

A veteran and his spouse with one of the equine facilitators.

Equine Assisted Therapy to Help Couples with PTSD: The Evidence for Improved Personal Relationships

by C. Randy Duncan, Steve Critchley, and Jim Marland

Introduction

an Praxis has been operating since March, 2013, in an effort to improve the personal relationships of veterans, active service members of the Canadian Armed Forces (CAF), and members of the Royal Canadian Mounted Police (RCMP), along with their respective spouses/partners negatively impacted by post-traumatic stress disorder (PTSD). There remains a steady inquiry and demand for this unique equine assisted therapy program, which is almost always initiated by the spouses/partners of individuals diagnosed with service-related PTSD. These remarkably dedicated spouses/partners typically attend the program with the hope that the negative effects of PTSD on their family relationships can be repaired. The following quote highlights the resilience of many of the spouses/partners:

"Can Praxis gave us both more tools to work with in rebuilding a trusting relationship. The emphasis on the spouse being an equal partner in the PTSD experience/ relationship has been particularly important to us."

(Spouse – 6 months post-intervention)

The aim of Can Praxis in knowingly taking on a lengthy and expensive pilot testing process has been to facilitate establishing the validity and reliability of their emerging program within a diverse equine assisted learning (EAL)/equine facilitated psychotherapy (EFP) industry. As such, there is a need to establish an empirical evidence base to support any assessment of the degree to which couples experience better personal relationships following completion of the first phase of a unique three-phase PTSD-tailored equine therapy program. Critical to the validation of the Phase I intervention, is reliably determining whether any detectable long-term improvements in these personal relationships are attributable to the targeted learning goals and objectives of the Can Praxis program.

Through 40 months of pilot testing, Can Praxis has obtained a follow-up sample size of n = 88 from the 292 participants who have completed Phase I. The current sample facilitates an examination of program progress by reporting the early trends relative to the intended long-term outcomes. However, it is acknowledged that these trends, which suggest some initial support for the benefits of equine assisted therapy, do not yet meet academic standards for an empirical evidence base to establish the Can Praxis program as a



Can Praxis test group with their instructors.

best practice within the EAL/EFP industry. In part, this is because social behaviours cannot be measured perfectly. Therefore, it is important methodologically for Can Praxis to continue increasing the number of respondents in the follow-up sample to reduce the chances that reported change in personal relationships are due to non-program sources.¹

This article focuses upon the follow-up results for the Can Praxis program, viewed at an average of 10.9 months post-therapeutic intervention. There is an examination of the extent to which participants identify and describe positive change in their personal relationships, and whether the impact of PTSD symptoms upon the family has been reduced. The working assumption is that the Can Praxis intensive three-day equine assisted therapy program produces self-mediation knowledge and skills that are remembered and implemented for a sufficient duration in the couples' day-to-day environment to positively affect personal relationships.

Background

an Praxis utilizes an experiential learning model, which integrates practical self-mediation techniques with equine activities to produce targeted communication skills and knowledge intended to be maintained long after completing the program.² The use of horses is intended to help participants 'be in the moment' and develop increased awareness and engagement towards acquiring a working knowledge of a practical self-mediation process. As such, the critical outcome assessment for determining the effectiveness of the program is based upon the data obtained from couples who have been back in their day-to-day environment for a minimum of three months. Relative to the following quote, having a high proportion of participants' report *how* and *why* their relationship has improved in the timeframe between the equine assisted therapy



Jim Marland teaching a class while the horses join in from behind.

intervention and the follow-up assessment suggests a linkage to the program's *implicit* and *explicit* learning goals.

"I practice modelling the behavior I wish to see in others daily now. My wife and I talk on a regular basis and are able to defuse situations before they implode. I am more open to understanding that at times my behavior scares the horses (my family) away and even though I say sorry, it may take them awhile to come back to me. This course has greatly improved my relationship with my sons, and they feel comfortable talking to me."

(Veteran – 10 months post-intervention)

Can Praxis has a goal of having their innovative equine assisted therapy program established as an evidence based best practice for treating individuals diagnosed with PTSD. The challenge is to move beyond justification based upon examples of emotionally powerful narratives that are prevalent across the EAL/EFP industry, to an empirical evidence base that will meet the criteria of the scientific community. The need for organizations like the CAF, the RCMP, and VAC to require empirical evidence that is more factual and can be checked is a legitimate concern.³ However,

for equine assisted therapy programs to clear this research bar, the requirements are complex, lengthy, and very costly. Indeed, to have an equine therapy program considered for inclusion in the long-term mental health strategies of the aforementioned organizations requires considerable resources and perseverance through a rigorous and lengthy pilot testing process.

An important aspect in making an argument for credible long-term outcomes is linking the findings to an effective and standardized intervention delivered in a consistent manner. The Can Praxis program is consistently facilitated by the two co-founders; one, a 28-year veteran of the CAF and accredited mediation trainer, and the other, a registered psychologist, a communication and leadership trainer, and an accredited EAL facilitator with more than 36 years of experience. As shown in Figure 1, the focus of the experiential learning program is helping couples impacted by service-related PTSD to acquire a practical self-mediation process that does not require on-going third-party intervention. The use of horses provides a very effective way to leverage participants' awareness of the communication principles and techniques taught within the context of applied self-mediation towards better managing conflict and facilitating problem-solving.⁴



Figure 1 - Can Praxis Phase I Equine Therapy Model.

Can Praxis

Phase I Therapy Intervention:

- 1) reduce PTSD symptoms
- 2) acquire self-mediation process



Back in Day-To-Day Environment:

1) apply interpersonal communication techniques



Follow-Up Assessment of:

- 1) change in personal relationships
- 2) less impact of PTSD on family

Figure 2 - Can Praxis Flow Chart of Intended Outcomes.

The Can Praxis program utilizes the same series of nine targeted EAL activities that are offered in the same way in each Phase I session. For example, the non-verbal 'join-up' EAL activity is offered at the start of sessions because of its impact and ability to leverage participant awareness of how horses are able to read human body language. The activity demonstrates the concept of 'pressure and release' by using relaxed body language to invite a horse back into one's personal space (i.e., a metaphor for "I'm sorry"), after first displaying aggressive behaviour (i.e., pressure) to drive the horse away. Experiencing this immediate feedback and seeing the consequences of their change in body language is virtually always 'eye-opening,' and it provides a new level of awareness of how the horse's behaviour mirrors the behaviour and attitude of their spouse/partner. In this way, the individual meets a self-mediation learning objective of a real time feedback moment, which is suggested to be transferable to their human relationships.⁵

As shown in Figure 2, the two intended short-term, end-of-session outcomes for the Can Praxis Phase I program are:
1) a reduction in PTSD symptoms over the course of the therapy session, and 2) the perceived acquisition of self-mediation skills helpful towards repairing personal relationships. To aid in

measuring these two dimensions, content experts were utilized to develop the Horses relieving OperationaL Stress Through Experiential Relationships (HOLSTER) scale; a semi-structured self-report questionnaire.⁶ Based upon the current sample size (n = 146), the 20-item PTSD scale of the HOLSTER has a high internal reliability coefficient of 0.80. Similarly, the 16-item Self-Mediation Skills scale has a high internal reliability coefficient of 0.74.

At this juncture in the pilot testing, there is a high positive linear relationship (r = 0.77, p < 0.001) between the PTSD scale and the Self-Mediation Skills scale. The resulting $r^2 = 0.59$ indicates that a higher score on the PTSD scale (i.e., a perceived reduction in PTSD symptoms) may be a predictive factor in higher scores on the Self-Mediation Skills scale (i.e., perceived confidence in acquiring communication skills). As such, 81.5% of participants report being very positive about relief from their PTSD symptoms over the course of Phase I, and 93.2% of participants were very positive that they had acquired useful self-mediation skills. This suggestion that positive experiential learning using horses may be a predictive factor in better outcomes for acquiring self-mediation skills represents a start to understanding the effi-

cacy of the Can Praxis equine assisted therapy program.

In addition, a semi-structured self-report instrument for the spouses/ partners participating in Phase I was adapted from the HOLSTER. The Benefitting from Experiential Learning Together (BELT) instrument includes a 5-item Self-Mediation Skills scale that has a moderate internal reliability coefficient of 0.66. Based on the sample size pertaining to this instrument (n = 133), 89.5%of spouses/partners reported being very positive about having acquired self-mediation skills useful towards repairing their relationships. Having the spouses/partners participate in this PTSD-tailored equine assisted therapy program is both integral to acquiring an effective self-mediation process and towards obtaining collaborative follow-up data that changes in the personal relationships are attributable to the Can Praxis program.



A veteran and his spouse (blindfolded). This is an exercise in developing trust and respect.



Methods

The current level of follow-up data represents 30.1% (n = 88) of the 292 veterans, active members of the CAF, members of the RCMP, and their respective spouses/partners who have completed Phase I of the Can Praxis program. These 88 respondents are comprised of 46 veterans, active members of the CAF, and/or members of the RCMP and 42 spouses/partners. The follow-up data represents a range of 3.0 to 29.0 months (M = 10.9) post Phase I intervention.

Follow-up to examine the intended long-term outcomes from Phase I is conducted in three ways. In each case, a separate survey questionnaire has been designed for those diagnosed with PTSD (i.e., veterans, active members of the CAF, and members of the RCMP), as well as for the respective spouses/partners. After a minimum of three months back in their day-to-day environment, couples who agreed to be contacted are mailed out a 17-item semi-structured survey questionnaire. Secondly, those individuals who have completed Phase I and returned to participate in a Phase II session, which incorporates a riding component, complete the respective 26-item survey questionnaire at the end of the experiential learning session. Thirdly, those individuals who have completed Phase II and returned to participate in a Phase III session, which also includes a riding component, complete either an 18-item survey questionnaire (i.e., those diagnosed with PTSD) or a 21-item survey questionnaire (i.e., spouses/partners) at the end of the session.

Twenty-nine couples, one veteran, and one spouse (n = 60) responded to the mail-out survey questionnaires. Four couples, nine veterans, active members of the CAF, and/or members of the RCMP and 3 spouses/partners (n = 20) participated in a follow-up Phase II Can Praxis session. Four couples (n = 8) participated in a follow-up Phase III Can Praxis session.

Results

The findings to date are first examined to determine the extent to which participants identify an improvement in their personal relationships. These empirical results are expanded to include *what* and *how* the relationships have improved. Additionally, there is an examination of the extent to which the impact of PTSD on the family has been reduced. This also includes the substantive findings about what symptoms of PTSD have been reduced and/or are being better managed.

Improved Personal Relationships

The preliminary follow-up results suggest that a high proportion of personal relationships have improved an average of 10.9 months post Phase I intervention. Overall, 83 (94.3%) respondents reported that at least 'Sometimes' their personal relationships have changed for the better. More specifically, 59 of the 88 respondents (67.1%) reported 'Yes,' their relationships have improved, and 24 respondents (27.3%) reported 'Sometimes.'

For the 46 individuals diagnosed with PTSD, veterans, active members of the CAF, and/or members of the RCMP, three main themes emerged about what had improved in their personal relationships. Twenty-seven (58.7%) respondents indicated that the communication was better, more regular, and/or more effective, which included having increased patience and listening to their partner more often. Secondly, 10 (21.7%) respondents reported that their relationship was better because they were able to reduce conflict with their partner and engage in better problem-solving conversations. Thirdly, eight (17.4%) respondents indicated that improved relations with their partner was due to personal growth in terms of being more open and in-tune with their emotions.

For the 42 spouses/partners, three main themes also emerged about what had improved in their relationships since participating in the Phase I Can Praxis session. Sixteen (38.1%) respondents reported that they had experienced better, more regular, and more honest communication, which included the perception that their partner was more patient and less distracted. Secondly, the same number, 16 (38.1%) respondents, indicated that there was less conflict with their partner, and they engaged in better problemsolving conversations. Finally, 15 (35.7%) respondents indicated that their partners were less defensive and became more accountable for their bad behavior when it surfaced.

Reduced PTSD Symptoms

A t this juncture, the results suggest that a high proportion of the 88 respondents perceived a reduction in PTSD symptoms since participating in Phase I of the Can Praxis program. Overall, 68 (77.3%) respondents reported that at least 'Sometimes' they felt that PTSD symptoms were improving and/or being better managed. More specifically, 34 (38.6%) respondents reported 'Yes' that previous PTSD symptoms experienced had improved since the therapy intervention, and a similar number, 34 (38.6%) respondents, reported improvement as 'Sometimes.'

For those 46 individuals diagnosed with PTSD, 20 (43.5%) reported 'Yes,' they were better able to manage their symptoms since returning to their day-to-day environment. Additionally, 17 (37.0%) reported that at least 'Sometimes' they were better able to manage their symptoms. As such, three main themes emerged based on the veterans, active members of the CAF, and/ or members of the RCMP identifying which PTSD symptoms had improved. Twenty-one (45.7%) respondents indicated that they felt less stress and anxiety interacting with family members and in social situations. Secondly, 20 (43.5%) respondents reported

they experienced less depression and remembered sadness. Thirdly, 14 (30.4%) respondents indicated that they experienced less anger and had more emotional control.

For the 42 spouses/partners, 14 (33.3%) reported 'Yes,' they perceived an improvement in their partners' PTSD symptoms since completing Phase I of the Can Praxis program. Additionally, 17 (40.5%) reported they had perceived an improvement at least 'Sometimes.' As such, four main themes were identified about which PTSD symptoms had improved and/or were being better managed. Nineteen (45.2%) respondents indicated that their partner displayed less anger and aggression towards them. Secondly, 12 (28.6%) reported that their partners appeared to be less stressed and anxious when interacting with the family and/or in social situations. Thirdly, a similar number, 12 (28.6%) respondents, indicated that their partners were not isolating themselves as much from the family. Finally, 9 (21.4%) respondents reported that their partners were not as depressed as they were prior to the equine assisted therapy intervention.

Relationship Change Attributable to Phase I Intervention

Starting with the 50th follow-up response (n = 39), a more direct question was included in the survey questionnaires about the perceived effectiveness of the Phase I self-mediation communication skills in repairing their personal relationships. For those 22 individuals diagnosed with PTSD, 12 (54.5%) indicated the self-mediation skills were 'Extremely' helpful. Additionally, 7 (31.8%) reported that learning the targeted communication skills were 'Good' training towards improving their relations. For the 17 spouses/partners, 6 (35.3%) indicated that the self-mediation skills were 'Extremely' helpful. An additional 10 (58.2%) reported that learning the targeted communication skills were 'Good' training towards improving their relations.



Brushing the horse is a new way to communicate as equals, and viewing the horse's reaction in the mirror provides feedback towards successful communicative behavior.

Conclusion

he co-founders of Can Praxis have never assumed that a complex disorder like service-related PTSD is easy to manage or recover from based upon one treatment option.7 Practical experience based upon 40 months of recruiting for and delivering the program, has also reinforced the perspective that for many individuals, there are no quick fixes, and that it is not sufficient to limit treatment to a pharmacological-based regimen for the major mood disorder symptoms of PTSD. Can Praxis offers a unique couples' experiential equine therapy program which has the potential for individuals to achieve sustainable behavioural change. An added feature of acquiring an increased awareness of and utilization of improved communication techniques is the potential to positively benefit concurrent and/or future treatment. As such, the effectiveness of the Can Praxis program is supported by a growing body of evidence suggesting that an integrated self-mediation and equine assisted therapy process will help couples recover from one typical associated feature of PTSD, dysfunctional personal relationships.8

Overall, the results herein suggest emerging evidence for a positive link between the intended relationship outcomes and the integrated equine assisted therapy and self-mediation skills delivered in Phase I. The early follow-up data indicates that 67.1% of respondents were very positive that their personal and

family relationships improved, and an additional 27.3% reported improved interpersonal relations, at least sometimes. The early trend towards linking the intended outcomes to the Can Praxis program is supported in the following two ways: 1) *explicitly* through targeted questioning of the benefits of the self-mediation training from a sub-sample of follow-up respondents; and 2) *implicitly* through the data and written comments from the overall sample of respondents. First, the early trends from the sub-sample of 39 of the 88 follow-up respondents shows that 18 (46.2%) indicated that the self-mediation training in Phase I was extremely helpful in repairing their relationships. Additionally, 17 (43.6%) respondents reported that these acquired communication skills were good training towards repairing their relationships.

Second, the many written comments obtained in the follow-up data help describe the positive program link to relationship outcomes by putting things in a context of the contribution of the horses. For example, a key integrated learning objective is having a targeted equine activity that demonstrates the self-mediation principle that interpersonal communication is improved by using appropriate body language. The intended outcome, particularly for those diagnosed with PTSD, is to respect the power of body language along with their partners' ability to read it. As such, the most frequently perceived relationship improvement observed in those diagnosed with PTSD, as reported by spouses/partners, was less anger and aggression displayed towards them. The following two quotes help support and illustrate this trend towards positive relationship outcomes:

"The fear that is generated in horses with body language has become a mirroring agent and reminds me daily that if I am not careful I can present as highly aggressive and a threat to any human just by the way I look or stand."

(Veteran – 10 months post-treatment)

"I never understood PTSD, only what it was doing to us. I used to internalize the feelings I had to cause less stress. I learnt how to recognize, approach and defuse through discussion. PTSD is big and heavy, but not as big and heavy as the horses, and I managed to persuade them to move aside/into a (pole) box. I can do the same with PTSD — move it aside and get to the real person gently."

(Spouse – 8 months post-treatment)

These early results offer support that the co-founders of Can Praxis are moving in the right direction by using horses as an adjunct in their PTSD-tailored equine therapy intervention to create opportunities for learning and healing. Further, the findings herein suggests support for the premise that utilizing targeted equine assisted activities brings a relational element to the experiential therapy process, which helps individuals affected by PTSD regulate their emotions and calm down so they are better able to internalize new information. In addition, the trend in the follow-up data, highlighted by the two preceding quotes, suggests that the horse-human interaction



Never underestimate the healing powers of an animal.

Heather Bashow

leverages an awareness of behavior that is positive, sustainable, and ultimately transferable to human interpersonal relations.

In spite of these positive early trends, the co-founders of Can Praxis acknowledge that these results do not yet comprise sufficient empirical evidence to establish their equine assisted therapy program as a best practice in accordance with the criteria of the scientific community. Therefore, the pilot testing process needs to continue, and to more substantively address two important methodological considerations: 1) increase the sample of Phase I participants sufficiently to validate the HOLSTER and BELT instruments; and 2) increase the sample of follow-up respondents towards minimizing the possibility that positive relationship outcomes are caused by non-program factors. The need for this continuing research aside, the current findings do represent an encouraging start to understanding the efficacy of this unique PTSD-tailored equine therapy program.

C. Randy Duncan, Ph.D, is an adjunct professor with the Department of Sociology at the University of Saskatchewan and is currently an independent researcher working with the following co-founders of Can Praxis.

Steve Critchley, CD, C Med, is a 28-year veteran of the Canadian Armed Forces and an accredited mediation trainer with international experience. Critchley provides services in conflict situations, such as harassment, landowner/community and energy company disputes, and workplace grievances.

Jim Marland, BSW, MA, is a registered psychologist and an accredited equine assisted learning facilitator. Marland started out by helping the ten largest United Kingdom companies with their communication and leadership training over 36 years ago.

Duncan's program evaluation training and experience, in his field of educational psychology, helps guide an objective evaluation of Can Praxis's innovative three-phase equine assisted therapy program. Critchley and Marland developed their integrated self-mediation and equine assisted therapy program in 2013 with the goal of establishing this unique intervention as a best practice treatment option for couples suffering from the effects of post-traumatic stress disorder.





Shannon, the partner of a veteran, with an equine friend.

NOTES

- E.J Posavac, & R.G.Carey, Program Evaluation: Methods and Case Studies (Third Edition). Englewood Cliffs, NJ: Prentice-Hall Inc., 1989).
- D. Dana, Managing Differences (Fourth Edition). (Prairie Village, Kansas: MTI Publications, 2008).
- . Based upon feedback from sources in the CAF, VAC, and RCMP, culminating with the following direction, "...all empirical evidence of the benefits of horse and human relationship are established and recognized by the scientific community, as a best practice treatment approach to PTSD and OSI." (D.G.J. Dubeau, Deputy Commissioner, RCMP, 2013).
- 4. The co-founders of Can Praxis strongly believe that if the negative behavior of those diagnosed with PTSD cannot be changed towards a willingness to communicate, and more specifically, to engage in conflict reducing conversations, personal relationships will deteriorate beyond repair and the individual becomes high-risk for suicide.
- L. Hallberg, Walking the way of the horse: Exploring the power of the horse-human relationship (Bloomington, IN: iUniverse, 2008).
- C.R. Duncan, S. Critchley, & J. Marland, "Can Praxis: A model of equine assisted learning (EAL) for PTSD," in *Canadian Military Journal*, Spring 2014, Vol. 14, No. 2, pp. 64-69.
- P.H.C. Mason, Recovering from the War (High Springs, FL: Patience Press, 1990).
- B.A. van der Kolk, "The complexity of adaptation to trauma self-regulation, stimulus discrimination, and characterological development," in *Traumatic* Stress: The Effects of Overwhelming Experience on Mind, Body, and Society (B. A. van der Kolk, A. C. McFarlane, & L. Weisaeth, [Eds.]), (New York: The Guilford Press, 1996).
- K.S. Trotter, Harnessing the Power of Equine Assisted Counseling: Adding Animal Assisted Therapy to Your Practice (New York: Routledge, Taylor & Francis Group, 2012).