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Horseplay for Transformational Leadership Development

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Abstract

The purpose of the study is to examine the relationship between an equine facilitated group therapy program and aspects of leadership and communication skills. A group of men and women (N=15) who are in leadership roles in San Francisco Bay Area organizations will attended a leadership development workshop called "Horseplay for Transformational Leadership" (HTLD) where they performed a number of group exercises with and without horses and received feedback from the program facilitators. The participants completed the Social Skills Inventory (SSI), a self-reported measure of verbal, non-verbal social competence and emotional intelligence, before and after the program. A review of the literature reveals that there have been a limited number of studies performed on at-risk youth populations in equine assisted therapy programs that indicate change in aspects of social competence and emotional intelligence; however, there is a lack of research on adult populations.

Horseplay for Transformational Leadership Development

A review of the relevant literature regarding the theoretical basis of a transformational leadership development program using horses includes the areas of transformative learning and leadership, equine behavior, equine assisted psychotherapy, and equine assisted leadership development. Non-verbal communication in relationship to horse training and how it is utilized in the context of therapy and leadership development can be understood by reviewing the principles of natural horsemanship and an analysis of the research based on a number of different equine assisted therapy and leadership development methods. The problems that face organizational leaders are revealed though studies on leadership and learning in an organizational or corporate context.

Throughout history, horses have been known to provide therapeutic aid. The ancient Greeks used horses to aid in the convalescence of wounded soldiers over two thousand years ago. Modern equine assisted therapies began in earnest in Europe in the 1950's when Liz Hartel, who was wheelchair-bound as a girl was the first woman to compete in the Olympic dressage event, won the silver medal at the 1952 Helsinki Olympic Games. At the Olympics she announced that riding horses cured her polio affliction. This inspired doctors to begin experimenting and developing methods to treat patients with a variety of neuromuscular disorders using horseback riding techniques (Esbjorn, 2006; Hayden,2005).

Initially, the practice of using horses in therapy, commonly referred to as hippo-therapy, was limited to practitioners in Switzerland, Germany, and Austria. It was not until 1969, when the North American Handicapped Riders Association (NAHRA) became a governing body that

set rules and guidelines for practice, that therapeutic riding became a legitimate form of treatment in the United States. Through its fifty-year evolution, equine assisted therapy eventually divided into physiological and psychological methods. The Equine-Facilitated Mental Health Association (EFMHA) formed in 1998 as practitioners began to formulate specific psychotherapy guidelines for using horses (Esbjorn, 2006; Frewin & Gardiner, 2005; Hayden, 2005).

Some of the benefits that participants in an equine assisted psychotherapy program experience are personal discoveries about self-awareness, better communication skills, and a better understanding of interpersonal dynamics through learning how to interact with and influence a one thousand pound animal (Kersten & Thomas, 2004). Vidrine (2002), considers EFP to be an highly effective alternative therapy that offers experience-based healing though self-awareness. Vidrine (2002) likens horses to "large mirrors" that reflect aspects of ourselves for deeper self-awareness (p. 591). People cannot rely on the use of verbal language when interacting with horses. This requires the person to learn to rely on body awareness and intentions the person from masking emotions or being generally unconnected in communication and intention.

In an interpretation of the dynamics of horse human interactions based on this acute awareness that horses posses, Kohanov (2003) provides anecdotal evidence through case studies that illustrates how effective communication and interaction with horses can lead to profound discoveries of self awareness, hidden emotions, repressed memories and a deep sense of connectedness with a consciousness that transcends human beings. The author takes a metaphysical approach to describing the properties of inter/intra species communications

between horse and human. She theorizes that "emotional resonance" plays a significant role in the unusual way that horses elicit such powerful responses from her clients.

Hayden (2005) performed a qualitative analysis of open-ended questionnaire responses of 32 severely emotionally disturbed children participating in an equine assisted psychotherapy program to determine the common themes in experiences of participants in areas such as self esteem, mastery of skills, and positive relationships. The results of the study indicate a positive correlation between the EAP program attendees and experiences relating to self-esteem. This would indicate that the minimal benefits of this type of therapy includes increased self-esteem. One potential reason for this result could be that because horses are non-judgmental in both their actions and communications, severely emotionally disturbed youth, respond to beings that do not have any preconceptions about them.

The types of maladaptive behaviors that affect at-risk youth are also present in many adults who are involved in leadership roles in all types of organizations. People who work in structured, corporate environments tend to adopt maladaptive psychological behaviors that can affect their leadership and communication skills, particularly when the organization is threatened or vulnerable (Staw, Sandlands, & Dutton, 1981). The dynamic and complex ways in which organizations change and develop creates a challenge for leaders to maintain authentic communication and remain effective in their responses to organizational change (Holliday, Statler, & Flanders, 2007).

During last 50 years, advancements in technology, communication, and information processing have placed pressures on somewhat stable and predictable social and economic systems by allowing for and even causing rapid paradigm shifts in systems' environment and their fundamental structures (Brooks, 1989). The conflict between relatively rigid organizations

and the dynamic, rapidly evolving environment creates a need for organizations to become much more flexible (Staw, Sandelands, & Dutton, 1981). The new technological paradigm has also strengthened the interconnectedness of systems, thereby intensifying a need for cooperation and understanding among leaders throughout organizational layers on many different points of view in order to deal with both societal and organizational dynamics (Holliday, Statler, & Flanders, 2007). This can be understood in terms of the interconnectedness of human social systems and economic, technological, and industrial systems. If the individuals who influence the aforesaid systems behave in ways that are dysfunctional and out of balance, the corporations and organizations that they are involved with will, in turn, become dysfunctional.

Staw et al. (1981) examined a body of previous research on how internal and external threats to the integrity of entities effect individuals, groups, and organizations. The authors investigated how adverse conditions influence the ability for cogent change to occur in multi-tiered facets of an entity by looking at behavioral similarities in the effects that threats have among individuals, groups, and organizations. The authors hypothesize that a threat to the integrity of an entity will cause a two-fold reaction: 1) centralization of control, and 2) restriction of information processing. These reactions are the two main dimensions of threat-rigidity, the tendency of a system to strictly rely on its dominant mode of operation under adversarial conditions. In other words, if a system is under threat, then the dominant operator will take control and, because it will rely on knowledge from previous experience, it will not have out-of-the-box thinking when deciding on a course of action. Threat-rigidity can cause organizational failure if that dominant mode is grossly inappropriate for the conditions that it faces. The authors propose that, in order for an individual, group, or organization to be successful, it must be able adaptable to the changes in its environment. If the changes are radical then threat-

rigidity can be a maladaptive response and cause serious problems. The demands of an organization during times of adversity contribute to leadership stress and maladaptive behaviors at individual, group, and organizational levels. The authors argue that organizational leaders should adopt transformational leadership styles that will lead to the flexibility in action and decision-making needed to adapt to an adverse or changing environment.

Conventional wisdom generally adheres to the notion that centralized control and constriction of information processing is the best way for dealing with adversity. In contrast to conventional practice, a study by Holliday, Statler, & Flanders (2007) that investigates the effects on organizations moving from traditional hierarchical models to team-based models indicates that organizations and individuals who demonstrate cooperation, creativity, and critical reflection are able to better meet the demands for success in an adverse and unpredictable environment. The authors assert that the biggest challenge to leaders today is "how to respond authentically, ethically, and effectively to the situations that arise in the course of organizational life" (p. 126). They point out that leaders need a way to reconcile the needs of an organization with "complex social and moral dilemmas" in order to maintain an ethical approach to continually achieve the goals (increased productivity and profitability) of the organization.

When leaders are able to match their core moral values to the needs and purposes of the organization they will have a foundation on which to inspire followers and become a model to which they can aspire, as well as begin to develop a transformational leadership style. Bass & Steidlmeier (1999) define the transformational leadership style by having the key properties of charisma, inspirational motivation, intellectual stimulation, and individualized consideration. The authors argue that transformational leaders are more likely to inspire people to realize their potential, share power among the group, and promote motivation that comes from core human

values and morals than the traditional transactional leader. Bass & Steidlmeier define the transactional as being based on a behavioristic model of reward and punishment. Transactional leaders motivate their followers by extrinsic means such as coercion, praise, rewards, reproach, threats, and discipline. They argue that transformational leadership is necessary because the post-industrial work environment has evolved from a process-oriented, task-based model to multifaceted or multifunction team-based model.

In a study on the relationship between communication/social skill and leaders' efficacy in novel situations Riggio, Riggio, Salinas, & Cole (2003) found that key aspects of effective leaders involve complex characteristics such as behavioral flexibility, creativity, and cognitive complexity rather than specific personality traits. They affirmed the notion that social and emotional communication abilities are associated with complex properties of a persons level of perceived charisma, ability to inspire followers, maintain positive social environment and other key aspects of effective leadership. Models for developing leadership skills should include measuring and enhancing non-verbal emotional and social abilities.

A model of education that addresses the learning styles of adults is crucial in the development of skills for transformational leaders (Holliday et al., 2007; Mezirow, 1997; Staw et al., 1981). Transformative learning theory is rooted in the epistemology of Habbermas' (1981) learning theory, in particular the process of communicative action, which involves consensus on the understanding of the meaning aspects of beliefs. In a summary of transformative learning theory, Mezirow (1997) states, "A defining condition of being human is that we have to understand the meaning of our experience" (p. 5). Transformative learning is essentially a redefinition of ones assumptions through critical reflection as well as the outcome of a challenge and response to ones assertions in terms of actions and beliefs. The frame of reference (one's

world-view based on socio-cultural context and environment) is instrumental in the development

of a model for understanding (Mezirow, 1997). Taylor (1998) redefines the frame of reference

as "meaning structures." Taylor demonstrates that meaning structures are comprised of two

components: 1) Meaning schemes, i.e. the framework for interpreting experiences; and 2)

Meaning perspective, which constitutes an individual's entire world view or framework of

reality.

The basis for meaning structure is developed in childhood, and it is the mechanism for

assigning meaning to one's experiences and view of the world (Taylor, 1998). The way in which

we learn and apply meaning through critical reflection is defined in childhood by the

development of abilities for identifying cause and effect, make logical generalizations, develop

theory of mind (I am different then you but we have some similarity in understanding the world),

abstract thinking, and imagination (Mezirow, 1997). There are tendencies to develop more in

some areas than in others, and will people tend rely on and strengthen those dominant areas in

adulthood. The frame of reference enables more efficiency in processing information and making

judgments; however, it also causes us to have strong biases and a general disregard for

information that does not comport with a set framework for understanding. Transformative

learners understand that everyone's frame of reference or view of reality is unique; therefore,

they are able to adopt a frame of reference that is "more inclusive, discriminating, self-reflective,

and integrative of experience" (Mezirow, 1997, p. 9).

Mezirow succinctly articulates the way in which transformative learning unfolds in

stating, "The process involves transforming frames of reference though critical reflection of

assumptions, validating contested beliefs through discourse, taking action on one's reflective

insight, and critically assessing it" (p.11). This indicates that the use of metaphor in an

experiential learning situation could be successful if learners are able to reflect on the meaning of a novel experience in context of a real-life situation in a way that they can then challenge their assumptions, therefore, allowing for a modification in their meaning structures. In context of threat rigidity, this would allow the entity to be creative in its decision-making and adaptable to a changing environment that presents new information irrelevant to prior experience.

As human beings move further outside the natural world, we become removed from our natural ways of communicating and maintaining social balance that are inherent in the natural world, and we are forced to adopt conflicting meaning structures of modern civilization (Irwin & Webber, 2001). By looking at social models of different species, we can develop a concept of human behavior and social systems based on those found in the natural environment. Horses provide an easily accessible example of highly social animals with clear models of social hierarchy that demonstrates trust-based leadership in ways that ensure their harmonious survival. Because horses have been an integral part of human existence for thousands of years, they can be a more tangible link to the natural world than other wild animals (Irwin & Webber, 2001; Rickards, 2000).

Within the past decade, methods of personal development / therapy have been evolving that utilize the innate and acute ability of horses to read and mirror body language. This method, often called Equine Assisted Psychotherapy (EAP), is generally used in experiential therapeutic practices in order to help bring about better self-awareness, empathy, and non-verbal communication skills (Kersten & Thomas, 2005). An effective method for training horses relies on building trust through congruency of intention and nonverbal communication (Irwin & Webber, 2001). This requires purposeful, explicit signals and responses to body language between horse and trainer (Irwin & Weber, 2001; Rickards, 2000; Roberts, 1998). The

assumption is that people can become more self-aware of incongruities in verbal/non-verbal communication through learning this method of horse training, thereby enhancing abilities for trust-based leadership.

Leadership development programs that utilize horses have been used to effectively demonstrate and draw parallels to trust-based and creative leadership models. In a preliminary investigation into ways of developing reliable methods for building trust-based or transformational skills, Rickards (2000) developed a method of studying the relationship between methods that utilize the "Join-Up" technique (a method of horse training that uses body language as a means for communicating with horses, and developing trust-based leadership dynamics), creative/transformational leadership methods, and traditional/transactional styles of leadership. The author compared commonalities between the "Join-Up" and creative leadership approaches and assuming that they have many features in common. Rickards (2000) found that "a particularly significant similarity is that they are both trust-based approaches, contrasting with more traditional approaches of human and horse management, in which the goals of the leader/trainer are achieved through reinforcement of power and through the exercise of coercive methods of maintaining dominance" (p. 249, para. 1). The author made a "fingerprint" of the join-up method, creative leadership method, and transactional method in order to easily identify the similarities, metaphorical congruencies, and contrasts.

In the current study of the effects that a leadership development program has on non-verbal emotional and social nonverbal communication skills, it is hypothesized that individuals who attend the Horseplay for Transformational Leadership Development (HTLD) program will understand the benefits of congruency between intention and action (i.e. not lying) in communication in order to establish trust by learning to effectively communicate with horses

through the use of nonverbal communication. By immersing people in a novel environment that promotes trust and cooperation along with rational discourse and metaphorical observations based on interaction with horses and group members, it may be possible for the participants to have a transformative learning experience. The HTLD program should challenge their basic assumptions about their relationship with others and potentially positively enhance participants' abilities in nonverbal emotional and social communication skills.

Method

Participants

A group of men and women (n=15), whose ages ranged from 30 to over 70, participated in trust-based leadership development program entitled Horseplay for Transformational Leadership Development (HTLD). Five group members did not attend the entire program or declined to participate in the research, therefore were not included in the final sample (n=10) of ten participants. The final sample consists of three women and seven men who are all Caucasian with college degrees, are in a high socio-economic stratum, and currently hold or have held leadership roles in organizations. Six participants reported their age as being between 51 and 60, three between 41 and 50, and one between 31 and 40. The participants worked in leadership positions in corporate, non-profit, government, legal, healthcare, and entrepreneurial organizations. Their backgrounds were from a broad range of socio-economic cultural circumstances. All but one of the participants reported that they had little to no experience with horses. None of them were familiar with the Social Skills Inventory, had ever participated in the voice dialogue process as described in the procedures section, or participated in an equine assisted group program.

Measures

Social Skills Inventory (Riggio, 2003). The SSI is a self-reported survey consisting of 95 items, with 90 question dedicated to the index and five for demographic information, that measures an individual's emotional and interpersonal competencies in areas of expressivity, sensitivity, and control for both emotional (non-verbal emotional states and attitudes) and social (engagement of verbal discourse with others) domains. The responses, scored on five-item Likert scale valued from one to five points, are given as: "not at all like me", "a little like me," "like me," "very much like me," and "exactly like me."

Emotional Expressivity (EE) refers to nonverbal communication delivery in terms of attitude, dominance and orientation, along with expressing emotional states. A person with a high score might be physically demonstrative of emotions, use frequent hand gestures, and have more exaggerated facial expressions. An example of an item that measures EE is, "I am able to liven up a dull party."

Emotional Sensitivity (ES) is a measure of an individual's ability to receive and understand nonverbal cues from others. People who score high on ES are easily affected emotionally by others. A representative item that measures Emotional Sensitivity would be, "I sometimes cry at sad movies."

Emotional Control (EC) is a dimension that involves a person's ability to control, both verbally and nonverbally, their emotional displays. This includes the ability to "mask" certain emotions based on the situation. A person with emotional control would not cry if their feelings were hurt during a business meeting. A high score could indicate that a person tends to resist displaying felt emotions.   An item that measures EC is, "I am easily able to make myself look happy one minute and sad the next."

Social Expressivity (SE) is an assessment of a person's ability to engage in serious conversation. A high score would indicate that the person is adept in initiating and managing conversations. A radio talk show host would probably score high in SE because of his ability to converse on a broad range of topics and maintain control over the conversation. A representative item is, "When telling a story, I usually use a lot of gestures to help get the point across."

Social Sensitivity (SS) is a score that measures how well an individual interprets verbal cues from others. Additionally, SS can indicate how well people understand and act in accordance to social norms. A low score would indicate that the individual would not be socially aware and would possibly exhibit inappropriate behavior. An item related to SS is, "Sometimes I think that I take things other people say to me too personally."

Social Control (SC) evaluates a person's adaptability to social situations. A person with a high SC score could be adaptable to most social situations. They can be comfortable in various different groups of people. A representative item of SC is, "I am usually very good at leading group discussions."

Procedure

The group participants were asked to fill out the Social Skills Inventory (SSI) at the beginning of the HTDL program, and repeated the SSI within five days of attending the program. The subjects will meet in small groups of five to ten participants for a session at Chileno Valley Ranch in Petaluma, CA. The program was divided into three parts. The first hour and a half was devoted to an overview of the principles of transformative learning and transformational leadership, as well as a voice dialogue process that assists the group in attaining a more elevated state of awareness. In the second part of the program, the participants learned the fundamental aspects of horse interaction based on the methods used by Roberts (1996) and Erwin & Webber

(1998). Group members each have an opportunity to participate in the "join-up" process with a horse, or simply observe others as they practice communicating with the horses using only body language. And finally, after a break, a task based group activity is designed with the horses in order to illustrate key aspects of group dynamics and problem solving.

During the first part of the session, the participants were given an overview of the HTLD program, so they could be prepared for what they were required to do. Upon arrival at Chileno Valley Ranch, the participants were required to complete a liability waiver form (see Appendix A-2). The participants then gathered to give brief introductions in order to become a little more familiar and comfortable with one another. The facilitator, a professional horse trainer and certified Equine Assisted Growth and Learning Association (EAGALA) equine specialist, then gave an overview of key aspects of transformative learning and transformational leadership as they pertain to horse training in order to prime them for the work that was done during the second and third parts of the process.

The participants engaged in a voice dialog process used to facilitate an understanding of energetic aspects of personality and emotion to become aware of their emotional state in relationship to their environment when working with horses. The voice dialog process was designed to help the participants identify aspects of personality by speaking in first person from a specific aspect in relation to the "self" or ego. The purpose was to move the perspective of thought from a dualistic mode (mind/body separation) to an integrated mode (mind/body connectedness). The participants were able to explore the meaning, definition, and properties of different aspects of personality, or voices in the mind, that were common to everyone by speaking in first person as these specific aspects in terms of how they relate to the self. This was done by identifying and addressing the dualistic voices (Controller, Skeptic, Protector,

Vulnerable child, Fixer), non-dualistic voices (Seeking Mind, Non-Seeking Mind, Big Mind, Big Heart), and integrated voices (True Self, Great Doubt, CEO) (Roshi, 2007; Kent, 2007). This process was used primarily to challenge their assumptions on how they identified themselves and help participants conceptualize how horses might experience reality and meaning in contrast and similarity to humans.

In the second part of the program, the facilitator demonstrated the "Join-Up" process with a horse in order to illustrate how trust is developed through clear nonverbal communication (Roberts, 1998). A series of non-verbal cues were exchanged until the horse signaled that it understood the clear and nonthreatening intentions of the participant by dropping its head while licking and chewing. At this point a participant would turn away from the horse inviting it to come into close contact. The horse would walk up behind the person and usually touch its nose to the person's elbow signaling that the horse considers the participant a trustworthy and capable leader. According to Roberts & Roberts (2007), *"This process of communication through behavior and body language and mutual concern and respect, can be a valuable tool to strengthen all other work with horses"* (About Join-Up section, para. 3).

All group members were then given the opportunity to try the process themselves. The facilitator observed the interaction and provided coaching in order to ensure that the process was successful. The interactions provided an opportunity to create metaphors used to illustrate how the participant interacted with others. When the participants finished they were given the opportunity to discuss their experience and identify how it could relate to aspects of trust-based leadership in their daily interactions with subordinates.

The third aspect of the program involved the participants performing a group related task that included moving a horse through an obstacle course without touching, bribing (pretending to

have a treat in their hands), or talking to the horse. The task was to move the horse around a series of cones, over a set of ground poles, and over a small jump. When the group completed the task or after a specified amount of time, the facilitator made observations and asked questions that elicited responses from the group used to metaphorically illustrate aspects of how individuals interact with others in an everyday group context. The group task was based on exercises described in the EAGALA handbook (Kersten & Thomas, 2005).

At the end of the program, the participants were asked if they would like to opt in to anonymously share their results for research purposes. Upon agreement they were instructed that the SSI would be administered online within five days, and that the test should take approximately 30 to 40 minutes. Follow-up sessions and an informal interview were offered at the end of the program.

Results

The hypothesis was that the difference between the participants' pre-test and post-test scores on the SSI would indicate general improvement in participants' aptitudes in nonverbal communication. Paired samples t-tests were performed on the pre and posttest scores in order to determine if there was any significant differences in the results of the six subscale and total SSI scores. Paired Samples t-tests revealed statistically significant differences in the hypothesized direction in two subscales: Emotional Control, ($t(9) = 2.475$, $p < 0.05$); and Social Expressivity, ($t(9) = 2.905$, $p < 0.05$).

Paired Samples Statistics of SSI Subscales					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Emotional Expressivity2	52.5000	10	7.77817	2.45967
	Emotional Expressivity1	52.0000	10	9.03081	2.85579
Pair 2	Emotional Sensitivity2	52.6000	10	7.96102	2.51749
	Emotional Sensitivity1	52.8000	10	7.49518	2.37019

Pair 3	Emotional Control2	46.6000	10	4.50185	1.42361
	Emotional Control1	44.8000	10	4.58984	1.45144
Pair 4	Social Expressivity2	52.7000	10	13.63044	4.31032
	Social Expressivity1	51.6000	10	14.43914	4.56606
Pair 5	Social Sensitivity2	44.0000	10	5.05525	1.59861
	Social Sensitivity1	42.2000	10	4.91709	1.55492
Pair 6	Social Control2	61.1000	10	11.21953	3.54793
	Social Control1	60.3000	10	11.25512	3.55918

Paired Samples Test Results of SSI Subscales					
	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Emotional Expressivity	0.5	2.95334	0.535	9	0.605
Emotional Sensitivity	-0.2	2.4404	-0.259	9	0.801
Emotional Control	1.8	2.29976	2.475	9	0.035
Social Expressivity	1.1	1.19722	2.905	9	0.017
Social Sensitivity	1.8	3.3928	1.678	9	0.128
Social Control	0.8	2.39444	1.057	9	0.318

The paired samples t-test revealed a statistically significant difference in the average of total social scores ($t(9) = 2.661$, $p < 0.05$), as well as the overall total SSI scores ($t(9) = 3.148$, $p < 0.05$).

Paired Samples Statistics SSI Total Social and Emotional Scores

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Social Total2	157.9000	10	25.13718	7.94907
	Social Total1	154.1000	10	25.08408	7.93228
Pair 2	Emotional Total2	151.700	10	12.0190	3.8007
	Emotional Total1	149.7000	10	12.97048	4.10163

Paired Samples Test SSI Total Social and Emotional Scores

		Paired Differences				
		Mean	Std. Deviation	t	df	Sig. (2-tailed)
Pair 1	Social Total2 - Social Total1	3.80000	4.51664	2.661	9	.026

Paired Samples Test SSI Total Social and Emotional Scores

		Paired Differences				
		Mean	Std. Deviation	t	df	Sig. (2-tailed)
Pair 1	Social Total2 - Social Total1	3.80000	4.51664	2.661	9	.026
Pair 2	Emotional Total2 - Emotional Total1	2.00000	5.43650	1.163	9	.275

Paired Samples Statistics SSI Total Scores

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Total Score 2	309.6000	10	34.31618	10.85173
	Total Score 1	303.8000	10	36.72057	11.61206

Paired Samples Test SSI Total Scores

		Paired Differences				
		Mean	Std. Deviation	Std. Error Mean	df	Sig. (2-tailed)
Pair 1	Total Score 2 - Total Score 1	5.80000	5.82714	1.84270	9	.012

The accuracy of the overall scores was determined by the Equilibrium Index, an indicator of uniformity of the responses across the six different scales. The higher the score, the more "balanced" they appear to be. The constant is 50 with a low threshold being 39. If the score were below 39, the low score would indicate an imbalance and would give reason to look into the score differences for an interpretation.

Discussion

There have been studies to indicate that some of the benefits that participants in an equine assisted psychotherapy program experience are personal discoveries about self-awareness, better communication skills, and a better understanding of interpersonal dynamics through learning

(Kersten & Thomas, 2004; Vidrine, 2002). Other research supports the assertion that people develop leadership and communication skills by drawing on the integral aspects of cognition, emotion, creativity, and physical movement while performing novel tasks in an environment that fosters metaphors for real-world leadership and organizational circumstances (Brooks, 1998; Holiday et al., 2007; Mezirow, 1997). The purpose of the current study was to determine how the aforementioned conditions as established in the Horseplay for Leadership Development program effect people's non-verbal communications skills. The results of the study indicated that the HTLD program seemed to be effective in increasing participants' ability to express and control nonverbal communication in aspects of emotional control and social expressivity resulting in a more congruent expression of intention and action. It is possible that the combined experience of voice dialogue, individual and group activities, and novel environment contributed to a transformative learning experience that resulted in an enhancement of non-verbal communication skills for the participants.

The Social Skills Inventory was used in this study because it is considered a valid measure of emotional and interpersonal competencies important for leadership (Riggio, 2007). Understanding how the subscales of the SSI interact in predicting behavior can elucidate the significance of the increase in test scores. The Interpretation of SSI scores are based on the relationship between any of the subscales and is dependent upon the overall balance of the scores. If someone is particularly high in one dimension and low another, this could indicate the presence of dysfunctional behavior. In considering that there is a positive linear interaction of the Emotional Control (EC) and Social Expressivity (SE) sub-scales, an inference can be made based on how these scales are defined. EC assesses an individual's level of control over their emotions, and SE is associated with an individual's ability to engage in and maintain a

conversation. Therefore, a possible interpretation of the data could be that the HTLD program augmented the participants' ability to both understand and control their emotions, which, in turn, caused them to feel more comfortable in expressing themselves to others.

Limitations of the Study

There are a few limitations in this study that compromise the conclusion validity of the study. There was not a method to determine which aspects of the program (cognitive/emotional, novel environment, trust-based communication) were attributable to the increase in scores on the subscales of emotional control and social expressivity. There is evidence to support that a novel environment in conjunction with physical activity and cognitive exercises are all that are needed for a transformative learning experience (Mezirow, 1997). This would preclude the notion that the experience with horses is effective outside of being unfamiliar to the participants; thus making it unclear as to what impact, if any, the use of horses had on the outcome.

There is also a risk to internal validity when considering that the method of testing used the identical test for both pretest and posttest measures. The improvement in test scores could have been the result of priming based on participants' familiarity with the test. The participants may have answered questions "more correctly" based on hypothesis guessing rather than any real change in perception or behavior. Even if the effects were directly attributable the program, it is not know if the effects of the program are long lasting because the retest was given only once within 5 days of the program.

Additionally, the effects of the HTLD program cannot be generalized to a larger population for at least two reasons: the sample size of ten participants was too small to be representative of a larger population, and the participants were not randomly selected. There was

little variation in age, gender, income and education levels of the participants which is not

representative of a broader population; therefore, it was not an experimental design.

Suggestions for Further Research

Regardless of the limitations of this study, the findings do indicate that the HTLD

program could have a significant positive effect on emotional and social skills of people in

leadership roles. Feedback from the participants was largely positive and encouraging. They

indicated that the program was "a highly effective and powerful experience," and that it would

be an "extremely useful exercise" for other members of their organizations. A number of

participant suggested that the program should be held over two days rather than a half-day in

order to fully grasp the concepts and allow for more time for group interaction and deliberation.

Another suggestion was that additional assessments be implemented in order to accommodate

more complete dimensions of leadership qualities. The Multifactor Leadership Questionnaire by

Bernard Bass and Bruce Avolio is a measure of transformational leadership that could be used in

addition to the SSI in future research.

In order to address some of the validity issues of the study, it would be necessary to have

a larger sample including a broader range of demographics such as age, income, education, and

background, as well as a control group. In order to be optimally effective, the participants

should be comprised of members of a management team of an organization in groups of between

four and eight participants. This would allow for the experience to be more analogous to real-

world situations.

References

Aanderson, K. (2004). *Subject variables affecting the perceived efficacy of equine assisted psychotherapy*. Unpublished thesis. Concordia University College of Alberta

Brandt, K. (2004, December). A language of their own: An interactionist approach to human-horse communication. *Society & Animals*, *12*(4), 299-316. Retrieved November 6, 2007, from Academic Search Premier database.

Bass, B., & Steidlmeier, P. (1999, Summer). Ethics, character, and authentic transformational leadership behavior. *Leadership Quarterly*, *10*(2), 181. Retrieved November 6, 2007, from Business Source Premier database.

Brooks, A. (1989). *Critically reflective learning within a corporate context*. Doctoral dissertation, Teachers College, Columbia University, NY.

Esbjorn, R. (2006). When horses heal: A qualitative inquiry into Equine Facilitated Psychotherapy. Retrieved August 23, 2007, from PsycINFO database.

Frewin, K. & Gardiner, B. (2005). New age or old sage? A review of equine assisted psychotherapy. *The Australian Journal of Counseling Psychology*, *6*, 13-17.

Habermas, J. (1981). *The Theory of Communicative Action.* Vol. 1*: Reason and the Realization of Society.* Boston: Beacon Press

Hayden, A. (2005). *An exploration of the experiences of adolescents who participated in equine-facilitated psychotherapy: A resiliency perspective*. Psy.D Dissertation, Alliant International University, San Diego, CA.

Holliday, G., Statler, M., & Flanders, M. (2007, June). Developing practically wise leaders through serious play. *Consulting Psychology Journal: Practice and Research*, *59*(2), 126-134.

Irwin, C., & Weber, B. (2001). *Horses don't lie: What horses teach us about our natural capacity for awareness, confidence, courage and trust*. New York, NY: Marlow & Company.

Kersten, G., & Thomas, L. (2004) Equine assisted psychotherapy and learning un-training manual. Santaquin, UT: Equine Assisted Growth and Learning Association

Kent, J. (2007, December). Inner Voices: Embracing all the parts of our personality. *Positive Health*, Retrieved March 3, 2008, from Alt HealthWatch database.

Kohanov, L. (2003). *Riding between the worlds: Expanding our potential through the way of the horse*. Novato, CA: New World Press.

Mezirow, J. (1997, Summer). Transformative learning: Theory to practice. *New Directions for Adult & Continuing Education, (74)*, 5-11. Retrieved November 12, 2007, from Education Research Complete database.

Rickards, T. (2000, December). Trust-based leadership: Creative lessons from intelligent horsemanship. *Creativity & Innovation Management*, *9*(4), 259. Retrieved November 10, 2007, from Business Source Premier database.

Riggio, R. (1986). Assessment of basic social skills. *Journal of Personality and Social Psychology*, *51*(3), 649-660.

Riggio, R. & Lee, J. (2007). Emotional and interpersonal competencies and leader development. *Human Resources Management Review*, *17*, 418-426.

Riggio, R., Riggio, H., Salinas, C., & Cole, E. (2003, June). The role of social and emotional communication skills in leader emergence and effectiveness. Group Dynamics: Theory, Research, and Practice, 7(2), 83-103.

Roberts, M. (1996). *The man who listens to horses.* New York: Random House.

Roberts, M., & Roberts, P. (2007). *Monty Roberts: Join-up,* Retrieved November 6, 2007, from

http://www.montyroberts.com

Roos, J., Victor, B., & Statler, M. (2004, December). Playing seriously with strategy. *Long*

Range Planning, *37*(6), 549-568. Retrieved November 12, 2007, from Business Source

Premier database.

Roshi, G. (2007). *Genpo Roshi: Awakening big mind big heart*. Retrieved March 3, 2008, from

http://www.genpo.org/Big_Mind_Big_Heart/Home.html

Staw, B., Sandelands, L., & Dutton, J. (1981, December). Threat-rigidity effects in

organizational behavior: A multilevel analysis. *Administrative Science Quarterly*, *26*(4),

501. Retrieved November 6, 2007, from Business Source Premier database.

Taylor, E. (1998). Transformative Learning Theory—An Overview. *In The theory and practice*

of transformative learning: A critical review. Washington, DC: Department of Education.

Retrieved November 6, 2007 from the ERIC database.

Vidrine, M. (2002). Equine-facilitated group psychotherapy: Applications for therapeutic

vaulting. *Issues in Mental Health Nursing*. (23), 587-603