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Nakita Dziegielewski Trauma-Focused Equine Assisted Psychotherapy TM: A Quantitative Study of Intervention Effectiveness

ABSTRACT

This study uses a quantitative lens to examine if Natural Lifemanship's ® Trauma-Focused Equine Assisted Psychotherapy TM (TF-EAP) model is effective in reducing the psychological, emotional, and/or behavioral problems in youth with a trauma history. Secondary data was collected on behalf of Spirit Reins, the organization that implements Natural Lifemanship's ® TF-EAP TM model, and used to determine the effectiveness of their traumainformed treatment intervention. Through a pre and post-test research design, data analysis was conducted on 40 youths' Child and Adolescent Functional Assessment Scale (CAFAS) total scores to determine intervention effectiveness. Findings suggest that Natural Lifemanship's ® TF-EAP TM model is effective in reducing the psychological, emotional, and/or behavioral problems in youth with a trauma history.

TRAUMA-FOCUSED EQUINE ASSISTED PSYCHOTHERAPY [™]: A QUANTITATIVE STUDY OF INTERVENTION EFFECTIVENESS

A project based upon an independent investigation, submitted in partial fulfillment of the requirement for the degree of Master of Social Work.

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"Yet I am always with you; you hold me by my right hand. You guide me with your counsel, and afterward you will take me into glory. Whom have I in heaven but you? And earth has nothing I desire besides you. My flesh and my heart may fail, but God is the strength of my heart and my portion forever" – Psalm 73:23-26... Thanks be to God Almighty because I know that I would not be where I am today without His love and guidance in my life. His grace is what got me into Smith and his strength is what got me through it. There were several times throughout this Smith and thesis journey that my patience and strength with the "process" was weak, but through prayer and His Word I was given the strength to keep walking in order to get it done.

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CHAPTER I

Introduction

"An animal's eyes have the power to speak a great language."

- Martin Buber

Equine Assisted Psychotherapy (EAP) is a unique, burgeoning therapeutic intervention focused directly on the interactions that manifest within the client-horse relationship. This experientially-based, therapeutic intervention utilizes clients' "actual experiences" with the horse in order to understand and explore their internal world and interpersonal dynamics (Karol, 2007, p. 80). The client-horse relationship is such an important piece of this therapeutic intervention because, through this relationship, the client gains insight into how he or she perceives and interacts with the world. Through identifying and exploring the client's interactions with the horse, the therapist and client can begin to work on the "here and now" psychological, behavioral, emotional, and relational problems currently impacting the client's life.

Over the last 18 years, interest, research, and funding for EAP programs and models has steadily increased. Yet, despite this increase the field still lacks good quality, empirical research attesting to its effectiveness, validity, and theoretical implications (Knapp, 2013; Selby & Smith-Osborne, 2013). There is also little information, literature, and research on how this field could possibly serve as an effective therapeutic intervention for youths who have experienced trauma. In fact, to date, I have yet to find an empirical research study exploring, let alone measuring, how this field could serve as an effective therapeutic intervention for youths who have experienced trauma. The purpose of this research study is to provide some insight into this area. Through an experimental research design, I quantitatively measured the effectiveness of Natural Lifemanship's ® Trauma-Focused Equine Assisted Psychotherapy (TF-EAP) [™] model in an effort to draw some conclusions on whether or not trauma-informed EAP programs and models could serve as an effective therapeutic intervention for youths who have experienced trauma.

While little research and information exists on how this field could possibly serve as an effective therapeutic intervention for youths who have experienced trauma, Chapter II will attempt to bridge this gap by providing a literature review on the field of EAP and traumainformed practices for youths who have experienced trauma. The first four sections in Chapter II briefly explore the field of EAP in all its complexity by reviewing EAP history, theory, intervention effectiveness, and the role of the horse. The fifth section within Chapter II provides an overview of trauma-informed practices and highlights the central ingredients needed to make a treatment intervention trauma-informed. The sixth section provides information on Spirit Reins and Natural Lifemanship's ® TF-EAP TM model. This section investigates if Spirit Reins, the organization currently implementing Natural Lifemanship's ® TF-EAP TM model, implements a trauma-informed EAP program, and if Natural Lifemanship ® serves as an effective trauma-informed EAP model. The seventh section attempts to merge all of the previous sections in an effort to hypothesize on how EAP programs and models could serve as an effective treatment intervention for youths who have experienced trauma.

CHAPTER II

Literature Review

What is EAP?

For those not familiar with the field of EAP, the term frequently invokes confusion and curiosity. Often times, when talking about EAP programs and models I am asked questions, such as, "So you do therapy with the horse?" Despite people's growing interest in the field over the last 18 years, a majority of individuals are still unaware of what this treatment intervention entails. EAP is a very specific and intentional experientially-based, therapeutic intervention. A typical EAP session includes a licensed mental health professional, equine specialist, client, and horse. Treatment is guided by the client's presenting problem(s), diagnosis, and biopsychosocial history, and just as with any other treatment intervention, these elements serve as the central components in the development of an EAP treatment plan. While there is still skepticism about this alternative therapeutic intervention.

As stated earlier, EAP focuses directly on the interactions that manifest within the clienthorse relationship because it is through these interactions that the client and therapist become aware of the intrapersonal struggles and maladaptive interpersonal dynamics the client brings into everyday relationships (Frewin & Gardiner, 2005). Knapp (2013) describes humans as "patterned animals" who, for the most part, will not go out of their way to seek new ways or patterns of doing things, even if their patterns do not serve them (p. 164). She asserts, "...

equine-assisted psychotherapy brings these habitual, repeated patterns into focus through the client's interaction with horses" (Knapp, 2013, p. 164). The insight gained from these interactions assist the therapist and client in identifying and exploring the client's intrapersonal struggles and maladaptive interpersonal dynamics. Working through these struggles and dynamics with the horse helps the client establish a new way of doing things.

The field of EAP is very diverse in the programs and models it provides to clients. While there are regulatory organizations that implement standards sanctioning EAP practices, the field has a diverse array of concepts, theories, names, and methods of accomplishing the same task (Lentini & Knox, 2009). Some EAP programs and models focus on riding and vaulting, while other focus on ground work activities (Vidrine, Owen-Smith, & Faulkner, 2002; Selby & Smith-Osborne, 2013; Lentini & Knox, 2009). Regardless of which concepts, theories, and methods are used, the central focus of all EAP programs and models revolve around the interactions that manifest within the client-horse relationship.

EAP History

The field of EAP lacks a consistent and accurate timeline regarding the initial development of EAP practices. Various research studies offer a diverse array of dates citing the origins of equine assisted practices in human civilization. Knapp (2013) referenced the earliest date of equine assisted practices, dating back to 600 B.C. when Greeks used horses to assist people with disabilities and to improve the general health and well-being of their people (p. 55). In the 1800s, European physicians incorporated therapeutic riding into their treatment of physical, neurobiological, and psychological disorders (Knapp, 2013; Frewin & Gardiner, 2005). While the use of horses in therapeutic settings has probably occurred for hundreds of years, the

relevance, research interest, and legitimacy of the practice as a profession has only recently begun.

The field of EAP is still in its infancy. The first association dedicated to the professionalization and standardization of EAP practices, Equine Facilitated Mental Health Association (EFMHA), was not formed until 1996 (Masini, 2010). In 1999, the Equine Assisted Growth and Learning Association (EAGALA) formed to further develop the professionalism and standardization of the field (Frewin & Gardiner, 2005). Despite the field's infancy and uncertain historical timeline, the bond created between humans and animals, and the benefits that have developed from that bond, have existed for thousands of years, prior to recorded history (Circulli, Borgi, Berry, Francia, & Alleva, 2011). This is an important aspect to keep in mind when reviewing the history of EAP. Hopefully, within time, the field of EAP will be able to develop a consistent and accurate historical timeline, and will continue to mature as a profession.

Theories Guiding EAP Practices

The field of EAP gains its theoretical foundation from a diverse array of traditional, therapeutic theories (Shultz, 2005; Selby & Smith-Osborne, 2013; Schultz, Remick-Barlow, & Robbins, 2007; Lentini & Knox, 2009; Karol, 2007; Klontz, Bivens, Leinart, & Klontz, 2007). While the profession primarily grounds itself in experiential theory, other theories such as Gestalt, cognitive behavioral, process-experiential, intersubjective, symbolic interaction, attachment, Kohutian, and psychodynamic theory also influence the field (Karol, 2007; Siporin, 2012, York, Adams, & Coady, 2008; Reichert, 1998; Lentini & Knox, 2009; Brant, 2004; Knapp, 2013; Frewin& Gardiner; 2005; Watson 2006; Masini, 2010). In the following section, I will discuss these diverse theories, explain how they are woven into to the field of EAP, and will provide insight into how they inform the work that takes place between the client and horse.

The main objective of experiential therapy is to foster relationships in which clients can become aware of their subjective reality and how that reality impacts their feelings, perceptions, goals, values, constructs, and interpersonal dynamics (Greenberg, Watson, & Lietaer, 1998, p. 3). As I mentioned earlier, the main objective of EAP is to discover and discuss the interactions that take place between the client and horse. Emphasis is put on clients' interactions with the horse because through those interactions clients can learn about themselves and how they interact with others in relationships (Frewin & Gardiner, 2005). In EAP, horses are seen as the essential tool in this experiential interaction because horses will react and respond to a client's behavior, actions, and internal states in a very honest way (Jobe, Shultz-Jobe, & McFarland, 2013, p. 69).

A horse cannot be fooled in a therapy session. Horses are hyper-vigilant animals whose biological programming necessitates that they be keenly attuned to a human's verbal and non-verbal communication (Frewin & Gardiner, 2005). A benefit to using horses in an experientially-based, therapeutic intervention is that they will engage in relational dynamics with clients. The horse will be aware of and respond to the client's relational wants and needs, as well as communicate its own wants and needs within the relationship. The horse communicates its own wants and needs based upon the intra and interpersonal emotional, behavioral, and relational dynamics the client brings into the session. The didactic process that occurs in the human-horse relationship is not a one way street. Siporin (2012) asserts that the client-horse relationship "... is not one-sided, but demands mutual trust and reciprocal interaction" (p. 460). The client learns that for a relationship to form a give and take needs to happen on both ends.

The experiential relationship that manifests is vastly instrumental to the work that is done in EAP because when the client engages with the horse, the horse supports the experiential

process by "providing the client with a means to see their behavior reflected, to change that behavior in real time, and to experiment with alternatives" (Knapp, 2013, p. 77). Through the interactions that manifest in the experiential client-horse relationship, clients become aware of their subjective reality and relational dynamics, and this newfound awareness assists them in creating a new way of viewing and interacting in relationships (Masini, 2010). The unique, experiential approach that EAP offers is seen as a beneficial aspect to the work that is achieved because it affords the client the opportunity to recreate and learn new ways of interacting with others. Schultz et al. (2007) asserts that the client-horse relationship allows the client to "identify and understand personal emotions, develop empathy, develop a sense of responsibility, learn to problem solve, and to succeed in new undertakings" (p. 266). The exercises that the horse and client engage in also provide the client with an opportunity to experiment with "cognitive, affect, behavioral, and sensory modulation and regulation" (Selby & Smith-Osborne, 2013, p. 419).

The diversity of EAP allows for a distinct array of traditional therapeutic theories to be incorporated into the work. In reviewing EAP research literature, several papers highlighted the relevance of certain psychodynamic theories and concepts as the means by which EAP works. Siporin (2012) provides a very insightful article exploring the effectiveness of EAP through the lenses of self psychology, attachment theory, and intersubjectivity. A common theme woven throughout the research literature discussed the horse's innate ability to create a safe space where a client's transference and projection can manifest itself (Lentini & Knox, 2009; Masini, 2010; Karol, 2007; Klontz et.al, 2007). Lentini & Knox (2009) provide an in-depth description of how a horse serves as "a whole new object that may be projected upon with various transference" (p. 53). Masini (2010) confirmed this statement by asserting, "the horse can serves a safe object for projection of uncomfortable feelings" (p. 31).

Other psychodynamic themes discussed throughout the research literature highlight the importance of preverbal experiences that manifest within the client-horse relationship. Siporin (2012) explores how "communication between client and therapy horse likewise involves primitive, albeit nonverbal, trust-building interactions reminiscent of infant-mother intersubjecitivity" (p. 460). Additional preverbal functions the horse generates within the client-horse relationship include touch, comfort, and rhythm (Karol, 2007). Karol (2007) asserts that EAP serves as an "existential theatre for the child's psychodynamic work to be enacted" and, due to this, the therapist is able to "explore the client's intrapersonal and interpersonal worlds on preverbal, nonverbal, and verbal levels of experience" (p. 88). Within this section it is evident that the field of EAP draws upon many theoretical perspectives to assert its effectiveness. While the profession's vast array of theoretical perspectives could definitely serve as a limitation, it is important to note that these varied theoretical frameworks and perspectives have been woven together in a functional way.

EAP Intervention Effectiveness

EAP is a diverse therapeutic intervention. The field works with diverse populations and has used to addressed various psychological, emotional, behavioral, and developmental issues (Selby & Smith-Osborne, 2013; Klontz et al., 2007; Yorke et al., 2008; Bizub, Joy, & Davidson, 2003; Lentini & Knox, 2009; Schultz et al., 2007; Ewing, MacDonald, Taylor, & Bowers, 2007). Selby and Smith-Osborne's (2013) systematic review of therapeutic interventions involving horses provides an extensive list of the psychological, behavioral, and emotional issues that EAP addresses, as well as the diverse population it serves. They write,

Interventions employing equines have been applied across age groups and cultures. It has been applied in work with families and groups, and is not genderspecific. This treatment approach has been used to address terminal illness, comorbid chronic developmental disabilities and health conditions, behavioral

and attentional issues, substance abuse and addiction disorders, eating disorders, depression, anxiety, relationship problems, and posttraumatic stress disorder. It has been applied to populations ranging from at-risk youths to brain-injured and aging veterans and to health care settings such as medical domiciliary care, residential treatment facilities, hospices and hospitals, and prisons. (Selby and Smith-Osborne, 2013, p. 419)

Their systematic review provides ample research on how the field of EAP serves as a diverse therapeutic intervention that successfully address different populations and issues. While the field may pride itself on being a diverse therapeutic intervention, is this diverse treatment intervention effective at what it claims to accomplishe?

Klontz et al. (2007), using an open clinical trial, quantitatively measured the effectiveness of a residential program employing Equine-Assisted Experiential Therapy (EAET). Researchers measured intervention effectiveness through a pre-test, post-test, and follow-up test research design with the use of two measurement tools: Brief Symptom Inventory and Personal Orientation Inventory. Findings from participants' post-test and follow-up test scores showed significant and stable reductions in participants overall psychological distress and reported enhancements in participants psychological well-being (Klontz et al, 2007, p. 263). Limitations within this study included an absent control group and the use of non-random sampling.

Ewing et al. (2007) conducted a three year, mixed methods research study on the effectiveness of an Equine-Facilitated learning program with youths who had moderate to severe behavioral, conduct and/or learning disabilities. The quantitative aspect of their study included a pre and post-test research design with the use of 5 measurement tools: Self-Perceptions Profile for Children, Empathy Questionnaire, Locus of Control Scale, Children's Depression Inventory, and Children's Loneliness Questionnaire. The qualitative aspect of their study included interviews and observations by the program's special education teacher, therapeutic riding instructor, and volunteers. Quantitative findings suggest no statistical significance regarding

program effectiveness, but qualitative findings indicated positive changes in youths who participated in the programming (Ewing et al., 2007, p. 66 & 67). For this study, researchers were able to employ a control group and offered legitimate suggestions on why they found no statistical significance regarding program effectiveness. These two components of the study serves as strengths.

Schultz et al. (2007) conducted an 18-month pilot study testing the effectiveness of EAP with children who had behavioral and mental health issues and a history of intra-family violence. This study measured intervention effectiveness through a quantitative pre-test and post-test research design with the use of one measurement tool: Children's Global Assessment of Functioning (GAF). Findings suggested program effectiveness due to an increase in all participants' GAF scores. A statistically significant correlation was also found between the improvement in GAF scores and the number of sessions given (Schultz et al., 2007, p. 268).

As stated earlier, to date, I have yet to find an empirical research study exploring, let alone measuring, how the field of EAP could serve as an effective therapeutic intervention for youths who have experienced trauma. The one research study I did find on horses and trauma provided a qualitative investigation on the human-horse bond and its possible impacts on individuals' recovery from trauma (York et al., 2008). For this study, no EAP programs or models were examined. The researcher simply talked with individuals who personally owned a horse and asked them how their relationship with their horse impacted their recovery from trauma.

It is evident that the field of EAP has a long way to progress regarding its legitimacy in the research arena; especially as it relates to working with youths who have experienced trauma. Selby and Smith-Osborne's (2013) systematic review could only generate 14 studies meeting

their inclusion criteria. The field needs more methodologically sound research studies to attest to its effectiveness and legitimacy as a profession. Echoing Lentini and Knox (2009), in order for the field to be taken more seriously in the research, medical, and therapeutic community, more research studies need to employ a standardized, controlled, and longitudinal research methodology (p. 56)

Horses as Modulators of Trauma

If one has ever been around a horse, one knows the majestic power and strength it can convey. At first, people may appear to be intimated by the size and strength of a horse, but they soon learn that there is also a gentle, sometimes hidden, aspect to a horse's nature. Unlike companion animals, such as dogs or cats, horses bring a unique set of skills and interactions into the therapy setting. This is mainly due to the fact that they are prey animals; their brains and instinctual hardwiring are completely different from predator animals such as dogs or cats. This unique instinctual hardwiring is also what makes them ideal candidates for working with youths who have experienced trauma.

Horses' instinctual, biological programming causes them to be acutely hyper-vigilant in order to flee from fearful and/or dangerous situations (Frewin & Gardiner, 2005, p. 5). These highly intuitive animals are born with a heightened sense of their surroundings in order to survive. How horses react to their everyday surroundings provides a parallel experience to the fear and traumatic stress reactions found in youths with a trauma history. Knapp (2013) states, "the number one, primary response of a prey animal is flight: run first, ask questions later. If a horse is unable to run, the flight response can morph into a fight or freeze response" (p. 232). Just like youths who experience trauma (Neigh, Gillespie, & Nemeroff, 2009), horses also encounter the fight, flight, freeze responses when experiencing a fearful or traumatic event.

Drawing upon this parallel alone could allow youths who have experienced a traumatic event to join with an object that has the same understanding of what it feels like to live in a world where they always have to be alert, cautious, and/or hyper-vigilant to survive (Vidrine, Owen-Smith, & Faulkner, 2002). Karol (2007) elaborates on this parallel by exploring how "the horse is also a vulnerable creature and so serves as an apt companion for a child overwhelmed by his or her own sense of vulnerability and imperfections" (p. 81).

Knapp (2013) asserts that, "understanding the predator/prey relationship is key to understanding why horses do what they do. Interestingly, it's also part of what makes horses effective as therapy animals; the horse's innate ability to detect incongruency (shifts, changes, conflicting information all constitute a kind of incongruency) makes him or her ideal for recognizing it in the client during session" (p. 19). Due to the horse's natural hyper-vigilant disposition, it reacts and responds to a client's behavior, actions, and internal states in a very honest and sincere way. Those honest and sincere reactions are what assists clients in recognizing the problems they create in the relationship with the horse and others (Jobe, Shultz-Jobe, & McFarland, 2013, p. 69). As stated earlier, a horse cannot be deceived in the therapy session because its biological programming necessitates that it be keenly attuned to a human's verbal and non-verbal communication (Frewin & Gardiner, 2005). The horse's ability to accurately reflect and attune to the client's behaviors, actions, and internal states provides the client with an opportunity to explore and understand what is really going on inside his or her internal world. Brandt (2004) asserts, "horses, too, are thinking, emotional, decision-making beings who, like humans, develop ways to communicate their subjectivity to their human partners" (p. 307). The communication that manifests within the relationship can provide clients with an opportunity to see how their trauma-related symptoms are not only affecting themselves, but another living being. The insight gained from the experiential client-horse relationship allows clients to learn new ways of communicating.

Horses also provide physical touch, rhythm, body-to-body experience, attunement, nonverbal communication, and preverbal/primitive experiences in the EAP session. These are other essential components that may make EAP programs successful with youths who have experienced trauma (Karol, 2007). Norton, Ferriegel, & Norton (2011) state that "trauma experienced during childhood effects brain functioning that is inaccessible to verbal recall. Trauma memories are observed in children's habitual and sporadic body movements. These repeated somatic expressions and affective states activate somatic disorders and traumatic traits" (p. 138). The experiential nature of EAP allows clients' habitual and sporadic body movements associated with their trauma memories to manifest in the session. Since the horse is naturally attuned to the client it will pick up on client's body movements and will react and respond to the client in the same body-based way. Through a wide array of movements, with various parts of their bodies, horses also communicate their wants and needs with their bodies (Brandt, 2004, p. 308). The intersubjective, nonverbal, body-based communication that manifests within the client-horse relationship serves as another possible tool that could provide trauma clients with insight and feedback regarding their traumatic experiences.

Trotter (2012) asserts, "through their body language, equines give immediate feedback to clients on how they are functioning and handling their feelings. This feedback helps clients learn how to pay better attention to the connection between their body and mind so they can inhabit their body in a new way" (p. 41). Since a majority of a horse's communication is through its body, it is acutely attuned to a client's body movements. This attunement brings awareness to clients' repeated somatic expression and affective states that may currently be out of their own

awareness. A child's traumatic memories can be explored and worked through in the EAP session because the horse will always react and respond to the client's habitual and sporadic body movements. The horse's reactions and responses to the client's nonverbal, body-based communication also serves as an effective tool for building a client's insight because "a client's interpretation of a horse's movement, behaviors, and reactions determines the meaning of the metaphor and, as such, provides a portal for the resolution of unfinished business by bringing forth- and addressing – transference reactions in the here-and-now of therapy" (Klontz et al., 2007, p. 259).

Rhythm and touch are additional examples of preverbal, body-based experiences that a horse naturally provides in the EAP session (Karol, 2007, p. 85). Perry (2009) asserts that rhythm and touch are also essential components in the neurobiological recovery of trauma. He states,

An overanxious, impulsive, dysregulated child will have a difficult time participating in, and benefiting from, services targeting social skills, self-esteem, and reading, for example. The field of restorative neurology has for many years emphasized the positive impact of repetitive motor activity in cognitive recovery from stroke. The principle suggests that therapeutic massage, yoga, balancing exercises, and music movement, as well as similar somatosensory interventions that provide pattered, repetitive neural input that would likely diminish anxiety, impulsivity, and other trauma-related symptoms that have their origins in dysregulation of those systems. (Perry, 2009, p. 243)

Horses can provide somatosensory experiences within the EAP session, and can naturally equip the trauma client with patterned, repetitive, rhythmic movements. Karol (2007) asserts, "preverbal experiences are the foundation of a sense of self, and often when an adult or child is suffering from trauma or an extremely stressful situation, he or she will look for tactile and rhythmical comfort so as to keep from feeling further disorganization" (p. 85). Horses can provide this natural tactile and rhythmical comfort to the trauma client through horseback riding and/or brushing/stroking the horse. This patterned, repetitive, rhythmic movement can comfort the trauma client and can possibly alleviate the internal disorganization the client might feel.

Through touch, rhythm, and mind-body interactions, horses also serve as an attachment object for youths who have experienced trauma (Yorke, 2010, p. 565). Vidrine et al. (2002) assert that touch and rhythm are some of the core components that characterize and develop human-infant relationships and attachments. These components are also what characterize the client-horse relationship. Rhythm is theorized to be one of the first experiences of the developing child, and the use of EAP is suggested by Lentini and Knox (2009) "to build up 'body-identity' and help with correcting pre-verbal dialogue" (p. 53). They go on to state, "horses may interact with the individual in an appropriate and physical way that would not be possible for the therapist" (Lentini & Knox, 2009, p. 53).

Throughout this section, I have tried to explore the role horses play in the EAP session. I have also tried to explain how horses could serve as modulators of trauma for youths who have experienced trauma. Throughout this section, research has suggested that horses can provide the trauma client with somatosensory, body-based, preverbal experiences that the therapist alone cannot. The more we learn about the neurobiological impacts trauma has on youth, the more we can begin to theorize on how the field of EAP could serve as an effective treatment intervention for youths who have experienced trauma.

What Makes A Treatment Intervention Trauma-Informed?

Before we can begin to discuss trauma-informed practices, I think it is essential to define trauma. Trauma is a single or repeated event that threatens or causes harm to a youth's psychological or physical well-being (Glaser, 2000). Traumatic events can be witnessed or experienced and can occur in a multitude of settings, such as the home, school, and community

(Boxer & Sloan-Power, 2013; Finkelhor, Turner, Ormrod, Hamby, & Kracke, 2009; National Child Traumatic Stress Network [NCTSN], n.d.a). Trauma affects youths on a physiological, psychological, neurodevelopmental, emotional, and behavioral level, and can adversely compromise their short and long-term mental health and developmental functioning (NCTSN, n.d.b; Boxer & Sloan-Power, 2013; Yorke, 2010; Glaser, 2000). While understanding how trauma adversely impacts youth is essential in the development of a trauma-informed treatment intervention, for the purpose of this section and study, I will give a brief overview of traumainformed therapeutic interventions and practices for youths who have experienced trauma.

In today's age, one cannot fully grasp the impact trauma has on an individual without understanding the neurobiology of trauma. During the 1990s, the field of neuroscience enhanced the world's understanding of how trauma effects the mind and body, and since that time, the majority of trauma-informed interventions that have been developed for youths have incorporated the knowledge that neuroscience has revealed (Steele & Malchiodi, 2012, p. 3). The field of neurobiology has consistently revealed that trauma primarily affects a youth's sensory processes (Perry, 2009; Glaser, 2000). Due to this information, "trauma-informed care must engage children and adolescents in sensory, neurosequential experiences to help restore a sense of safety and bring about a renewed sense of empowerment" (Steele & Malchiodi, 2012, p. xix).

A neurosequential model of therapeutics applies the findings and knowledge associated with the neurobiology of trauma into the clinical work being done (Perry, 2009, p. 248). By applying this unique perspective to the clinical picture, therapists gain a greater understanding of their clients' developmental history and therapeutic needs because they have an understanding of how trauma affects the brain; which will inherently affect clients' functioning. Today, traumainformed practices are based upon the research and knowledge we now have on the neurobiology

of trauma and how it affects the biological, physiological, neurological, and psychological

functioning of the client (Steele & Malchiodi, 2012, p. 19)

Steele & Malchiodi (2012), in their book Trauma-Informed Practices with Children and

Adolescents, outline 10 best practices that should be included in trauma-informed care. The 10

best practices of trauma-informed care should include the following:

1). Restore a sense of safety, empowerment, and self-regulation (Bath, 2008; Briere & Scott, 2006; Perry & Szalavitz, 2006; Greenwald, 2005).

2) Apply trauma-informed assessment through an understanding of neurosequential development and sensory-based trauma reactions.

3) Capitalize on interventions that address the right hemisphere of the brain (Gil, 2006).

4) Develop trauma-informed relationships between child clients and therapists, parents/caretakers, teachers, and other helping professionals and significant adults to establish positive attachment and improve interpersonal skills.

5) Create trauma-informed environments that support internal locus of control, positive social interaction, safety, and empowerment.

6) Promote trauma integration to help individuals reach a new meaning for trauma event and capability to manage trauma reactions (Steele & Raider, 2001).

7) Encourage posttraumatic growth and resiliency (Malchiodi, Steele, & Kuban, 2008) and positive affective enhancement (Cook, Spinazzola, Ford et al. 2005).

8) Recognize that no one intervention fits every situation and that in the course of intervention, trauma integration results from the timely and developmentally appropriate application of sensory-based, somatic, cognitive, and behavioral approaches and practices.

9) Develop and include interventions that respect and support cultural diversity.

10) Empower children and adolescents and their families/caretakers to become active participants in intervention and programming. (p. 19-20)

This list has clearly incorporated the current research and knowledge we now have on the

neurobiology of trauma and how it affects the biological, physiological, neurological, and

psychological functioning of the client. Today's trauma-informed therapeutic interventions need

to incorporate all of these components if they intend to create an accurate and effective treatment plan that alleviates clients' symptoms associated with their trauma.

Spirit Reins & Natural Lifemanship's ® TF-EAP ™ Model

Spirit Reins is an outpatient EAP agency that provides trauma-informed therapeutic services to children and families. They offer a variety of counseling services, but the focus of their work is to serve children who have experienced abuse, neglect, and/or other traumatic events. The agency's mission is to transform the lives of children and families through traumainformed therapy services, training, and research (Spirit Reins, n.d.b). In 2010, Spirit Reins adopted Natural Lifemanship's [®] TF-EAP TM model to better service their population's needs (Spirit Reins, n.d.c). Spirit Reins provides individual, group, and family therapy. Overall, their therapeutic services consist of three main components: Rhythmic Riding TM, Relationship Logic TM, and Strengthening the Family (Spirit Reins, n.d.c). These three components are essential to the work that is done at Spirit Reins and serve as the building blocks that "promote healing, emotion regulation, impulse control, and relationship skills such as building trust, reciprocity, and taking responsibility" (Spirit Reins, n.d.a).

Natural Lifemanship's ® TF-EAP TM model is based on the neuroscience of brain development, and how traumatic events affect the brain and the ability to form healthy relationships (Spirit Reins, n.d.a). On their website, they describe their TF-EAP TM model as one that "utilizes horse physiology to regulate human physiology, and horse psychology to heal human psychology" (Natural Lifemanship, n.d.). Natural Lifemanship ® serves as a traumainformed therapeutic treatment model because it incorporates current neurobiological and neuropsychiatric research and knowledge into the work being done. The two main components of the model include Rhythmic Riding TM and Relationship Logic TM. These two components

employ somatosensory, body-based, preverbal, neurosequential therapeutic activities and experiences to regulate a child's neurological functioning and decrease his or her maladaptive psychological, emotional, behavioral, and/or relational functioning.

In an effort to accurately convey Natural Lifemanship's ® Rhythmic Riding TM and

Relationship Logic TM components, I have included a brief dialogue from Spirit Reins' (n.d.c)

Services Overview handout. When describing Rhythmic Riding TM, Spirit Reins asserts,

Rhythmic Riding utilizes horseback riding and music to provide the rhythmic, patterned, repetitive movement required to help gain self-awareness and develop better impulse control. Growing up in an environment of fear, stress and/or chaos causes a child's brain to have an overdeveloped "fight or flight" response to stress which leaves them with the inability to control their impulses, thoughts and behavior enough to function in school and at home. But control is exactly what they need to be successful in riding a horse and in other real life situations. In this program, children learn breathing exercises, exercises to improve focus, progressive muscle relaxation and exercises that help them learn to relax and ease their fears while learning to be more aware of their emotional state. They get to practice each of these new skills in the moment when they feel scared, stressed or frustrated. Once they are able to regain control of themselves, they are able to be successful with the horse. These successes quickly transfer from the arena to their everyday world. (Spirit Reins, n.d.c, para 3)

When describing Relationship Logic TM, Spirit Reins asserts,

In Relationship Logic, clients are given an opportunity to build a relationship with a horse they choose. Children who have experienced trauma learn to build relationships based on fear, control and/or manipulation. Most of our clients will inadvertently choose a horse that will treat them the way they are used to being treated or that they believe they can treat in the same manner they treat other people. Because horses have a unique ability to react to human behavior in much the same way as humans would, they are able to help our clients understand how their behavior affects the relationship. A horse will not give love and acceptance until the client learns to build a relationship that fosters love and acceptance, the same way they must in human relationships. Once clients figure out the changes that they need to make to build a good relationship with the horse, they recognize that these same changes can be applied to relationships with their friends, family, teachers, and others. (Spirit Reins, n.d.c, para 4)

With these program descriptions, it is evident that Spirit Reins and has tried to create a trauma-

informed EAP agency by implementing Natural Lifemanship's ® TF-EAP [™] model. Their work

with children, adolescents, and families closely aligns with the current research literature regarding trauma-informed practices for children and adolescents, and they have an understanding of the neurobiology of trauma. Rhythmic Riding TM and Relationship Logic TM incorporate the central ingredients needed to create an effective trauma-informed therapeutic intervention. The two components within Natural Lifemanship's ® TF-EAP TM model incorporate somatosensory, body-based, preverbal, neurosequential therapeutic activities and experiences to regulate a child's neurological functioning and decrease his or her maladaptive psychological, emotional, behavioral, and/or relational functioning. The unique aspect to this trauma-informed treatment approach is that the horse is seen as the foundational piece that transforms and heals the trauma client.

Merging the Gap Between EAP Practices & Trauma-Informed Practices

The field of EAP is diverse and multifaceted. This literature review has tried to explore the field in all its complexity by reviewing EAP history, theory, intervention effectiveness, and the role of the hose. While the field still lacks strong, methodologically sound research studies to legitimize its efficacy, the field is progressing. Throughout this literature review I have also tried to investigate the field of EAP through a trauma-informed lens to see if it is possible for this field to serve as a trauma-informed therapeutic intervention for youths who have experienced trauma. By attempting to connect the dots between EAP and trauma-informed practices I hope readers will gain a greater understanding of how the two could possibly bridge together; merging the gap that currently exists.

While biases are inherent in every research project, I do believe the research literature has effectively conveyed how trauma-informed EAP programs could serve as an effective treatment intervention for youths who have experienced trauma. Horses can provide trauma clients with

somatosensory, body-based, preverbal, neurosequential therapeutic activities and experiences that regulate their neurological functioning and decrease their maladaptive psychological, emotional, behavioral, and/or relational functioning. While horses provide trauma clients with a parallel understanding of what it feels like to always be in a hyper-vigilant state, they also offer trauma clients a transformative opportunity to create healthy, safe, and reciprocal relationships.

Perry (2009) asserts that "... relational interactions with safe and familiar individuals can buffer and heal trauma-related problems..."(p. 248). A horse can provide these safe and familiar relational interactions for the trauma client. Steele & Malchiodi (2012) explain that "practices that address individuals' 'survival brains' through sensory and somatic (body-oriented) experiences, and enhance self-regulation, trauma integration, and healthy relationship and environments are central to trauma-informed care" (p. xix). A horse naturally understand this reality and can provide the trauma client with a visual and physical understanding of what it means to live in "survival brain" mode. Through the client-horse relationship, trauma clients gain insight and understanding on how their own trauma has created their "survival brain" mode. After this insight and understanding is gained, through the client-horse relationship, they can begin to work on the necessary skills needed for self-regulation, trauma integration, and building healthy relationships and environments.

By combining the knowledge and research we now have on the neurobiology of trauma, we can begin to see that trauma-informed EAP therapeutic interventions are possible. What makes this field unique is that the horse alone may be the sole cause of what makes a traumainformed EAP model successful and effective. Yorke (2010) has shed some light onto this area by looking at the client-horse relationship through a trauma-informed lens. She hypothesized that the client-horse relationship, and the interactions that manifest within this relationship, may be

the core component to what makes EAP practices an effectively trauma-informed therapeutic intervention for youths who have experienced trauma.

This chapter has attempted to bridge the gap that currently exists between the field of EAP and trauma-informed practices for youths who have experienced trauma. Research literature suggests that the field EAP already incorporates several components that are needed for an effective trauma-informed treatment intervention, and highlights how this treatment intervention might be effective with youths who have experienced trauma. The next chapter within this research study will describe the methods used to measure the effectiveness of Natural Lifemanship's ® TF-EAP TM model. The first two sections within Chapter III reviews the research purpose, method, and design. The third, fourth, and fifth sections provide information on the sampling frame and characteristics, data collection methods, and data analysis. The sixth section highlights research limitations and biases.

CHAPTER III

Methodology

Research Purpose

Over the last eighteen years, numerous research studies have tried to convey the effectiveness of EAP. Yet, despite the increase in scholarly research and investigation, the field still lacks sounds empirical research studies that can prove its validity, generalizability, and effectiveness (Selby & Smith-Osborne, 2013; Vidrine et al., 2002; Schultz et al., 2007). Selby and Smith-Osborne (2013), in their systematic review of therapies and interventions involving horses, reported "... to date no randomized clinical trials, considered the criterion standard in research methodology, have been conducted" within the field of EAP (p. 421). While they did assert that sound, rigorous research evidence has begun to emerge in the last few years, it is evident more work needs to be done to establish and promote the field's credibility, funding, availability, and accessibility (Selby & Smith-Osborne, 2013, p. 421). Thankfully, though, with organizations such as the Horses and Humans Research Foundation, EAP providers and researchers are now given support, promotion, and funding to create scientific research studies that meet the criterion standard in research methodology (Horses & Humans Research Foundation [HHRF], n.d.b).

With this information in mind, we can begin to understand why there is a lack of information, literature, and research on how field could possibly serve as an effective therapeutic intervention for youths who have experienced trauma. This is why this research study is so

important. Trauma-informed EAP programs that specifically work with youth who have experienced trauma need to be evaluated in order to safeguard the population they serve. Youths who have experienced trauma are a very vulnerable population. They need and deserve therapeutic services that address more than just the emotional aspect of their trauma. Through quantitatively measuring the effectiveness of Natural Lifemanship's ® TF-EAP TM model, I hope to shed some light on how this trauma-informed EAP model, and others like it, could serve as a beneficial, alternative, therapeutic intervention for youths who have experienced trauma. The main purpose of my research study is to measure the effectiveness of a specific trauma-informed EAP model. The second purpose of my research study is to offer insight into how we can bridge the gap that currently exists between EAP, trauma-informed practices, and youths who have a trauma history. Hopefully, the findings in this research study can lay a small foundation to the future evaluation and research that needs to be conducted on the field of EAP and its ability to serve as an effective trauma-informed therapeutic intervention for youths who have experienced trauma.

Research Method & Design

Through a quantitative lens, I measured the effectiveness of Natural Lifemanship's ® TF-EAP TM model by using secondary data collected on behalf of Spirit Reins, the organization currently implementing Natural Lifemanship's ® TF-EAP TM model. With an experimental pre and post-test research design, data analysis was conducted on 40 youths' Child and Adolescent Functional Assessment Scale (CAFAS) total scores to determine if Natural Lifemanship's ® TF-EAP TM model was effective in reducing the psychological, emotional, and/or behavioral problems in youth with a trauma history.

Initially, my research method and design was set up to measure the pre and post-test CAFAS scores of participants who had been enrolled in Spirit Reins programming for three months, but due to the lack of participants who fit the inclusion criteria, I had to expand my inclusion criteria to all participants who were enrolled in Spirit Reins programming and had not been previously used in a past research study. My adjusted sample frame now includes participants who had been enrolled in Spirit Reins programming anywhere from 3 to 15 months.

My use of secondary data in a pre and post-test research design is unique to the quantitative EAP research studies I have read thus far. While this aspect of my research study is unique, it does incorporate key themes from past quantitative research studies measuring EAP effectiveness. First, my use of a pre and post-test research design mimics many of the quantitative studies measuring EAP effectiveness (Ewing et al., 2007; Kaiser, Smith, Heleski, & Spence, 2006; Klontz et al., 2007; Schultz, 2005; Trotter, Chandler, Goodwin-Bond, & Casey, 2008). My use of the CAFAS is another unique aspect to this research study and will hopefully assist in producing a sound piece of methodological research due to the wide use and research of the CAFAS measurement tool. To date, I have yet to find any research literature measuring EAP effectiveness with the CAFAS measurement tool.

The CAFAS is a multidimensional, clinician-completed rating scale that measures and assesses the degree of functional impairment in youths with emotional, behavioral, psychiatric, and/or substance abuse problems. Functional impairment scales are commonly used in assessing the functioning of youths and often assist in the development of a client's treatment plan by monitoring their progress (Bates, Furlong, Green, 2006). Although many articles advocate the use and function of clinician-completed rating scales, these measurement tools have received some scrutiny regarding their psychometric weaknesses, susceptibility to rater bias, and

ambiguity in the rating process (Bates et al., 2006, p. 683). In order to reduce the limitations and biases in previous unidimensional, clinician-completed rating scales, researchers began developing multidimensional rating scales such as the CAFAS. These new, multidimensional scales consist of "multiple prompts within and across several domains of functioning" and "indicate[s] the presence or absence of discrete behaviors and/or observable conditions" (Bates et al., 2006, p. 683). Several studies describe the CAFAS as being a reliable, valid measurement tool (Hodges, n.d.; Hodges, Doucette-Gates, & Liao, 1999). Yet, Bates et al. (2006) argues the CAFAS "employ[s] such a seemingly theoretical incompatible mix of scoring strategies, a practice that appears to, at the least, raise questions about its content and, thus, construct validity" (p. 683). This is important to keep in mind, especially when looking at the limitations of this study, because as Bates et al. (2006) asserts, "a scale's content validity directly affects the validity of clinical inference that can be drawn from what it scores" (p. 684).

Aside from these limitations, though, Hodges et al. (1999) states that "reliability studies have demonstrated satisfactory internal consistency, test-retest reliability, and interrater reliability" of the CAFAS (p. 110). Bates et al. (2006) asserts that numerous studies have provided support for the external validation of the CAFAS and that consistency has been proven in the relationship between CAFAS impairment scores and other indicators of problem behavior and psychopathology (p. 685). Despite possible limitations, the CAFAS is still seen as a "robust, psychometrically sound" measurement tool (Hodges, n.d., p. 1) as evidenced by its continual use in federal and local programs on a local, state, and national level (Bates et al., 2006, p. 684).

In order to generate a sample that had a trauma history I implemented the Adverse Child Experiences (ACE) score. Initially, I had included the ACE score to serve as inclusion criteria to determine which youth had experienced trauma, but due to the limited sample size this inclusion

criteria generated, Spirit Reins' Clinical Director and I determined to remove this inclusion criteria to generate a larger sample. In order to generate a sample of participants who did fit my trauma history inclusion criteria, Spirit Reins' Clinical Director and I determined to include participants who had an ACE score and/or a history of intrauterine trauma. Both the ACE score and history of intrauterine trauma served as the new inclusion criteria for trauma history. Participants' ACE score was generated from the ACE Score Questionnaire located in Appendix D, and participants' history of intrauterine trauma was self-reported. Both the ACE score and intrauterine trauma history were gathered during participants' initial assessment, which Spirit Reins' Clinical Director has access to.

Although my use of the ACE score changed, it is important to outline why this score is still being included in the study. The ACE score is a measurement tool that evaluates a child's exposure to traumatic stressors such as childhood abuse, neglect, and household dysfunction that could impact a child's life (Center for Disease Control [CDC], 2014). Having this score in the study is still important because it provides readers and future researchers with important demographic information on participants' level of trauma exposure. My use of the self-reported intrauterine trauma history is also important because it is "...widely recognized that the exposure to an adverse fetal environment can have persisting effects on an individual's physiology and mental health..." (Schwarze et al., 2013, p. 1280). By incorporating participants' self-reported history of intrauterine trauma, I will be able to investigate the demographics of my sample and the degree to which my sample has experienced intrauterine trauma.

My research method and design faced several limitations due to the changes that needed to be made in order to generate a sample size that was big enough to perform quantitative statistical tests. The main limitations impacting my research method and design include: the lack

of a control group, the lack of an adequate sample size for quantitative analysis, and the lack of a consistent pre and post-test timeframe. The lack of a control group and adequate sample size decreases the validity, generalizability, and causality assumptions and conclusions I can draw regarding the effectiveness of Natural Lifemanship's ® TF-EAP TM model. Despite these limitations, thought, important findings were made about Natural Lifemanship's ® TF-EAP TM model.

Sample

To generate my sample, I used a nonprobability sampling strategy with purposive and convenience sampling. The use of nonprobability sampling aligned with current research literature on determining intervention effectiveness with a pre and post-test method (Selby & Smith-Osborne, 2013; Schultz et al., 2007; Ewing et al., 2007). Purposive sampling was needed since I was researching the effectiveness of a specific trauma-informed treatment modality and needed a sample reflecting a history of trauma. Convenience sampling was the only method by which I could generate my sample since I was using secondary data provided by Spirit Reins.

Initially, my sample frame included the following characteristics: youths between the ages of 5 and 17, who were ready to enroll, but had yet to receive treatment, in Spirit Reins programming, and who have an ACE score of three and above. Due to lack of participants this sample frame generated, I expanded my sample frame to include the following characteristics: youth between the ages of 5 and 17, who had a pre and post-test CAFAS score, who had either an ACE score of 1 and above or a history of intrauterine trauma, and who had not been used in any previous research studies.

With the adjusted sample frame, Spirit Reins was able to generate 45 participants who matched my sample criteria. During the final stages of data collection 5 participants had to be

removed from the sample because they either stopped attending Spirit Reins programming or did not have a completed CAFAS post-test. Therefore, my final sample consisted of 40 participants.

As for my sample's demographic makeup, 65% of participants were female and 35% were male. Their ages ranged from 5-17 with a mean age of 12. A majority of the participants, 52.5%, identified as Caucasian/White, followed by 22.5% identifying as Hispanic, 15% identifying as African American/Black, 7.5% identifying as Biracial, and 2.5% identifying as Asian. 92.5% of participants had an ACE Score of 1 and above with a mean score of 4, and 62.5% of participants had a history of intrauterine trauma. Participants' involvement in Spirit Reins programming ranged anywhere from a minimum of 3 months to a maximum of 15 months with the mean score of 9 months.

As I stated earlier, the number of participants in my sample frame serves as a limitation, but I do believe my findings highlight the effectiveness of Natural Lifemanship's ® TF-EAP TM model. There are also inherent biases in my sample due to my use of purposive sampling. All of the elements in my intended population were selected and represented in the sampling population. No ethical concerns arose while collecting my study sample. Spirit Reins generated the sample based upon my sample criteria, and I simply performed the data analysis on the secondary data they provided. No youth were harmed in this process. As stated earlier, CAFAS is a clinician-completed rating scale and did not require any participation on behalf of the participants for the CAFAS score to be generated. My use of secondary data did not require me to administer an informed consent form to conduct my research study, but an informed consent form was administered by Spirit Reins and signed by each participant and their legal guardian prior to their participation in Spirit Reins programming. My research project was reviewed and approved by Smith College School for Social Work (SCSW) Human Subjects Review (HSR).

My research project has met all ethical research standards, and has not imposed any harm on behalf of the research participants. You can find my SCSW HSR approval letter in Appendix A.

Data Collection Methods

All of the data used in this study was collected by 6 Spirit Reins clinicians. During each participant's initial assessment with Spirit Reins, several items were collected and generated. Clinicians completed a CAFAS assessment which required them to enter in pre-test CAFAS scores, demographic information, and an anonymous, de-identified primary ID for each participant via their secure, online CAFAS database. They were also responsible for administering the ACE score questionnaire and gathering information on each participant's intrauterine trauma history.

Spirit Reins clinicians were also in charge of completing post-test CAFAS scores on each participant, as well as, determining the sample population given my sample criteria. Once the sample was determined, and the pre and post-test CAFAS scores submitted, I was given a list of participants that fit my sample criteria. I was then given permission on behalf of Spirit Reins to access their secure, online CAFAS database to obtain each participant's demographic information and pre and post-test CAFAS scores for data analysis.

Using each participant's de-identified, primary ID, I entered in each participant's demographic information, CAFAS total and subscale scores, CAFAS severe impairments number, and months of Spirit Reins programming into an Excel document titled DATA. I was also sent an Excel document on behalf of Spirit Reins that included each participant's ACE score and their exposure to intrauterine trauma. I entered all of this information into the DATA Excel document. Once all of the data was collected, I sent the DATA Excel document to the Smith College School for Social Work Research Analyst for data analysis. All participants' information

in this Excel document was de-identified for research purposes and to safeguard the confidentiality of participants and Spirit Reins.

It is important to note that in order to generate a CAFAS score a clinician has to select items from eight life domains: At School, Home, in the Community, Behavior Towards Others, Moods, Self Harm, Substance Use, and Thinking. The items selected in the CAFAS reflect information that was collected during the initial clinical assessment (pre-test) and follow-up assessment (post-test). The items selected describe the youth's functionality, problematic behaviors, as well as strengths and goals (Hodges, n.d.). I have included a copy of the CAFAS questionnaire in Appendix C.

Data Analysis

Data analysis was conducted by the Smith College School for Social Work Research Analyst. The school's research analyst imported my DATA Excel document into a Statistical Package for the Social Sciences (SPSS) file, and then ran frequencies for all variables and descriptive statistics for ratio level variables. Descriptive statistics were used to explore the demographic characteristics of my sample population in an effort to explore the diversity of Spirit Reins' population. Descriptive statistics were also generated because most of the EAP research studies I have read do not do an adequate job at exploring the demographic characteristics of their sample. Data analysis of my sample's demographic information was also useful because I was able to explore if relationships existed between demographic characteristics and intervention effectiveness.

My use of the following inferential statistics were used to analyze participants' pre and post-test CAFAS total scores, number of CAFAS severe impairments, months of programming, and trauma history: t-test, pearson's r, and oneway analysis of variance. The use of these

statistics allowed me test my hypothesis regarding the effectiveness of Natural Lifemanship's ® TF-EAP TM model. My hypothesis suggested that Natural Lifemanship's ® TF-EAP TM model would be effective in reducing participants' post-test CAFAS total score. If a reduction in participants' CAFAS total scores occurred, my research study would prove Natural Lifemanship's ® TF-EAP TM model to be effective in reducing the psychological, emotional, and behavioral problems in youth with a trauma history. While the main focus of my research was to measure each participants pre and post-test CAFAS total score, the use of other inferential statistics assisted in determining the effectiveness of Natural Lifemanship's ® TF-EAP TM model.

Limitations & Biases

Throughout this chapter, I have mentioned several limitations within the methodology of my research study. My inability to generate a sample that shared a consistent pre and post-test timeframe impacted my ability to generalize findings. The lack of a control group and adequate sample size limited my study's ability to produce valid findings. There is also an inherent bias in my sample due to my use of purposive sampling. A majority of these limitations were caused by agency and personal restrictions that revolved around financial feasibility and staff availability. If Spirit Reins and I had an increased supply of financial supports and staff availability, then we could have possibly produced a piece of research literature with more valid and generalizable results.

It should also be noted that I am a horse enthusiast and personally believe that traumainformed EAP programs and models could serve as an effective treatment intervention for youths who have experienced trauma. I have also received training in Natural Lifemanship's ® TF-EAP TM model. These personal biases, beliefs, and experiences could very well have impacted my

research study regarding the study's literature review, research design and findings. It should also be noted that I am researching an established EAP organization so my findings will have an impact on the organization as well.

Aside from these limitations and biases, though, my findings will be able to educate the field about the effectiveness of trauma-informed EAP programs and models, and can lay a foundation for the future work that needs to be done in the field. Hopefully, these findings will be helpful for future researchers measuring the effectiveness of trauma-informed EAP programs and models. These findings will also be able to attest to the effectiveness of Natural Lifemanship's ® TF-EAP TM model, which has the possibility to influence the future services that Spirit Reins provides. The following chapter will discuss and highlight the findings of this research study. There were several important findings in this study, and Chapter IV will discuss if Natural Lifemanship's ® TF-EAP TM model was effective in reducing the psychological, emotional, and/or behavioral problems in youth with a trauma history.

CHAPTER IV

Findings

The main purpose of this research study was to quantitatively examine if Natural Lifemanship's ® TF-EAP TM model was effective in reducing the psychological, emotional, and/or behavioral problems in youth with a trauma history. The statistical analysis of pre and post-test CAFAS total scores was used to determine intervention effectiveness. My hypothesis suggested that participants post-test CAFAS total scores would be lower than their pre-test CAFAS total scores, thus, determining Natural Lifemanship's ® TF-EAP TM model to be effective in reducing the psychological, emotional, and/or behavioral problems in youth with a trauma history. Findings supported this hypothesis.

A paired t-test was used to determine if differences existed between participants' pre and post-test CAFAS total scores. A significant difference was found (t (39)=5.40, p=.000). Participants mean pre-test CAFAS total score was higher (m=89.25) than their mean post-test CAFAS total score (m=53.50). A lower mean post-test CAFAS total score supports the hypothesis that Natural Lifemanship's ® TF-EAP TM model is effective in reducing the psychological, emotional, and/or behavioral problems in youth with a trauma history.

Participants pre-test CAFAS total scores ranged from 30 to 220 with 40% of participants having a CAFAS total score of 90 and above. Participants post-test CAFAS total scores ranged from 0 to 150 with 17.5 % of participants having a CAFAS total score of 90 and above. While analyzing the difference between participants' pre and post-test CAFAS total scores was the

main tool used to determine intervention effectiveness, other information collected on participants (i.e. CAFAS severe impairments number, months enrolled in Spirit Reins programming, and trauma history) proved relevant in evaluating Natural Lifemanship's ® effectiveness.

During the data collection phase, I collected each participant's pre and post-test CAFAS severe impairments number. A CAFAS severe impairment number ranges from 1 to 8. It indicates the number of life domains (out of eight possible domains) in which a youth had the highest score possible. The eight life domains are: School, Home, Community, Behavior Towards Others, Moods/Emotions, Self Harm, Substance Use, and Thinking. A paired t-test was used to determine if differences existed between participants pre and post-test CAFAS severe impairments number and a significant difference was found (t (39)=3.603, p=.001). Participants' mean pre-test CAFAS severe impairments number (m=.35). A lower mean post-test CAFAS severe impairments number (m=.35). A lower mean post-test CAFAS severe impairments number (m=.35). A lower mean post-test CAFAS severe impairments number supports the hypothesis that Natural Lifemanship's ® TF-EAP TM model was effective in reducing the psychological, emotional, and/or behavioral problems in youth with a trauma history.

One limitation within the research study was that I could not generate a sample that shared a consistent pre and post-test timeframe. As mentioned earlier, my original study intended to measure the CAFAS total scores of participants who had been enrolled in Spirit Reins programming for 3 months. Due to a lack of participants that fit this inclusion criteria, I had to change my sample characteristics to include participants who had been enrolled in Spirit Reins programming from 3 to 15 months. While changing this aspect of my sample decreased the generalizability of my research findings, it provided the opportunity to examine whether the

length of program enrollment impacted participants' post-test CAFAS total scores. The evaluation of this was approached three different ways.

First, a CAFAS change score was created for each participant. A CAFAS change score measures the change in CAFAS total score for each participant from pre to post-test. Thus, negative change scores indicate a decrease in CAFAS score, which indicates an improvement following the program. The more negative this change score is, the larger the improvement in CAFAS total score. A Pearson Correlation was used to determine if there was a relationship between the number of months enrolled in Spirit Reins programming and participants CAFAS change score. No significant correlation was found. Second, a three category variable for months was created (1=3-6 months, 2=7-10 months, 3=11-15 months) and a one-way analysis of variance was used to determine if there was a difference in CAFAS change score by the number of months enrolled in Spirit Reins programming. No significant difference was found. Finally, the third statistical test used the post-test CAFAS total score and the original month variable. A Pearson correlation was used to determine if there was a relationship between the number of months enrolled in Spirit Reins programming and participants' post-test CAFAS total scores. A significant weak negative correlation was found (r=-.336, p=.034). This negative correlation suggests that as months in the program increased participants' post-test CAFAS total score decreased.

Since the focus of my research study revolves around youths who have experienced trauma, I wanted to see if participants' trauma history had an impact on their post-test CAFAS total scores. I used two variables to explore this possible statistical phenomenon. The first was ACE scores and the second was intrauterine trauma history.

When looking at participants' ACE score, I wanted to see if participants with a higher ACE score had the same degree of reduction in their post-test CAFAS total scores as those with a lower ACE score. To determine this, a two category variable was created: ACE score low (0-4) and ACE score high (5-9). Then a t-test was used to determine if differences existed in CAFAS change score by ACE score group (high versus low). No significant difference was found. Then the original ACE score was used and a Pearson Correlation was run to determine if there was a relationship between participants' ACE score and their post-test CAFAS change score. No significant correlation was found.

I also wanted to measure whether there was a difference in CAFAS total score by whether participants has a history of intrauterine trauma. First, a t-test was run to determine if a difference existed between participants' post-test CAFAS total score by intrauterine trauma history. No significant difference was found. Then, a second t-test was run to determine if there was a difference in CAFAS change score by intrauterine trauma history and a significant difference was found (t(17.57)=2.840, p=.011). Participants who had a history of intrauterine trauma had a lower mean CAFAS change score (m=-20.4) than participants without a history of intrauterine trauma (m=-61.33). This suggests that those with a history of intrauterine trauma changes less than those without a history of intrauterine trauma.

Overall, my findings suggest that Natural Lifemanship's ® TF-EAP [™] model is effective in reducing the psychological, emotional, and behavioral problems in youth with a trauma history. Participants' post-test CAFAS total scores had a lower mean score than their pre-test CAFAS total scores. There was a decrease in participants' CAFAS severe impairments number, and findings suggest that as months in Spirit Reins programming increased participants' post-test CAFAS total score decreased. While the overall findings suggest that Natural Lifemanship's ®

TF-EAP [™] model is an effective trauma-informed therapeutic intervention for youths who have experienced trauma, more research needs to be done due to the limitations regarding valid and generalizable results. The importance of these findings will be discussed in the following chapter. Chapter V provides an overview of the limitations currently existing within the field and within this research study. This chapter will discuss how the research findings impact the field of EAP and social work, and will offer suggestions on future research.

CHAPTER V

Discussion

Limitations in EAP

Over the last eighteen years, interest, research, and funding for EAP programs and models has steadily increased. Despite this increase, the field still lacks good quality, empirical research attesting to its effectiveness, validity, and theoretical implications (Knapp, 2013; Selby & Smith-Osborne, 2013). There is also less information, literature, and research on how this field could possibly serve as an effective therapeutic intervention for youths who have experienced trauma. As stated earlier, I have yet to find a research study exploring, let alone measuring, the effectiveness of a trauma-informed EAP program or model for youths who have experienced trauma. The purpose of this research study was to provide some insight into this area and attempted to bridge the gap that currently exists between EAP, trauma, and youths.

Important Findings

The findings from this research study laid a foundation to the future evaluation and research that needs to happen regarding the effectiveness of trauma-informed EAP programs and models and their ability to effectively impact youths who have experienced trauma. Findings from this research study support my hypothesis regarding Natural Lifemanship's ® effectiveness. The decrease in participant's post-test CAFAS total scores support my hypothesis that Natural Lifemanship's ® TF-EAP TM model is effective in reducing the psychological, emotional, and behavioral problems in youth with a trauma history. Additional findings, such as

the decrease in participants' CAFAS severe impairments number, also confirm Natural Lifemanhip's ® effectiveness. Findings on participants' enrollment in Spirit Reins programming suggest that as months in Spirit Reins programming increased, participants' post-test CAFAS total score decreased.

Research Limitations

Comparing and contrasting my findings from previous research studies is difficult due to the lack of research studies examining and measuring the same variables. This research study is the first of its kind. My incorporation of qualitative data may have been more useful in exploring the effectiveness of Natural Lifemanship's [®] TF-EAP TM model, but due to agency and personal limitations, that type of data collection was not possible. Purposive sampling, participants' lack of a consistent pre and post-test timeframe, my study's lack of a control group, and adequate sample size served as a limitation. Personal biases regarding the effectiveness of EAP programs could have also impacted the findings in this study, but aside from these limitations, findings are important because the field lacks information in this area. A major strength in this study is that it has begun the dialogue regarding trauma-informed EAP services and their efficacy with youths who have experienced trauma.

Relevance to the Field of Social Work

These finding are also important to the field of social work. The field of prides itself on providing competent and appropriate services to others. Youths who have experienced trauma are a vulnerable population and deserve competent and appropriate services that address their needs. Findings from this report are important to the field because it will increase social workers' knowledge on effective, trauma-informed therapeutic interventions for youths who have a trauma history. The field of social work could greatly benefit from the knowledge gained from this

research study and findings suggest that Natural Lifemanship's ® TF-EAP [™] model serves as an effective trauma-informed treatment intervention for youths who have experienced trauma.

Future Research

Further research in trauma-informed EAP programs and models needs to be conducted for the field to legitimize itself as an effective, trauma-informed therapeutic intervention for youths who have experienced trauma. Future research studies need to implement good quality, methodologically sound research studies that can really attest to the effectiveness, validity, and theoretical implications of the field. Randomized clinical trials need to be incorporated into future research studies to eliminate the serious limitations and biases that currently exist within the research literature thus far. Once these methodology limitations are addressed, I believe the field will be able to establish itself as a legitimate and effective, trauma-informed therapeutic intervention.

Conclusion

Trauma-informed EAP programs and models provide clients with a new understanding of their trauma history and symptoms. Through the client-horse relationship, clients can engage in somatosensory, body-based, preverbal experiences that the therapist alone cannot provide. This unique and alternative treatment modality cultivates a space and opportunity for the trauma client to learn new ways of communicating in order to create a healthy, safe, and reciprocal relationship with the horse and eventually others. The experiential insight that is gained from the client-horse relationship, may be the sole component of what makes trauma-informed EAP programs an effective therapeutic intervention for youths who have experienced trauma.

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APPENDIX A

Smith College School for Social Work Human Subjects Review Approval Letter



School for Social Work Smith College Northampton, Massachusetts 01063 T (413) 585-7950 F (413) 585-7994

January 4, 2014

Nakita Dziegielewski

Dear Nakita,

You did a very nice job on your revisions. Your project is now approved by the Human Subjects Review Committee.

Please note the following requirements:

Consent Forms: All subjects should be given a copy of the consent form.

Maintaining Data: You must retain all data and other documents for at least three (3) years past completion of the research activity.

In addition, these requirements may also be applicable:

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

Renewal: You are required to apply for renewal of approval every year for as long as the study is active.

Completion: You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

Congratulations and our best wishes on your interesting study.

Sincerely,

Elaine Kersten, Ed.D. Co-Chair, Human Subjects Review Committee

CC: Colette Duciaume-Wright, Research Advisor

APPENDIX B

Agency Approval Letter

September 20, 2013

Smith College School for Social Work Lilly Hall Northampton, MA 01063

To Whom It May Concern:

Spirit Reins and Natural Lifemanship gives permission for Nakita Dziegielewski to locate her research in this agency and with this specific therapeutic modality. We do not have a Human Subjects Review Board and, therefore, request that Smith College School for Social Work's (SSW) Human Subject Review Committee (HSR) perform a review of the research proposed by Nakita Dziegielewski. Spirit Reins and Natural Lifemanship will abide by the standards related to the protection of all participants in the research approved by SSW HSR Committee.

Sincerely,

Bettina Dhulton-Jobe Bettina Shultz-Jobe

Natural Lifemanship Founder

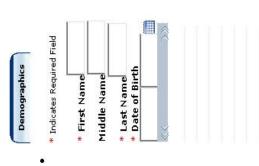
tinda An

Rhonda Smith Spirit Reins Founder & Executive Director

APPENDIX C

Child and Adolescent Functional Assessment Scale (CAFAS) Clinician-Completed Questionnaire

The following pages include the clinician-completed, CAFAS questionnaire. A client's CAFAS total and subscale scores, as well as, their CAFAS severe impairments number is generated by this questionnaire. The demographic information page and caregiver questions are also included.





* Gender C Male C Female C Unspecified

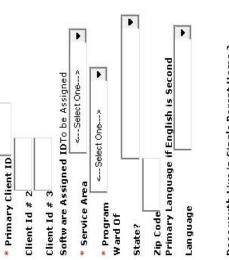
* Ethnicity(Check all that Apply)

- African American / Black
 - Caucasian / White Ĺ
- Native American / First Nation L
- Native Hawaiian or / Pacific Islander

* Is youth Hispanic?

C Yes C No C Not Reported





Does youth Live in Single Parent Home ?

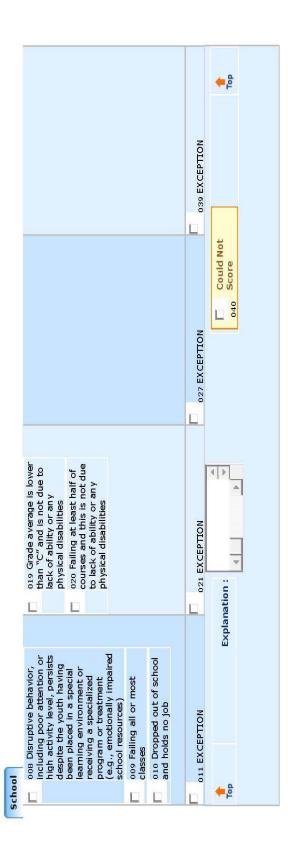
C Yes C No C Not Reported

Other n Asian

🗖 Not Reported Specify If Other

🚯 Add Client 😵 Cancel

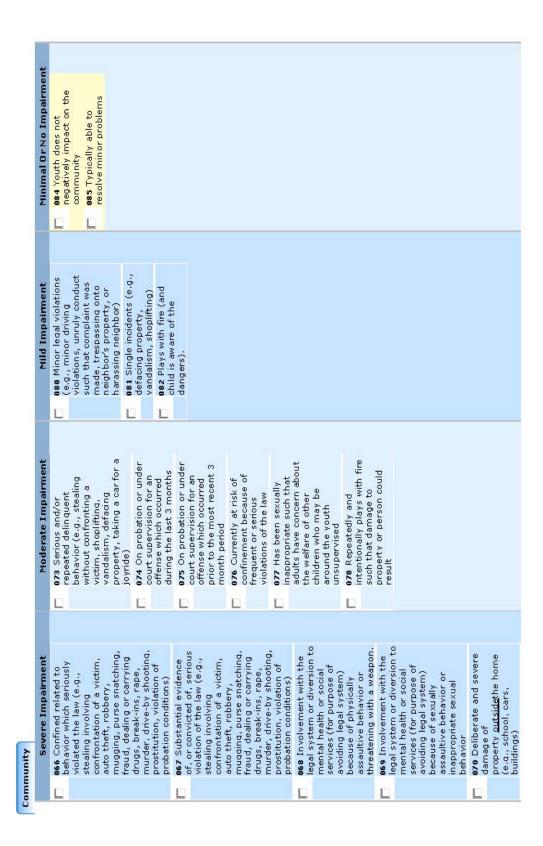
	Severe Impairment	Moderate Impairment		Mild Impairment		Minimal Or No Impairment
L	001 Out of school or job	012 Non-compliant	L	022 Non-compliant	L	028 Reasonably
	due to behavior that	behavior which results in		behavior results in teacher		comfortable and competent
	occurred at school or on job	persistent or repeated		or immediate supervisor		in relevant roles
	aunng me raung period (e.n. asked to leave or	functioning or becomes		pringing attention to pmblams or structuring		029 Minor problems
	refuses to attend)	known to authority figures		vouth's activities so as to		satisractorily resolved
L	002 Exhelled or equivalent	other than classroom		avoid predictable		030 Functions satisfactorily
	from school due to	teacher (e.g., principal)		difficulties, more than other		even wich discractions
	behavior (e.g., multiple	because of severity and/or		youth		031 School grades are
	suspensions, removed from	chronicity	L	023 Inappropriate behavior		average or above
	community school, placed	 013 Inappropriate behavior 		results in teacher or		032 Schoolwork is
	in an alternative school)	which results in persistent		immediate supervisor		commensurate with ability
	003 Judged to be a threat	or repeated disruption of		bringing attention to		and yourn is menually retarded
	to others because of	becomes known to		volith's activities so as to	1	son Cabaalurade ia
	aggressive potential (i.e.,	authority figures other than		avoid predictable	Ü.	033 SCHOOLWORK IS COMMENSIIFATE With ability
	actions or statements)	classroom teacher (e.g.,		difficulties, more than other		and vouth is learning
	monitoring or supervision	principal) because of		youth	151	disabled
	needed	severity and/or chronicity	L	024 Occasionally disobeys	L	034 Schoolwork is
L	004 Harmed or made	014 Frequently truant (i.e.,		school rules, with no harm	1	commensurate with ability
1	serious threat to hurt a	approximately once every		to others or to property,		and youth is a slow learner
	teacher/peer/co-	two weeks or for several	_	more than other youth	Ľ	035 Schoolwork is
	worker/supervisor	consecutive days)		025 Problems in school,	1	commensurate with ability
Г	005 Unable to meet	015 Frequent absences		including behaviors related		and youth has a learning
	minimum requirements for	from school (I.e.,		to poor attention or high		impairment due to
	behavior in classroom	approximately once every		activity level, are present		matemal alcohol or drug
	(either in specialized	TWO WEEKS OF TOP SEVERAL		but are not disruptive to		use
	classroom or regular	consecutive days) due to impositing hohoright and		ure classiouri (cari be	Ľ	036 In a mostly vocational
	classroom with specialized			classmom with the vouth		program and doing
	services in public school or equivalent) without special	physical illness		able to achieve		satisfactorily
		16 At work, missed days		satisfactorily)		037 Graduated from high
I	006 Chronic truancy	or tardiness results in	L	026 School/work		scrool or received GED
	resulting in negative	reprimand or equivalent	1	productivity is less than		038 Dropped out of school
	consequences (e.g., loss of	 017 Disruptive behavior, 		expected for abilities due to		and is working at a job or in actively leading for a tab
	course credit, failing	including poor attention or		failure to execute		וא מכנו יישו א ויטטאוווא וטו מ וטו
	courses or tests, parents	high activity level, resulting		assignments correctly,		
	notified)	in individualized program or		complete work, nand in work on time atr	_	
	007 Chronic absences,	specialized treatment peing needed or implemented				
	other than truancy, resulting in negative	(e.g., emotionally impaired			_	
	consequences (e.g., loss of	school resources)			_	
	course credit, failing	018 At work, received a reprimending or			_	

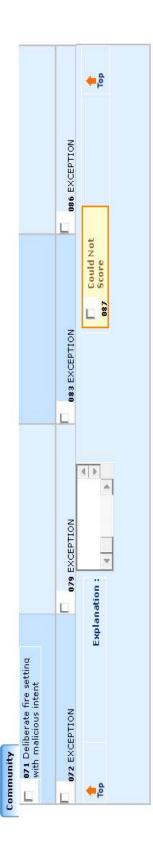


Severe Impairment	Moderate	Moderate Impairment	Mild Impairment	Minimal Or No Impairment
041 Not in the home due to child's behavior that occurred in the home during the rating period	051 Persistent failure to comply with reasonable rules and expectations within the home (e.g.,	t failure to reasonable)ectations me (e.g.,	057 Frequently fails to comply with reasonable rules and expectations within the home	062 Typically complies with reasonable rules and expectations within the home
042 Extensive management by others required in order tho be maintained in the home	bedtime, curfew); active defiance much of the tim (<u>OR</u> , if youth is not in the home, youth fails to com	bedtme, currew), active defiance much of the time (OB, if youth is not in the home, youth fails to comply	058 Has to be "watched" or prodded in order to get him/her to do chores or comply with requests	6 Minor problems satisfactorily resolved
043 Deliberate and serious threats of physical harm to household members 044 Repeated acts of	with rules and expectatio unless close monitorind/supervision is maintained) 052 Frequent use of	with rules and expectations unless close maintained/supervision is maintained, use of	059 Frequently "balks" or resists routines, chores, or following instructions, but will comply if caregiver	
intimidation toward household members 045 Behavior and activities	profane, vulgar, or curse words to hou sehold members	sehold	16.0 Frequently engages in behaviors which are intertionally fruct ratio or	
are beyond carequers influence almost all of the time (i.e., serious and repeated violations of expectations and rules, exuch as curfew)	 053 Repeated irresponsible behavior in the home is potentially dangerous (e.g. leaves stove on) 054 Run away from home 	053 Repeated irresponsible behavior in the home is potentially dangerous (e.g., leaves stove on) 054 Run away from home	annoying to caregiver (e.g., taunting siblings, purposeful dawdling)	
046 Behavior and activities have to be constantly monitored in order to ensure safety in the home	overnight and likely whereabouts are kn caregivers, such as home	overnight and likely whereabouts are known to caregivers, such as friend's home		
047 Supervision of youth required, which does or would interfere with careativer's ability to work or carry out other roles	the home	uso Delicerate damage to the home		
048 Run away from home overnight more than once, or once for an extended ine, and whereabouts unknown to caregiver				
049 Deliberate and severe damage to property in the home (e.a., home structure, grounds, furnishings)				
050 EXCEPTION	C 056 EXCEPTION	N	061 EXCEPTION	064 EXCEPTION

Home





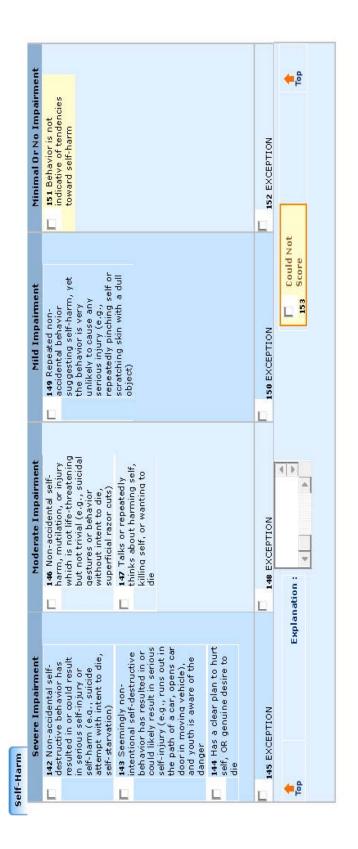


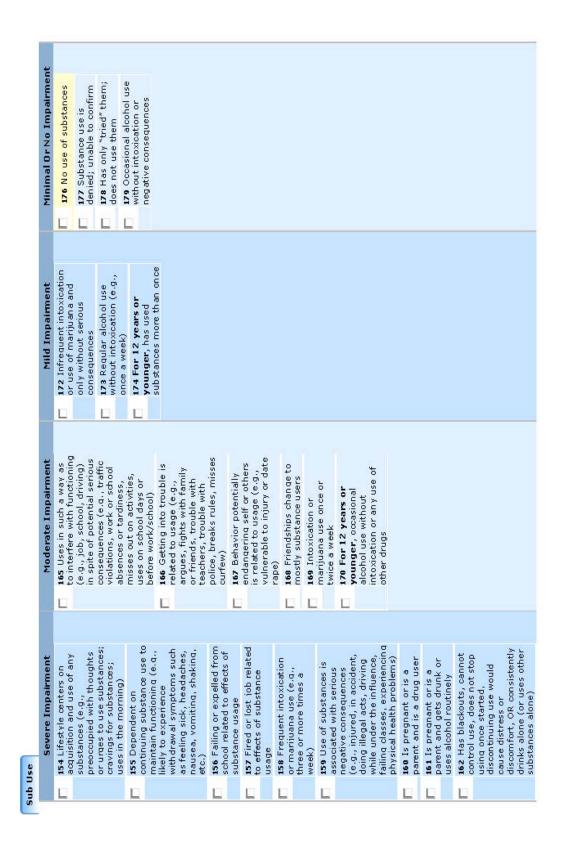
Moderate Impairment Mild Impairment Minimal Or No Impairment	argun to oth	problems for self or others 104 Poor judgment or sustain a normal range of (e.g., fighting, belligerence, impulsive behavior that is age-appropriate promiscuity) age-inappropriate and	2	105 Upset (e.g., temper	vindicuve (e.g., deliberacely in trustraced, or if chucked and persistently annoying T 106 Easily annoyed by	to others, intentionally damaging personal damaging personal		096 Poor judgment or 107 Does not engage in	resulting in dangerous or activities because of	risky activities that could tendency to be ignored or lead to injury or harm to rejected hy neers	others, more than other 7 108 Difficulties in peer	007 Frequent display of Friends due to negative	igry		other people or animals 109 Immature behavior	υ	or manipulative manner having friends who are (e.g., uses/cons others) predominantly vounger		100 Involved in gang-like	100 Involved in gang-like activities in which others are harassed, bullied,	100 Involved in gang-like activities in which others are harassed, bullied, intimidated, etc	100 Involved in gang-like activities in which others are harassed, bullied, intimidated, etc 101 Persistent	100 Involved in gang-like activities in which others are harassed, bullied, intimidated, etc Intersistent problems/difficulties in	100 Involved in gang-like activities in which others are harassed, bullied, initimidated, etc 101 Persistent 101 persistent artagonizing behaviors
	55.5 L	re r	6 Å	55	=> E	8-9 6-2	ģ		≣ ₽.	e e	52	60	P O	60		\$	P e	2		2 8 8 8. D	2.5 6 8 2 (
	008 Behavior consistently bizarre or extremely odd 008 Behavior so disruptive	or dangerous that harm to others is likely (e.q., hurts or tries to hurt others, such	as hitting, biting, throwing things at others, using or	threatening to use a weapon or dangerous	accomplished sexual	assault or abuse of another person (e.g., used force,	verbal threats, or, toward	ounger youth, munimutuation	091 Deliberately and	severely cruel to animals		L												

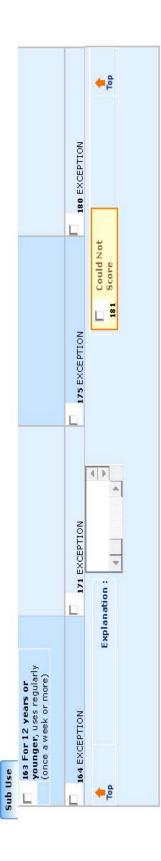


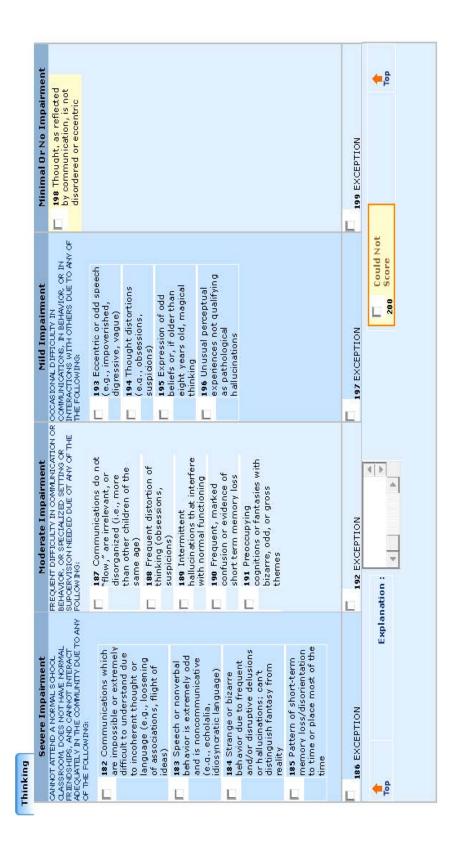
Spook	Severe Imnairment	Moderate I mnairment	Mild Imnaiment	Minimal Or No Impairment	
116 Viewed as od strange because responses are inc (unreasonable, e: most of the time	116 Viewed as odd or strange because emotional responses are incongruous (unreasonable, excessive) most of the time	 121 Marked changes in moods that are generally intense and abrupt 122 Depressed mood or 	128 Often anxious, fearful, or sad, with some related symptom present (e.g., nightmares, stomachaches)	 136 Feels normal distress, but daily life is not disrupted 137 Considers self to be an 	
117 Fear anxieties trauma r attendan absent fi per weel marked	11.7 Fears, worries, anxieties, or reactions to trauma result in poor attendance at school (e.g., absent for at least one day per week on average) OR marked social with drawal	sadness is persistent i.e., at least half of the time), with disturbance in functioning in at least one of the following areas: sleeping, eatind, concentration, energy level, or normal activities. OR.	129 Disproportionate expression of irritability, fear, or worries 130 Very self-critical, low self-esteem, feelings of worthlessness 131 Easily distressed if	OK person 138 Can express strong emotions appropriately 139 Experience of sadness and anxiety are age- appropriate	
(will not visit wit associat incapac at least average	(will not leave the home to visit with friends) 118 Depression is associated with academic incapacitation (e.g., absent average, or if attends	if <u>onk</u> irritability or anhedonia (i.e., marked diminished interest or pleasure in typical activities) is present, there should be disturbance in two or more areas	makes mistakes 132 Sad, withdrawn, hurt, or anxious if criticized 133 Sad (or depressed or anhedonic) or anxious in at least one setting for up to a few days at a time		
school, OR soci friends) 119 Dep accomp accomp die) die)	school, does not do work) OR social incepacitation (I.e., isolates self from friends) 119 Depression is accompanied by suicidal intent (i.e., really wants to die)	123 Youth worries excessively (i.e., out of proportion) and persistently (i.e., at least half of the time), with disturbance in furned, with disturbance in functioning manifested by at least one of the following: sleep problems, tiredness, poor concentration, irritability, muscle tension, or feeling "on edge."	134 Notable emotional restriction (e.g., has difficulty expressing strong emotions such as fear, hate, love)		
		124 Fears, worries, or anxieties result in the youth expressing marked distress upon being away from the home or parent figures; however, the youth is able to go to school or engage in some social activities			
		125 School-age children require special accommodations because of worries or anxieties (e.g., sleeping near parents, calling home)			

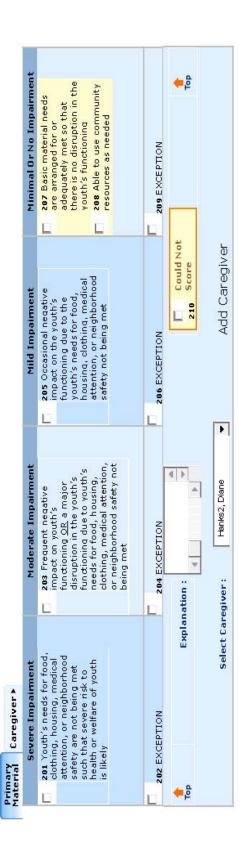
	T 135 EXCEPTION	La Could Not 141 Score
126 For traumatized youth, emotional blunting (i.e., no or few signs of emotional expression; emotional expression is markedly flat) OR marked distress around recollections, dreams, or reminders related to the original trauma	127 EXCEPTION	Explanation :
	120 EXCEPTION	¢∎0



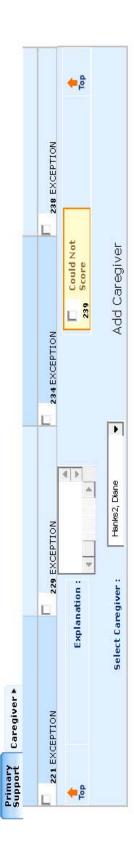






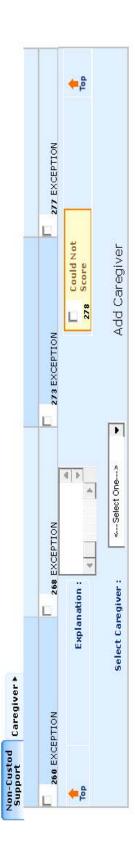


1	Support Caregiver >		0.	
	Severe Impairment	Moderate Impairment	Mild Impairment	Minimal Or No Impairment
	211 Sociofamilial setting is potentially dangerous to the youth due to lack of family resources required to meet the youth's needs/demands	 222 Youth's developmental needs cannot be adequately met because youth's needs/developmental demands exceed family 	230 Family not able to provide adequate warmth, security or sensitivity relative to the youth's needs. Support from other sources outside the	 235 Family is sufficiently warm, secure, and sensitive to the youth's major needs 236 Parental supervision is adequete
L	212 Gross impairment in parental judgment or functioning (may be related	resources 23 Marked impairment in parental judoment or	immediate family are unable to compensate for this inadequacy	237 Even though there are temporary problems in
	to psychosis, substance abuse, severe personality disorder, mental retardation, etc.)	functioning (may be related to emotional instability, psychiatric illness, substance use, physical	231 Frequent family arguments and/or misunderstandings resulting in bad feelings	to the youth, there is compensation from the wider social support system
L	213 Caregiver is frankly hostile, rejecting, or does not wart youth to return to the home	illness, criminal activities, or other impairing condition) 224 Family conflict is	232 Family relations are characterized by poor problem solving, poor communication.	
L	214 Youth is subjected to	pervasive and continual (characterized by hostility.	emotional insensitivity	
1	by a caregiver	tension, and/or scapegoating, etc.)	provide adequate supervision. firmness, or	
	physical abuse or neglect in the home by a caregiver	225 Family members are insensitive, angry and/or resentful to the vouth	consistency in care over time relative to the youth's needs: no other supports	
L	216 Caregiver "kicks" youth out of the home, without trying to make other living	26 Marked lack of parental supervision or consistency in care (e. o., frammenty	compensate for this deficit	
	arrangements 217 Youth currently removed from the home due to sexual abuse, physical shurse,	does not know whereabouts of youth; does not know youth's friends)		
	218 Failure of caregivers to provide an environment safe from possible abuse to	227 Failure of caregiver to provide emotional support to youth who has been trauwatized or abused		
L	or traumatized or traumatized 219 Severe or frequent domestic violence takes	228 Domestic violence, or serious threat of domestic violence, takes place in the vointh's home		
	place in the home 220 Caregiver is openly involved in unlawful			
	behavior of contributes to or approves of youth being involved in potentially unlawful behavior			



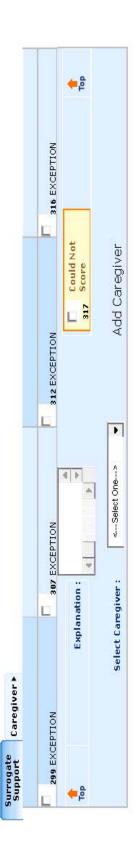
	Severe Impairment	Mo	Moderate Impairment	Mild Impairment		Minimal Or No Impairment
1	240 Youth's needs for food, clothing, housing, medical attention, or neighborhood safety are not being met such that severe risk to health or welfare of youth is likely	242 Freque impact on functionin disruption functionin needs for clothing, n or neighbo being met	242 Frequent negative impact on youth's implotion of Q.B. a major disruption in the youth's functioning due to youth's needs for food, housing, needs for food, housing, or neighborhood safety not being met	244 Occasional negative implact on the youth's functioning due to the youth's needs for food, housing, clothind, medical attention, or neighborhood safety not being met		 246 Basic material needs are arranged for or are arranged for or that there is no disruption in the youth's functioning 247 Able to use community resources as needed
	241 EXCEPTION	243 EX	243 EXCEPTION	C 245 EXCEPTION		248 EXCEPTION
수 율		Explanation :	4 1	Could Not 249 Score	ot	€
	Select Care	aregiver :	<select one=""></select>	 Add Careolver 	L.	

0	Support Caregiver >			(a
	Severe Impairment	Moderate Impairment	Mild Impairment	Minimal Or No Impairment
	250 Sociofamilial setting is potentially dangerous to	261 Youth's developmental needs cannot be	269 Family not able to provide adequate warmth,	274 Family is sufficiently warm, secure, and
	the youth due to lack of family resources required	adequately met because youth's	security or sensitivity relative to the youth's	sensitive to the youth's major needs
	to meet the youth's needs/demands	needs/developmental demands exceed family	needs. Support from other sources outside the	275 Parental supervision is adequate
	251 Gross impairment in parental judgment or functioning (may be related	resources 262 Marked impairment in parental iudoment or	Immediate ramily are unable to compensate for this inadequacy	276 Even though there are temporary problems in
	to psychosis, substance abuse, severe personality	functioning (may be related to emotional instability,	270 Frequent family arguments and/or	providing adequate support to the youth, there is commensation from the
	disorder, mental retardation, etc.)	psychiatric illness, substance use, physical	misunderstandings resulting in bad feelings	wider social support system
L	252 Caregiver is frankly hostile, rejecting, or does	illness, criminal activities, or other impairing	271 Family relations are characterized by poor	
	not want youth to return to the home	condition) 263 Family conflict is	problem solving, poor communication, or	
L	253 Youth is subjected to	pervasive and continual	emotional insensitivity	
	sexual abuse in the home by a caregiver	(characterized by hostility, tension, and/or	272 Family not able to provide adequate	
L	254 Youth is subjected to	scapegoating, etc.)	supervision, firmness, or	
-	physical abuse or neglect in	264 Family members are	consistency in care over	
	the home by a caregiver	insensitive, angry and/or resentful to the youth	time relative to the youth's needs; no other supports	
L.	255 Caregiver "kicks" youth	Z65 Marked lack of parental	compensate for this deficit	
	trying to make other living	supervision or consistency	7	
	arrangements	in care (e.g., trequently does not know		
	256 Youth currently removed from the home	where and known where abouts of youth;		
-	due to sexual abuse,	aces not know youth s friends)		
1	prysical douse, or neglect	C 266 Failure of caregiver to		
-	provide an environment	provide emotional support		
	safe from possible abuse to	traumatized or abused		
	a youth previously abused or traumatized	267 Domestic violence, or		
L	258 Severe or frequent	senous threat of domestic violence, takes place in the		
	place in the home	youth's home		
	259 Caregiver is openly involved in unlawful			
	behavior or contributes to			
	or approves of youch pering involved in potentially			
	unlawful behavior			



at	Material Caregiver Severe Impairment		Moderate I mpairment	Mild	Mild Impairment		Minimal Or No Impairment
	279 Youth's needs for food, clothing, housing, medical attention, or neighborhood safety are not being met such that severe risk to health or welfare of youth is likely	ಸ.೮ 2 ಕ 2 ಕ ರ ಕ ಸ [281 Frequent negative impact on youth's functioning <u>OR</u> a major disruption in the youth's functioning due to youth's needs for food, housing, needs for food, housing, or neighborhood safety not being met	283 Occas impact on functionin vouth's ne housing, o attention, safety not	283 Occasional negative impact on the youth's functioning due to the youth's needs for food, housino, clothing, medical attention, or neighborhood attention, or neighborhood safety not being met		285 Basic material needs are arranged for or adequately met so that there is no disruption in the youth's functioning 286 Able to use community resources as needed
	280 EXCEPTION	28	282 EXCEPTION	284 EXCEPTION	TION		287 EXCEPTION
و		Explanation :	4 •		288 Score	24	¢₽
	Select	Caregiver :	Select One>	Þ	Add Caregiver		

141 18 194				-	
Severe Impairment		Moderate Impairment	Mild Impairment	ment	Minimal Or No Impairment
289 Sociofamilial setting is potentially dangerous to the youth due to lack of family resources required to meed the youth's needs/demands	0	300 Youth's developmental needs cannot be adequately met because youth's needs/developmental demands exceed family	308 Family not able to provide adequate warmth, security or sensitivity relative to the youth's needs. Support from other sources outside the	e to warmth, vity tth's th's e	 313 Family is sufficiently warm, secure, and sensitive to the youth's major needs 314 Parental supervision is
290 Gross impairment in parental judgment or function (may be related		resources 301 Marked impairment in parental indoment or	immediate family are unable to compensate for this inadequacy	are sate for	aucquare 315 Even though there are temporary problems in
to psychosis, substance to psychosis, substance disorder, reental retardation, etc.)		parenter joudnient functioning (may be related perchiatric illness, substance use, physical	 309 Frequent family arguments and/or misunderstandings resulting in bad feelings 	اې s elings	providing adequate support to the youth, there is compensation from the wider social support system
291 Careqiver is frankly hostile, rejecting, or does not want youth to return to the home	Ľ	illness, criminal activities, or other impairing condition) 302 Family conflict is	310 Family relations are characterized by poor problem solving, poor communication. or	1s are oor boor	
292 Youth is subjected to		pervasive and continual	emotional insensitivity	ivity	
sexual abuse in the home by a caregiver		(characterized by hostility, tension, and/or scapegoating, etc.)	311 Family not able to provide adequate supervision. firmness. or	le to ess. or	
physical abuse or neglect in the home by a caregiver		303 Family members are insensitive, angry and/or resentful to the vouth	consistency in care over time relative to the youth's needs: no other supports	e over e youth's upports	
294 Caregiver Kicks youth out of the home, without	L	304 Marked lack of parental	compensate for this deficit	is deficit	
trying to make other living arrangements	1.	supervision or consistency in care (e.g., frequently			
295 Youth currently removed from the home due to sexual abuse, powercal abuse,		ages not know whereabouts of youth; does not know youth's friends)			
296 Failure of caregivers to provide an environment safe from possible abuse to		305 Failure of caregiver to provide emotional support to youth who has been traumatized or abused			
a youth previously abused or traumatized		306 Domestic violence, or			
297 Severe or frequent domestic violence takes place in the home		senous threat of gomestic violence, takes place in the youth's home			
298 Caregiver is openly involved in unlawful behavior or contributes to or approves of youth being involved in potentially unlawful behavior					



APPENDIX D

Adverse Childhood Experiences (ACE) Score Questionnaire

Finding Your ACE Score

While you were growing up, during your first 18 years of life:	
 Did a parent or other adult in the household often or very ofter Swear at you, insult you, put you down, or humiliate you? or 	
Act in a way that made you afraid that you might be physic	cally hurt?
Yes No	If yes enter 1
2. Did a parent or other adult in the household often or very ofter Push, grab, slap, or throw something at you? or	1
Ever hit you so hard that you had marks or were injured?	
Yes No	If yes enter 1
3. Did an adult or person at least 5 years older than you ever Touch or fondle you or have you touch their body in a sexe or	ual way?
Attempt or actually have oral, anal, or vaginal intercourse	with you?
Yes No	If yes enter 1
4. Did you often or very often feel that No one in your family loved you or thought you were imported or	ortant or special?
Your family didn't look out for each other, feel close to each Yes No	ch other, or support each other? If yes enter 1
5. Did you often or very often feel that	
You didn't have enough to eat, had to wear dirty clothes, a	and had no one to protect you?
or	
Your parents were too drunk or high to take care of you or needed it?	take you to the doctor if you
Yes No	If yes enter 1

6. Were your parents ever separated or divorced? Yes No	If yes enter 1
7. Was your mother or stepmother:	
Often or very often pushed, grabbed, slapp	ed, or had something thrown at her?
or Sometimes, often, or very often kicked, bit hard?	ten, hit with a fist, or hit with something
or	
Ever repeatedly hit at least a few minutes or Yes No	threatened with a gun or knife? If yes enter 1
8. Did you live with anyone who was a problem dri	nker or alcoholic or who used street drugs?
Yes No	If yes enter 1
9. Was a household member depressed or mentally suicide?	ill, or did a household member attempt
Yes No	If yes enter 1
10. Did a household member go to prison? Yes No	If yes enter 1

Now add up your "Yes" answers: _____ This is your ACE Score.