complex trauma treatment:
 - **Unique dyad** in attunement and bonding built on the transfer of emotions/touching. (Scopa et al., 2019)
 - **Touch** is a component of attachment as it gives nurture and security. (Bowlby, 2005)
 - Horse provides a **safe reset** for safe touching. (Vincent & Farkas, 2017)
 - **Size difference** between horse/child simulates parent/child and facilitates corrective experience. (Burgon, 2011; Naste et al., 2018)

Conclusions

- **PIE combined with CBT** is new but may be powerful.
(Wharton et al., 2019)
- **Presence of the parent** in PIE may create positive neurological wiring (oxytocin).
- Anecdotal needs evidence and PIE **needs standardization**, like TF-CBT.
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We Know It Works



The Herd



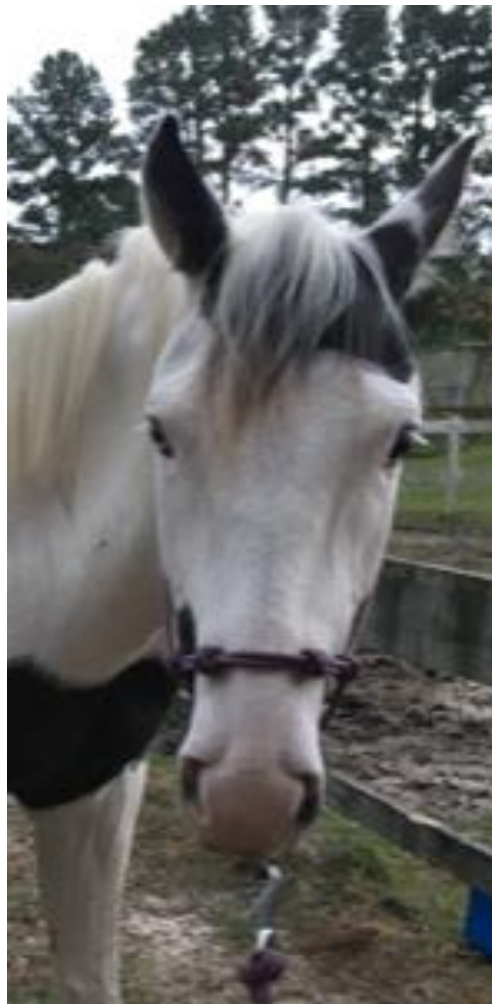
The Herd



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The Herd



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