The Effectiveness of Equine-Assisted Experiential Therapy: Results of an Open Clinical Trial

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Abstract
This article describes an equine-assisted experiential therapy approach and presents treatment outcomes in 31 participants in an equine-assisted, experiential therapy program. Participants completed psychological measures prior to treatment, immediately following treatment, and 6 months after treatment. Reported reductions in psychological distress and enhancements in psychological well being were significant immediately following treatment and were stable at 6-month follow-up. The article discusses the clinical implications and limitations of the present study and directions for further research.

Keywords
experiential therapy, equine-assisted therapy (EAT), animal-assisted therapy, treatment effectiveness, treatment outcomes, equine-assisted experiential therapy (EAET)

Introduction
Documentation of the use of animals in mental health treatment appears as early as 1792 (Trivedi & Perl, 1995). Discussions about the use of companion animals (pets) in therapy have been present in the peer-review psychological
literature since the mid-1900s. Most writings to date describe animal-assisted therapy as consisting of therapy as usual with one or more companion animals present in the therapy room. Studies have shown positive results in the treatment of psychological and physical symptoms in various populations when pets are used in as part of the therapy milieu (Brickel, 1980-1981; Beck, Seraydarian & Hunter, 1986; Fosse, Minder, Aycock, & Santana, 1994; Mason & Hagan, 1999; Marr et al., 2000).

One such animal-assisted therapy approach uses horses. Equine-Assisted Psychotherapy (EAP) involves the use of horses in the treatment of psychological issues. Although it has been used to treat a multitude of psychological problems (Taylor, 2001; Tramutt, 2003; Tyler, 1994; Vidrine, Owen-Smith, & Faulkner, 2002; Zugich, Klontz & Leinart, 2002), quantitative studies on its effectiveness are almost nonexistent in the literature (Taylor, 2001; Vidrine et al.). Typically, in EAP, the therapist integrates equine activities within their broader theoretical framework. In this study, equine activities were integrated with the theory and techniques of experiential therapy, a humanistic-existential approach that uses direct experience as the primary avenue to change (Mahrer, 1983).

The Treatment Model

The present study examined the effectiveness of Equine-Assisted Experiential Therapy (EAET). EAET combines experiential therapy with specific equine activities to give clients the opportunity to work through unfinished business, relieve psychological distress, live more fully in the present, and change destructive patterns of behavior. In EAET, horses serve as catalysts and metaphors to allow clinical issues to surface. The core experiential treatment modality in EAET is based on the theory and techniques of psychodrama (Dayton, 1994; Fox, 1988). This model of experiential therapy, without the inclusion of the equine component, is explained in detail in previous writings (Klontz, 2004; Wegscheider-Cruse, Cruse & Bougher, 1990), and participants have reported significant reductions in psychological symptoms and enhancements in psychological well being after undergoing treatment (Klontz, Garos, & Klontz, 2005; Klontz, Wolf, & Bivens, 2001).

In EAET, therapists work closely with a Horse Handler, who is responsible for ensuring safety as well as providing proper instruction for interacting with horses. Equine activities such as choosing a horse, horse grooming, mounted work, walking/trotting, lunging, and equine games are combined with traditional experiential therapy tools of role-playing, sculpting, role-reversal, mirroring, and Gestalt techniques. A treatment manual incorporating these types
of activities into equine therapy was developed and used in the study, providing specific therapeutic equine activities (Longville, 2000). An example of one such activity is illustrated in the Appendix.

**Unfinished Business**

A major goal of this treatment approach is the resolution of unfinished business. Corey (1991) defines unfinished business as unexpressed feelings that are linked to memories carried into present life in ways that interfere with one’s ability to function effectively. He notes that unfinished business remains until an individual deals with the unexpressed feelings. Experiential techniques help clients resolve unfinished business through re-experiencing significant life events and relationships, allowing them to work through unresolved conflicts and emotions to live more fully in the present (Wegscheider-Cruse & Bougher, 1990).

**Horse as Metaphor and Therapist**

EAET offers a unique opportunity for the therapeutic use of metaphors. Horses elicit a range of emotions and behaviors in humans, which can be used as a catalyst for personal awareness and growth (Zugich et al., 2002). Horses also offer a variety of opportunities for projection and transference. A horse walking away, ignoring, being distracted by other horses, sleeping, wanting to eat at the wrong time, biting, urinating, and neighing are common horse behaviors to which clients respond. Clients can also often relate to a horse’s natural hypervigilance and impulse to escape when the horse feels frightened or threatened (Vidrine et al., 2002). A client’s interpretation of a horse’s movements, 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. Horses can also give accurate and unbiased feedback, mirroring both the physical and emotional states of the participant during exercises, providing clients with an opportunity to raise their awareness and to practice congruence between their feelings and behaviors (Zugich et al.).

In addition, whereas it may be fairly easy to dismiss a transference reaction to a therapist or group member as a legitimate reaction to the target’s shortcomings or inappropriate actions, it is much more difficult to attribute a transference reaction to the shortcomings, inappropriate behaviors, or premeditated offenses of a horse. As such, transference reactions in equine therapy can often be addressed without some of the confounding interpersonal factors present in more traditional therapies.
Method

Study Design

Treatment outcomes were assessed in a 4 1/2-day residential program in the southern United States. The program provided 28 hours of EAET in a group therapy format, with groups averaging 8 participants per group. Upon arrival at the center, study participants were administered a pretest consisting of the measures described below. The same measures were administered again after the final day of treatment. Participants were mailed the follow-up assessment battery 6 months after treatment.

Participants

All participants attending 8 consecutive EAET programs within an 8-month period at the treatment center were invited to participate in the study. A total of 66 individuals participated in the 8 programs. Forty-nine agreed to take part in the study and provided pretest and posttest data. Of the original sample, 31 participants (9 men and 22 women) mailed in their follow-up data—on average, 6 months following treatment (M = 26.52 weeks, range 21 to 34 weeks). Only those 31 participants who provided data at all 3 time points were included in the data analysis. Participants ranged in age from 23 to 70 (M = 44.74), had an average of 15.77 years of education, and came from 13 States. More than 90% of the participants were Caucasian. Thirty-nine % were married, 10% were in a committed relationship, 35% were previously married or separated, and 16% were single.

Psychotherapists

Two male and three female psychotherapists led the groups. All were Master’s Level, were licensed, and had achieved a Level II certification in Experiential Therapy from the American Society of Experiential Therapists (ASET). They averaged 15 years experience in the area of Experiential Therapy and 3 years experience in EAET. Adherence to the treatment approach was closely monitored through staff meetings with the clinical supervisor two times daily.

Horse Handlers and Horses

The Horse Handler involved in this study was the owner of the horses. The Horse Handler demonstrated safety guidelines and acted as a safety spotter for all equine activities during the program. Horses chosen to work in the program were calm, easy to approach, able to accept people walking around all
sides and touching all areas, aged, and halter-and-saddle trained geldings or mares, and were all from the same herd.

**Instruments**

**Brief Symptom Inventory (BSI; Derogatis, 1993).** The BSI is a 53-item, self-report, Likert-type scale designed to measure psychological symptom patterns. The BSI's summary scale, the Global Severity Index (GSI), was used as a measure of general clinical distress. Pathological problems are indicated when a GSI T-score is ≥ 63. As such, a T-score of 63 was used as the clinical cut-off for evaluating clinically significant change.

**Personal Orientation Inventory (POI; Shostrom, 1974).** The POI is a 150-item, true/false, self-report instrument designed to measure constructs related to self-actualization. The instrument is scored on 2 scales of personal orientation, the Time Competent (Tc) and Inner Directed (I) scales, and 10 subscales measuring elements of self-actualization. The Tc and I scales were used in the analysis as they are the only scales that do not have overlapping items, and are recommended for use as an overall estimate of self-actualization (Shostrom, 1974).

**Results**

Our analysis-strategy progressed from tests of multivariate significance to examination of main effects and follow-up comparisons on both measures. We adopted a .05 level of significance for all tests. Effect sizes were computed as partial, Eta-squared values ($\epsilon^2$) for all MANOVA analyses, and separate effect sizes from pretest to posttest and from posttest to follow-up were also reported. Clinical significance was assessed by examining whether group levels of functioning fell within the normal range as defined by normative data associated with the instruments.

**Results of the BSI**

Our central hypothesis was that general symptom severity would diminish following treatment. To test this, we conducted a multiple analysis of variance (MANOVA) with repeated measures on the BSI Global Severity Index (GSI). The means and standard deviations for the GSI are presented in Table 1. A significant effect for pretest vs. posttest vs. follow-up was found, Wilks’ Lambda = .551, $F(2,27) = 11.019$, $p < .05$, $\epsilon^2 = .449$. This main effect was examined using repeated contrasts. The contrasts revealed a significant decrease in the GSI scores from pretest to post-test, $F(1,28) = 22.563$, $p < .05$, \[ \text{...} \]
\( \varepsilon^2 = .446 \), and no significant difference between posttest and 6-month follow-up. The prepost effect size for the GSI was 0.800 s.d., and the pretest to 6-month follow-up effect size was also 0.800 s.d. At pretest, 60% of the participants had GSI T-scores in the clinical range. At posttest, only 20% remained above the clinical cut-off, with a slight increase to 27% scoring in the clinical range at 6-month follow-up.

### Results of the POI

Our central hypothesis in relation to the POI was that participants in EAET would report enhancements in psychological well being. We conducted a multiple analysis of variance (MANOVA) with repeated measures on the Tc and I scales. The means and standard deviations for the Tc and I are presented in Table 1. A significant effect of point of observation among pretest vs. posttest vs. follow-up was found, Wilkes Lambda = .536, \( F(4,114) = 10.442, p < .05 \), \( \varepsilon^2 = .268 \). This main effect was examined using repeated contrasts. On both scales, contrasts revealed that scale scores increased significantly from pretest to posttest, and there was no significant change from posttest to follow-up. The pre-post effect size for the Tc scale was \(-0.867 \) s.d., and the pretest to 6-month follow-up effect size was \(-0.768 \) s.d. The pre-post effect size for the I scale was \(-1.180 \) s.d., and the pretest to 6-month follow-up effect size was \(-0.900 \) s.d. At pretest, only 17% of the participants had Tc T-scores that fell above the mean standard score based on the normal adult sample. At posttest, 37% scored above this cut-off, with an increase to 43% reporting Tc scores above the clinical cut-off.

### Table 1. Means and Standard Deviations for the BSI GSI and POI Tc and I Scales at Pretest, Posttest, and 6-month Follow-up

<table>
<thead>
<tr>
<th>Time</th>
<th>Pre</th>
<th>Post</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Severity Index (GSI)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>0.923</td>
<td>0.489*</td>
<td>0.621</td>
</tr>
<tr>
<td>SD</td>
<td>0.647</td>
<td>0.413</td>
<td>0.575</td>
</tr>
<tr>
<td>Time Competent (Tc)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>13.430</td>
<td>16.430*</td>
<td>16.370</td>
</tr>
<tr>
<td>SD</td>
<td>3.954</td>
<td>2.885</td>
<td>3.700</td>
</tr>
<tr>
<td>Inner Directed (I)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>75.970</td>
<td>92.530*</td>
<td>90.400</td>
</tr>
<tr>
<td>SD</td>
<td>16.800</td>
<td>10.579</td>
<td>15.222</td>
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\( p < .05 = * \)
above the normal adult sample mean at 6-month follow-up. For the I scale, at pretest only 30% of the participants had T-scores that fell above the mean standard score based on the normal adult sample. At posttest, 67% scored above this cut-off, with a slight decrease to 64% at 6-month follow-up.

Discussion

As predicted, participants showed significant and stable reductions in overall psychological distress and enhancements in psychological well being from pretest to posttest and follow-up. They reported fewer psychological symptoms and reductions in the intensity of their psychological distress. They reported being (a) more oriented in the present; (b) better able to live more fully in the here-and-now; (c) less burdened by regrets, guilt, and resentments; (d) less focused on fears related to the future; (e) more independent; and (f) more self-supportive.

Although these results are promising, they are difficult to interpret due to the absence of several experimental controls, such as the lack of a control or comparison group and the use of a non-random sample. As a result, it cannot be said for certain whether the changes observed were the result of treatment, time alone, or other factors unrelated to treatment. Future research in this area would benefit from random selection and assignment and the use of a control or comparison group. This study is also limited in its reliance on client self-report data, which can be influenced by demand characteristics, with subjects attempting to portray a greater improvement in functioning than actually occurred. In addition, as no data were collected on individuals who declined, we were unable to examine any possible differences that may have existed between those who participated in the study and those who declined to participate. Last, because of the loss of subjects who did not complete and return the 6-month follow-up data, it is uncertain whether there were any noteworthy differences between the stability of change in the group that responded 6 months following treatment and the group that did not respond.

Conclusion

Because most equine-assisted psychotherapy integrates the use of horses into an already established treatment approach, future research in this area might also benefit from a detailed dismantling study to examine the degree to which the inclusion of horses affects treatment—and, if so, in what areas. In summary, the present study showed that participants reported significant improvements
in psychological functioning immediately following an EAET program and that these changes were stable at 6-month follow-up. Although there are important limitations to this study, it represents an important first step in examining the utility and value of this form of equine-assisted psychotherapy.

Acknowledgment

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References


Appendix

Choosing a Partner

Focus of Exercise:
This is the first exercise of the EAET experience. It helps illuminate the participants’ perspectives on their relationships with their horses. All EAET exercises may be seen from the perspective of relationships with oneself, others, and with one’s spirituality. This exercise brings to light participants’

1. Decision-making processes
2. Choices
3. Healthy versus unhealthy relationships
4. Communication skills

Materials Needed:
One haltered horse with lead for each participant (to better explore group dynamics, you may choose to have one horse less than the number of participants)

Procedure:
1. Review safety procedures. Remind the participants about the importance of listening to the horse handler regarding safety issues. If at any time the horse handler and/or the facilitator feel that the exercise is becoming unsafe, stop the activity and take a time-out.
2. Instruct the participants that every activity should be experienced from the perspective of their relationships (family, community, self and spiritual).
3. Encourage the participant to choose a horse to work with for the day. This is a silent exercise and participants should not talk about their decision-making process with other participants.
4. After each participant has silently selected a horse, come together as a group to discuss their choices.

Questions (Q)/Observations (O):
These questions can be asked while experiencing each exercise. This is only a starting place for the facilitator. Be creative and use life experiences to add to these examples.
Q: As you look at the horses and think about the horse you are going to choose, how do you feel?
Q: What are you looking for in the horse that you will be picking today, for example: size, color, shape, breed?
Q: What type of relationship does this horse represent for you, work, spouse, children, self, etc.?
Q: What factors went into your decision-making process? Did you have to decide between more than one horse? Did you need to know more details about this horse, its background, name, etc.?
Q: Did you notice anything about how the horses interact with each other as a herd and individually? How does this relate to you?
Q: What horse did you choose and why?
Q: Whom/what does the horse represent to you?
Q: Did you make your choice quickly and impulsively, or slowly and thoughtfully?
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