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A Healing Space: The Experiences of First Nations and Inuit Youth with Equine-Assisted Learning (EAL)

Colleen Anne Dell · Darlene Chalmers · Nora Bresette · Sue Swain · Deb Rankin · Carol Hopkins

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Abstract The Nimkee NupiGawagan Healing Centre (NNHC) in Muncey, ON provides residential treatment to First Nations and Inuit youth who abuse solvents. As a complement to its culture-based programming, in 2008 the centre began offering weekly equine-assisted learning (EAL) curriculum to its clients in partnership with the Keystone Equine Centre and the Lambton Equine Assisted Learning Centre. This study explores the potential benefit of the EAL program on youths' healing. We conducted 15 interviews with two intakes of male and female EAL program participants and 6 NNHC and EAL staff, reviewed EAL facilitator and NNHC staff reflections and participants' EAL journals, and observed the EAL program. It was concluded that youths' healing was aided through the availability of a culturally-relevant *space*; from within an Aboriginal worldview this understanding of space is central to individual and communal well-being. This was conveyed in three key themes that emerged from the data: spiritual exchange, complementary communication, and authentic occurrence. This understanding provides insight into the dynamics of healing for Aboriginal youth who abuse solvents, and may be applicable to other programming and populations.

C. A. Dell (⊠)

Department of Sociology and School of Public Health, University of Saskatchewan, 9 Campus Drive, 1015 Arts Building, Saskatoon, SK S7N 5A5, Canada e-mail: colleen.dell@usask.ca

D. Chalmers

Faculty of Social Work, University of Regina, Saskatoon, SK, Canada

N. Bresette

Nimkee NupiGawagan Healing Centre, Muncey, ON, Canada

S. Swain

Keystone Equine Centre, West Lorne, ON, Canada

D. Rankin

Lambton Equine Assisted Learning Centre, Brigden, ON, Canada

C. Hopkins

National Native Addictions Partnership Foundation, Muskoday, SK, Canada



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Introduction

In August 2008, the Canadian government announced its investment of over \$250,000 from the National Anti-Drug Strategy for a pilot equine program that aimed to assist youth in trouble with the law to recover from illicit drug abuse. However, scientific validation of the benefit of the horse in contributing to behavioural change is quite limited (Dell et al. 2008; Kaiser et al. 2004; Kruger and Serpell 2006; Lefkowitz et al. 2005).

This exploratory study is a collaborative effort of the research, equine, and addictions treatment communities in an attempt to contribute much needed understanding to the equine intervention field. To help fill the existing gap in research evidence, our team applied a culturally-informed framework to specifically examine the role of equine-assisted learning (EAL) in the healing of First Nations and Inuit youth from solvent abuse (i.e., the deliberate inhalation of fumes given off from a substance, such as gasoline and glue, for its intoxicating effects). If Canada is going to invest in equine-assisted programs as a form of addictions treatment for youth, it needs to be informed by empirical evidence pertaining to the incorporation of the horse within therapeutic, psychosocial processes.

Over the past 50 years, there has been a growing recognition of the benefits of animal-assisted therapy (AAT) to maintain and enhance human well-being and healing (Heimlich 2001; Hines 2003). An extensive body of literature exists in the area of relationships, attachment, and bonding between humans and companion animals (Hines 2003; Kruger and Serpell 2006; Levinson 1972; Mallon 1992). In recent years, an increasing number of human service professionals have been exploring the inclusion of animals as mediators of psychotherapeutic and health-related interventions within their professional practice (Jorgenson 1997; Karol 2007; Netting et al. 1987; Pollack 2009; Porter-Wenzlaff 2007; Reichert 1998; Sable 1995; Tedeschi et al. 2005; Yorke et al. 2008). Although research is limited, studies documenting the processes and outcomes of AAT are gradually being undertaken (Brooks 2006).

A branch of animal-assisted interventions that has received particular attention in the past decade is the incorporation of the horse, or equine, across a range of human service contexts. Riding and non-riding programs and practices have been developed for their potential psychological, emotional, and social benefits (Drawe 2001; Frame 2006; Graham 2007; Hayden 2005; Iannone 2003; Kersten and Thomas 1997; Klontz et al. 2007; Schultz 2005). Known generally as equine-assisted therapy, the approach has been incorporated into counselling and learning programs within corrections (Deaton 2005), mental health (Bizub et al. 2003; Kakacek and Ottens 2008), social services (Burgon 2003), women's addiction treatment (Pollack 2009), and with high-risk youth who have experienced emotional and behavioural trauma (Basile 1997; Brouillette 2006; Chardonnens 2009; Drawe 2001; Ewing et al. 2007; Foley 2007; Iannone 2003).

A more recent development is the incorporation of the horse into addiction treatment with youth (Jarrell 2009), and specifically with First Nations and Inuit youth who abuse solvents (Dell et al. 2008). Within this context, a life skills and learning program has been offered through a method termed equine-assisted learning (EAL). EAL is a non-riding, educative method based on experiential learning processes, and addresses individuals' emotional and behavioural difficulties through the presence of and direct contact with a horse.



The existing literature on the inclusion of horses within non-riding therapeutic processes is mainly informed by outcomes and theories from the broader human-animal bond knowledge base (Kruger and Serpell 2006) as well as descriptive and anecdotal accounts (Frewin and Gardiner 2005). Although limited, some empirical evidence exists that includes quantitative and qualitative studies that have examined the psychosocial outcomes of and participant experiences with non-riding equine-assisted therapy programs. For example, studies have explored equine-assisted therapy with high-risk youth experiencing emotional problems (Trotter et al. 2008); youth with severe emotional disorders (Ewing et al. 2007); special education students (Brouillette 2006); at-risk children (Bowers and MacDonald 2001); and youth with mental health challenges (Hayden 2005). However, to date, studies that examine the incorporation of EAL in the treatment and healing of First Nations and Inuit youth who abuse solvents are virtually non-existent.

In 2008, the Nimkee NupiGawagan Healing Centre for First Nations and Inuit youth who abuse solvents queried whether EAL might be a valuable extension to its cultural programming. Since the introduction of the horse to some First Nations peoples and communities, it has had both working (e.g., hunting and gathering) and cultural and ceremonial (e.g., Horse Dance) roles. The horse has been viewed historically by some First Nations with a profound sacredness, just as sacredness is believed to be present in all living things (Kruger and Serpell 2006; Lawrence 1998). Recognizing the cultural reverence of the horse, it is said that a horse's spirit can lead an individual to understand their place in the circle of life, which is endemic to an Aboriginal youth's healing from solvent abuse (Dell et al. 2008).

Given the relative infancy of equine-assisted interventions generally (Kaiser et al. 2004; Lefkowitz et al. 2005; Schultz 2005; Trotter et al. 2008), and EAL specifically (Dell et al. 2008; Kersten and Thomas 1997; MacKinnon 2007), and the absence of research attention to the intersection between EAL and the cultural meaning of the horse to Aboriginal peoples, there is a significant gap in understanding. This is of particular interest for youth who abuse solvents because conventional methods of treatment have been met with limited success (Jumper-Thurman and Beauvais 1997), and there is likewise limited research on treating youth solvent abuse (Simpson 2002; Torjman et al. 2001). The aim of this exploratory study is to understand the experiences of First Nations and Inuit youth participating in an EAL program as part of their healing from solvent abuse while in a residential treatment centre. To undertake this study, it was essential that it be situated within Aboriginal ways of knowing.

Conceptual Framework for the Study

This study is conceptualized from within an Aboriginal worldview, which is understood as a way of knowing, including ways of seeing, relating, and experiencing. Such a worldview understands the individual, the collective, and the universe as an interconnected web of being (Cajete 2000). The land, for example, is intimately related to culture, spirit, family, and other dimensions of healthy being. Traditional understanding and empirical research both acknowledge that connecting with creation in all its forms is fundamental to healing for Aboriginal peoples (Crowfoot-Graham et al. 2001; McAdam 2009; McCormick 2000; Ross 2006). This counters in numerous ways Western biomedical approaches to healing that primarily focus on an individual independent from others and their surroundings (Marbella et al. 1998; Morrisseau 1998).



Aboriginal understanding places the *spirit* at the centre of knowing and recognizes its innate existence in all life forms. To comprehend the meaning of spirit it requires "seeking understanding beyond the physical world" (McAdam 2009, p. 14). Some refer to this as "getting beyond the self," and that "it is only through getting beyond the self that humans are able to connect with the rest of creation" (McCormick 2000, p. 26). McAdam (2009) explains that "all of the creator's creations, including the smallest insect and the air we breathe, have a life force or a spirit and are therefore sacred" (p. 15). Lawrence (1998) acknowledges that "the horse, like other animals, is viewed as occupying a vital role in the great circle of living creatures, not as representing a lower rung on the hierarchical ladder (or chain) of being" (p. 137). The spirit is at the centre of Aboriginal ways of knowing and works in relation with the natural physical world. This appreciation is independent of the diverse cultural heritages of First Nations and Inuit peoples.

The *space* in which spiritual exchange takes place is variously described within First Nations and Inuit languages; it is where spiritual and physical realities meet. The work of Hopkins and Dumont (2010) reference the concept of *Va*, native to the Samoan peoples of the Pacific Islands; Va acknowledges this "space that relates" (p. 14). Citing Te Pou (2008), Hopkins and Dumont share:

The concept of Va refers to the "space between." It is fundamentally different from western notions of space defined by open areas, expanses or distances that separate. It refers to relationships that are collective. To maintain Va is to respect and maintain the sacred space, harmony and balance within relationships. With regard to health, Va captures the holistic Pacific worldview of the important relationships between our physical, spiritual, psychological, social, economic and cultural dimensions that underpin a healthy community. Relationships are not unidirectional, but mutually linked and reciprocal, and the space between, is not space that separates but space that relates. (p. 13–14)

This understanding of space recognizes that culture, informed by spirit, is the foundation of individual and communal healing. By extension, this situates the central role of culture in treatment for First Nations and Inuit youth who abuse solvents (Hopkins and Dumont 2010).

Method

Design

Originating from the Nimkee NupiGawagan Healing Centre's (NNHC) query into whether EAL might be a valuable extension to its cultural programming and the extant animal intervention literature, this exploratory study aims to understand the experience and potential healing impact, if any, of EAL program participation for First Nations and Inuit youth in residential solvent abuse treatment. To achieve such an understanding, the study was designed as a phenomenological, qualitative examination of multiple participants' perspectives, prioritizing the youths' viewpoints. Qualitative methods were chosen for the study because they are especially relevant to research questions concerned with subjective experiences, meanings, and processes (Berg 1998; Boyatzis 1998; Kirby et al. 2006). Specifically, semi-structured interviews with youth participants and NNHC staff, journaling by the youth, NNHC and the equine centre's staff reflections, and researcher observations served as a triangulation of measures. Congruent with phenomenology, this



method was deemed the most appropriate as it allowed for a prioritizing of the youths' creation of meaning based on their lived experiences (Denzin and Lincoln 2008; Patton 2002; Speziale and Carpenter 2007), while at the same time recognized that others' perspectives are the mechanism through which individuals' stories collaboratively unfolded (Creswell 2007).

The study was carried out in active collaboration between NNHC staff and management, the EAL facilitators from the Keystone Equine Centre and Lambton Equine Assisted Learning Centre, and university researchers. Given the treatment status of the youth in the study, they were represented by NNHC in the research process. The intent of the study design was to facilitate a decolonizing method in which the research was undertaken "by, for and in balance with" the research population and not "on" it (Kirby and McKenna 1989, p. 28; Smith 1999). For example, Aboriginal ways of knowing took precedence over Western paradigms of understanding in the study (Smith 1999). Our team's ethical practices were in adherence to the CIHR Guidelines for Health Research Involving Aboriginal People (2008) and the OCAP Principles (ownership, control, access, possession) (Schnartz 2004). Ethics approval for the study was granted by the University of Saskatchewan Behavioural Research Ethics Board, and the University of Regina Research Ethics Board.

Setting

The Nimkee NupiGawagan Healing Centre (NNHC) is located on First Nations territory in Muncey, ON. The NNHC offers a 4-month, 10-bed residential cultural treatment program for First Nations and Inuit youth. Intake is rotated three times a year by gender. The program is grounded in First Nations culture; however, it is general enough that it is applicable to Inuit youth (i.e., culture is understood as a way of life). NNHC's vision of a holistic healing environment for youth is guided by the Medicine Wheel and teachings of the Four Directions (Nimkee NupiGawagan Healing Centre 2003).

The EAL program was offered to NNHC youth by the Keystone Equine Centre in West Lorne, ON and the Lambton Equine Assisted Learning Centre in Brigden, ON (hereafter referred to as K&L). K&L's mission is to provide the highest level of equine-assisted learning to participants through maintaining balance with the earth, honouring diversity, and promising to always respect, love, and care for the horses in the program. The K&L curriculum is 12 weeks, offered 1 h per week, and is designed to assist youth with increasing their self-esteem, modifying their behaviour, and healing while having fun. The K&L program has worked with NNHC to ensure Aboriginal culture-based virtues taught in the treatment program coincide with virtues addressed in the equine program.

Sample/Participants

A purposive, convenience sample of 15 EAL youth participants (seven male and eight female) was accessed through the NNHC. The boys attended the EAL program from October 15 through to December 10, 2008. This was the first time that K&L offered the curriculum. The male participants ranged from 12 to 17 years of age, with an average age of 14. Five of the male youth were of First Nations descent from five different cultural territories in Canada, and two were Inuit from one territory. All youth were at the NNHC for solvents as their primary substance of abuse, although 86% also problematically used alcohol and other drugs. Only two male youth had prior experience with horses, and the two Inuit youth had never seen a living horse before.



The girls attended the EAL program from January 12 through to April 23, 2009. The average age of the female participants was 15, and their age ranged from 13 to 17. Of the eight girls, six were First Nations, and similar to the males, represented six diverse cultural territories in Canada. Also similar to the boys, all girls were attending NNHC for solvent abuse; however, 88% also abused other substances. Three female youth had prior exposure to horses.

All youth in attendance at NNHC during the two intakes were recruited and retained throughout the study, except one male for whom contact with his guardian was not made and so no data was collected from him. The youth missed, on average, one EAL and the corresponding journaling session. The male intake was characterized as "typical" by NNHC; however, the female intake was identified as "difficult" in comparison to a typical female cohort. For example, four of the girls were briefly incarcerated at one point during their treatment residency.

The three treatment staff interviewed represented the teaching and counselling professions. The counsellor had 5 years of experience in youth treatment, and the two teachers, between them, had accumulated 35 years in educating youth. One of the three staff was the NNHC Executive Director, one was the teacher, and the other a primary counsellor to the youth. The teacher and counsellor facilitated the EAL program on behalf of NNHC, meaning that they both attended the EAL program weekly (the teacher missed one session, and the counsellor two). The teacher also oversaw the youths' journal writing on EAL in the NNHC classroom on a weekly basis.

Procedure

Semi-structured interviews were held with the EAL participants during their last week in NNHC and EAL programming, and were conducted by the university researchers at the NNHC. Informed consent was provided by all youth and their parents/guardians. In recognition of the youths' participation, they received a ten-dollar honorarium and a DVD. The average interview length was 25 min, ranging from 17 to 54 min. The interview guide focused on the youths' experiences with the EAL program, its impact on their healing, as well as the horse program's congruence with cultural understanding and teachings at NNHC. Questions explored in each of the areas included, for example: did you feel it was worthwhile for you to be involved in the horse program, and why; did you learn anything new about yourself by participating in the horse program, and what; and did you practice any of the seven Grandfather Teaching (virtues) in the horse program, and how? All interviews were digitally recorded and transcribed.

Two of the semi-structured interviews with the NNHC staff took place at the treatment centre and were approximately 50 min in length. One interview was held in a local restaurant and was 90 min in duration. The interviews focused on identical areas to the youth interviews, but from the staff's perceptions of the youths' experiences. Informed consent was provided by the staff, and they received a pen (approximate \$20 value) for their participation in each of the youth intakes. Two of the three interviews were digitally recorded and transcribed, and detailed notes were documented for the third interview.

The youth attended the EAL program on Wednesday afternoons and Thursday mornings in the NNHC classroom. They took, on average, 20 min to journal responses to the following questions: (a) What types of things did you do in the horse program yesterday? (b) Why do you think they had you do these things in the program? How did the activities make you feel? (c) What things did you like best about the program yesterday? Why did you like these things best? What things did you like least about the program? Why did you



like these things least? The youths' answers were, on average, one-half page per week and at a grade four literacy level. Infrequently, drawings were included. As the classroom teacher oversaw the journaling exercise, any insight she had on individual journal entries were recorded in her own observations and submitted to the researchers (see below). The journals were collected for analysis at the completion of the 4-month EAL program.

The NNHC classroom teacher provided written, weekly reflections of her experience overseeing the youths' journaling and observing the EAL program (13 pages). The EAL program facilitators also provided written weekly reflections on their observations of working with the individual youth (26 pages total). These observations were made in the same topic areas as the youths' journaling, which regarded the program activities and rationale. In addition, the two researchers observed one, 2-h session of the EAL program with the girls and completed written reflections (four pages total). Observation of the boys was unable to be coordinated. It was important to observe the research participants in the context of their world to enhance our understanding of their experiences (Bonner and Tolhurst 2001). As participant observers engaging in aspects of the EAL sessions, the university researchers were able to reflect upon contextual influences that contributed to a richer understanding of the youths' experience.

Analysis

Our approach to data analysis was informed by the phenomenological work of Moustakas (1994) and a data-driven approach to coding. Applying a phenomenological approach prioritized the youths' experiences in a field where nothing specific to EAL, First Nations and Inuit youth solvent abuse, and healing has been empirically researched. Likewise, an inductive approach to data analysis allowed for "silenced voices or perspectives inherent in the information [to] be brought forward and recognized" (Boyatzis 1998, p. 3). Further, developing codes inductively through thematic analysis is a specific way of seeing the data (Thorne 2000), and this corresponded with our prioritizing of Aboriginal ways of understanding the data in this study.

Given the separate male and female intakes of the NNHC program, gender was the obvious criterion referent for developing the coding scheme for the study. Data coding began with the two university researchers reviewing either the male or female interviews and corresponding journals, and identifying themes specific to the benefit or non-benefit of the youths' interaction with the horses and the EAL program. This was the agreed upon starting point, given the absence of prior research in the field. This involved a line-by-line reading of the verbatim transcription of the youths' interviews and journals, and identifying words, sentences, and quotes that offered understanding of their experiences. Table 1 provides a cursory summary of the youths' interview responses and is organized by responses common to both males and females, and those that are gender-specific. Colorcoding and review guides were developed to help organize the data. Given the brevity and limited number of youth interviews, each researcher reviewed all transcripts in detail to identify the initial set of emergent themes. A total of 11 themes emerged from the youths' data regarding benefits/non-benefits of the horse (spending time with the horse, physical touch, nurturing, horse physiology, connection with the horse, one special horse, communication), and benefits/non-benefits of the program (skill development, unappealing aspects, EAL facilitators, engaging in a new activity). The 11 themes, agreed upon by the researchers, were based on their constant comparative method with one another during the thematic analysis as well as their use of memos to document the reasoning behind their



Table 1 Summary of youth responses to interview questions

Interview question	Males and females shared responses	Male specific	Female specific
1) What types of things did you do in the horse program?	Exercised and fed the horse; brushed the horse; obstacle course; moved the horse sideways; blindfold activity; learned to control the horse; walked around the horse; tying the horse	Made the horse run (round pen activity)	Saw the baby foal; cleaned and walked the horse; braided the horse's hair; decorated the horse
2) Why do you think that they had you do these things in the program?	Learn respect; communication; patience; learn about how the horse communicates; learn to give directions; solve problems; to trust; learn to be nice to others	Not to yell at the horse; the horse uses body language; put stuff away (i.e., brushes)	Horse uses it legs to move; horse needs to be fed; they have babies; learn to work on a team
3) How did the activities make you feel?	Tired; scared at first; frustrated when horse didn't listen; can learn new things; can make the horse listen to me	Not think about drugs; be healthy; work on healing	Happy; liked by the horse; felt special; felt trust; listened to by the horse; loved by the horse, horse was a new friend
4) What things did you like about the program?	The horses; the facilitators; time away from the centre; working with the horse; having a favorite horse	Make the horse run (round pen activity); run while leading the horse; touching the horse	The baby horse; brushing and feeding the horses; being with the horses; knowing when to talk to the horse
5) Why did you like these things best?	Fun; being with a favorite horse	The horses all act different; we get along	Horse was a friend to talk to; being liked by the horse
6) What things did you like least about the program?	Smells of the horse and barn; weather; being outside when cold;	Not being able to ride the horses	Sharing a favorite horse
7) Why did you like these things least?	Needed to listen to the teachers and follow instructions; wearing a helmet	Sometimes boring; didn't like how the helmet looked	Shoes got muddy and clothes dirty; didn't like how the helmet felt on head

coding procedure. The researchers then reviewed the others' youth data with the 11 themes, and no new ones emerged.

Next, the themes were taken to the larger team for discussion and contextualized understanding, and the overarching notion of space emerged from the application of an Aboriginal cultural understanding to the data. The contribution of diverse experiences, social and cultural locations, and understandings of knowledge (e.g., understanding of space) among the varied team members enabled this to occur. With this emergent understanding of space, the youth interviews and journals were reexamined by the researchers for further thematic coding according to the more specific space-related categories of interaction between the youth and the horse, the youth and the EAL program, and the youth and the EAL facilitators. At this time, the researchers brought in additional perspectives on the youths' experiences, and coded the NNHC staff interviews and reflections, the K & L staffs' reflections, and the researchers' observations. This data was



reviewed to better understand the youths' perspectives; no solitary themes emerged from this data in comparison to the youths' data. It is important to note, however, that some of the data collected, such as challenges specific to the EAL program, were no longer examined with this narrowing of focus. Given the limited thematic divergence in their original coding of the youths' interviews and journals, the researchers collaboratively reviewed all the data. Five themes emerged from this larger analysis: authentic, communicative and relational regarding youths' interaction with the horses; inter-cultural regarding the youths' interaction with the EAL program; and therapeutic regarding their interaction with the EAL facilitators. Returning to the team members for further culture-based discussion, these themes were distilled into three themes: spiritual exchange, complementary communication, and authentic occurrence. The researchers returned to the original data sources for a final review and validation of the themes. As relayed, we also validated our themes and analysis throughout via meetings with our larger team who are experts in their respective fields.

Results

Three key themes depict the experiences of First Nations and Inuit youth in residential solvent treatment at NNHC with the EAL program, and its potential benefit to their healing. The themes indicate the presence of a culturally-relevant space in which the EAL program and its benefits are experienced. The first theme is *spiritual exchange*, and it is understood as the experience of spending time and connecting with the horses, and sometimes one in particular, as well as with the EAL program facilitators. The theme *complimentary communication* is understood as sensing through body language and intuition with the horses and taking pride in this, and in turn, transferring this understanding to human interactions. And third, *authentic occurrence* centres on overcoming barriers to understanding imposed by Western practices and ways of knowing. Each theme and its associated clusters or sub-themes are reviewed. Congruent with the data analytic approach, where applicable, differences between females and males are noted.

Theme 1: Spiritual Exchange

The male and female youth expressed significant interest in simply spending time with the horses in the EAL program. They enjoyed walking, feeding, and brushing them, with one youth commenting, "I'm not trying to listen [to the facilitators]. I'm just do [be] with the horses." This overall sense of just "being" with the horses was likewise documented by the EAL program facilitators, the NNHL staff, and the researchers. It was characterized as the youth appearing to be focused on the horse with a "calm presence," giving the sense that they were "in the moment." For example, one of the youth led a horse off to the side of the arena and stood with it calmly while it ate; a staff member commented that "they really liked just that time with the horses....It is just a good quiet time for them and they just enjoy being with a horse and brushing it." One of the EAL staff similarly expressed: "...she'll just walk around with him and brushed him. She won't do the obstacle [exercise]. She won't do any of the stuff they are supposed to do. She will just be with him." The EAL facilitators allowed for the youths' wanting to just "be" with the horses in their facilitation of the program.

The majority of male and female youth shared that they developed a meaningful connection with the horses. The horses were defined as "friends" with whom the youth could



"share." One youth commented, "Like he was my friend yah. When he looked me, looked me in the eye." When another youth was asked if she was going to miss the horses, she replied, "I think I am going to buy one for myself....At least he'll understand and I will be able to talk to him every day no matter what." In turn, the horses made the youth feel "special" and "welcomed," with one youth commenting, "[T]hey just see the goodness inside me....well, I guess I feel welcomed." A staff member, reflecting on the boys program, shared: "I think they learned that they can have a relationship with an animal....I think it helps them with their healing."

For some of the participants, a deeper connection with one special horse was described. This revealed the establishment of a deep level of trust with the horse, and this developed for some into a mutual relationship or bond. One male participant explained, "There was a trust I felt with the one horse—that he believed in me, that I knew what I was doing, and you had a trust in him, like a bond." It is interesting to note that the boys also identified their special horse by its physical attributes, such as the speed at which it could run and its color, appetite and size. An NNHC staff described the trust and bond that developed between the youth and horses in the comment:

...because the participant has worked on his baggage, and the horse sense that, senses the change in that person. This has become a common event particularly this session with [participant] and his horse Stuey. It took a long time for Stuey to let [participant] in his personal space. He would occasionally nip at [participant]. This always made [participant] upset because he loved Stuey so much. After a while, weeks later, Stuey quit nipping at him. Stuey is great at reading the participants. Had [participant] gotten over his baggage? I believe so. After that they were inseparable.

In addition to spending time and connecting with the horses, the youth expressed a meaningful exchange with the equine program facilitators, including the development of trust. The females shared general sentiments, including "nice," "funny," and "[t]hey are really good teachers. They are just good at teaching." The NNHC staff observed that the girls were "comfortable with the facilitators," and that at the start of the equine program it appeared they were competing for the facilitators' attention. The boys were more expressive about the EAL facilitators, with one boy characterizing them as "responsible people, love their horses, talk to them like their children, knew a lot about the horses, showed how to be around the horses." The boys also made specific mention of the male facilitator. It appeared that by allowing the boys to help with the horses, the facilitator showed that he trusted them and that made the boys feel good.

The NNHC staff likewise recognized the personal qualities of the EAL staff for engaging with the youth; for example, they were:

...very patient. They were very kind and caring and even when sometimes the girls were being disruptive, they tried, you know, really hard to work well with them, and, and to be understanding and, and I think that everything that they did and how they worked with them was really good for the youth to see that they were so patient with them.

Another NNHC staff member observed that "it was actually really good cause they showed a lot of trust on their part. Even though the girls kept exhibiting behaviours that they weren't really trustworthy. They kept giving them opportunities to build that trust again, so it was really good."



Theme 2: Complementary Communication

An ability to communicate with the horses beyond verbal commands was expressed by both the male and female youth. Being aware and in tune with the body language of the horse to communicate was particularly noted by the males, with one youth relaying, "...you could feel it in his body language and everything." The females expressed a greater tendency to use their intuition and sensing, with one participant sharing, "[L]ook in the horse's eyes and can tell if they are mad or sad," and another stating, "I can hide my emotions...horses can't. They sense things." One of the boys expressed a combination of communicating through body language and intuition, stating, "I felt the horse believed in me and felt this through my body language." The youths' increased awareness of their ability to communicate with the horses was associated with feelings of accomplishment. Both the male and female youth shared at length their pride in how they learned to work alongside the horse through their communicative interactions with it. This involved, for example, equine specific techniques, such as how to tie, lead, and halter a horse. Mastery was particularly apparent in the boys' comments, such as "how to put on the halter...and...walk beside him and backwards." One researcher noted, "[Y]ou can just see the pride in her face, and how confident she is with the horse following her."

The youth also articulated the transferability of their communication abilities that were built up through interaction with the horses in the EAL program to humans, such as patience and leadership. Both the boys and girls spoke of learning to work as a team to problem solve: "[Y]ah, you gotta learn how to work as a team instead of just by yourself." The girls, in particular, expressed how they learned to cooperate better at NNHC by participating in the EAL program: "[M]hm 'cause there's some people here that I don't get along with but after you go to the horse program we all started just talking and getting along."

Theme 3: Authentic Occurrence

The female youth expressed significant compassion and care toward the pregnant mares and their foals in the EAL program. There was no opportunity to observe this during the boys' intake. The girls' innate nurturing abilities were apparent in such comments as, "I'm just gonna feed him...I just go to [the horse] and feed him...Nobody wants to be hungry." The girls' nurturing capacity was also reflected in the researchers' and staffs' observations:

Like [participant] spent a whole hour last week, just standing there with her horse, brushing, taking care of, because even though these girls have a lot of behaviour, they love kids, they're really good when little children come in here and they are really good with the horses, like they really like taking care of them and brushing them and doing all that. And the same when little kids come here. The girls like to play with them, and hug them, hold them, get them food...

There was great curiosity expressed by the youth about the horses' anatomy, in particular, the pregnant mares. This provided opportunities for the NNHC staff to discuss anatomy-related topics with the youth. For example, many of the youth made comments in their interviews and during the EAL programming that "I saw a horse pooping." The EAL program staff journals documented the interest by both the girls and boys in whether horses had sexual intercourse. For the girls in particular, the pregnant mares afforded an opportunity for NNHC staff to discuss the birthing process and view videos of horses in labour.



Physical touch is a vulnerable area for the majority of the youth at the NNHC given their experiences of unhealthy touch (e.g., physical and sexual abuse). For the boys, interacting with the horses gave them an opportunity to express affection. One of the boys stated, "I just went over there and just start petting him and I couldn't, like I went over, under his neck and started petting him right there." A program staff member commented that "one thing different from the boys intake was just that they [the girls] weren't as physical with the horses as the boys were, so the boys hugged, were more hugging of the animals. They would hug them a lot and just be touching them a lot." For the girls, physical touch with the horses centred on caretaking (e.g., cleaning up the horses' droppings) in addition to expressing affection (e.g., braiding a horse's mane). Based on the typical behaviours of the youth while at the NNHC, the staff and facilitators expressed surprise at the girls' willingness to clean up after the horses and the boys' emotional expression toward the horses.

Discussion

The results of this study indicate that the EAL program offered a space for youth to partake in their culture. Interpreting the experiences shared by the youth and the perceptions of the program staff and researchers from an Aboriginal place of knowing offered a culture-based understanding of the impact of the EAL program on youths' healing. This is supported by non-traditional Western research. It is well-established that First Nations and Inuit youth who abuse solvents, and Aboriginal peoples generally who abuse substances, are in need of (re)introduction to their culture for individual and communal healing (Hopkins and Dumont 2010; McCormick 2000; Niccols et al. 2010). The misuse of substances is directly linked to the historical impact of colonization, resulting in multi-generational losses of land, language, and culture for Aboriginal peoples. Together, the horse, recognizing its cultural significance to some First Nations, and the EAL program established a space in which this (re)introduction could take place. This unfolded in three main ways. First, the space provided an opportunity for the youth to engage in a spiritual exchange; the EAL program allowed for recognition of the youth outside their physical being—their spirit. Second, the youth engaged in complementary communication within the space, experienced as taking pride in being able to sense body language and intuition with the horses and transferring this to humans. This provided the youth with substantiation in the physical world of a spiritual exchange. And third, the space allowed for authentic occurrences to take place, including experiences with nurturing and physical touch, and understanding anatomy, which have been curbed by Western historical practices and ways of knowing.

The occurrence of a spiritual exchange in the EAL program space was evident in the youths' descriptions and others' reflections on the youth just wanting to "be" with the horses. This was similarly detailed in the staffs' reflections. The Western literature supports the development of a bond between animals and humans, and commonly refers to it as an *alternative space* of shared meaning and understanding (Yorke et al. 2008). An Aboriginal understanding recognizes that the spirit of the youth connects with the spirit of the horse; this experience extends beyond the natural world and is at the centre of Aboriginal knowing. A NNHC staff member explained the importance of this from a cultural perspective, of "seeing themselves, you know, of just, of being if they could, but of being within the whole." For some youth, a deeper and more meaningful connection with the horses developed, and for still others an eventual bond with one special horse was established. Endemic to the youths' experiences was that as their exchanges with the horses



grew more meaningful, deeper levels of reciprocal trust were established. Reciprocity can contribute to a sense of one's importance in relation to another (Karol 2007), and trust is an element of Aboriginal ways of knowing for attaining balance, healing, and harmony in life (Benton-Banai 1988).

Of interest to this study is that the EAL program also provided a space for spiritual exchange between the youth and facilitators. This was most evident in the boys' expression of developing trust with the program facilitators. The literature supports that opportunities to interact with animals provide a starting place to explore and develop trust and a relationship with another living being (Latella 2003). McNicholas and Collis (2006) further explain that "social signals from animals are less complex than from humans, and the reduced processing load may permit a greater degree of social understanding and social interaction than would be otherwise possible" (p. 69). The development of a trusting exchange with the horses, as well as with the EAL staff, is particularly important for this group of youth, who have had their trust significantly violated in the majority of their lives (e.g., impacts of colonizing government actions toward Aboriginal peoples, experiences of interpersonal violence).

The EAL program also provides a space for communication between the youth and horses that is complementary to a verbal exchange. Although based in an oral tradition, Aboriginal knowledge has historically taken forms beyond the spoken word, including written stories, ceremonies, traditions, ideologies, medicines, dances, and arts. As relayed in the first finding, the EAL program provided a space in which a youths' spirit could engage with an equine spirit (e.g., just "being" with the horse). This second finding advances this understanding with recognition that engaging in complementary communication techniques, such as sensing body language and intuition in exchanges with a horse, is observable for the youth of their spiritual exchange with the horses (e.g., can lead a horse). Western literature similarly indicates that horses are extremely sensitive to subtle changes in the body language of their companions and are able to respond intuitively to human behaviour and intent (Frame 2006; Graham 2007; Hallberg 2004; Schultz 2005; Tramutt 2003). From within an Aboriginal worldview, the youth were able to experience the relation between the natural and spiritual world in this exchange and be a witness to its result.

The significant sense of pride the youth took in establishing communication with the horses appeared to nourish their spirits. The Western work of Roberts et al. (2004) suggests that "resonance occurs in the human-horse interaction and provides participants with a powerful nonverbal feedback about real feelings" (p. 34). This resonance of feelings may provide enhanced opportunities for self understanding and increased self-esteem. Of interest to this study is that the youths' ability to communicate with the horses, and their pride in doing so, contributed to enhanced exchanges with others, including the EAL facilitators and other youth. The work of Brandt (2004) on human-horse communication and its transferability to interactions with humans, describes the communicative experience as embodied; it requires a "tuning in" to the animal (p. 306). From within an Aboriginal worldview, this is fundamental to understanding spirit-to-spirit exchange.

The youths' experiences and the staff's reflections relayed that the EAL program provided a space for authentic occurrences to take place. This is, from an Aboriginal place of knowing, attained in the relational space in which spiritual exchange occurs. Rooted in historical practices and Western approaches to knowing, barriers are imposed on such experiences in Western society. For example, acknowledging the impact of the history of colonization with First Nations and Inuit in Canada, youth in NNHC's residential program have experienced multiple forms of abuse (e.g., unhealthy experiences with physical touch)



and the impacts of intergenerational trauma (e.g., parental neglect). The EAL program provides a space for these to be experienced "anew" from a cultural basis.

Spending time with horses naturally involved the youths physically touching them (e.g., brushing, braiding). Within an Aboriginal worldview, physical being is one of the four aspects of the individual: physical, mental, spiritual, and emotional (Benton-Banai 1988). Given the rate of physical and sexual abuse among First Nations and Inuit youth in treatment for solvent abuse, horses can offer a safe and non-sexual mechanism for physical touch (Held 2006). Robin and ten Bensel's (1985) work explains that animals can "satisfy the child's need for physical contact and touch without the fear of the complications that accompany contact with human beings" (p. 71). Similarly, the impacts of residential schooling have resulted in underdeveloped parenting skills, including the limited expression of love and nurturance. The EAL program space offered the youth the opportunity to experience their innate and spiritual sense of nurturing and caretaking for another being; for example, the girls experienced this as nurturing the pregnant mares, their foals, and other horses. This supports the traditional complementary roles and responsibilities of males and females in some First Nations and Inuit cultures (McAdam 2009). This may also reflect the limited opportunities boys have to express their feelings of affection due to "unfeeling" social constructions of masculinity, and in particular for Aboriginal males in Western culture.

Spending time with the horses also allowed for uninhibited inquiry and exploration of knowledge, which is oftentimes stunted by the social mores of Western society. The horses' anatomy, for example, provided a space for questions to be asked about natural body occurrences. Opportunities to discuss anatomy (animal or human) when interest was expressed by the youth were capitalized upon, in particular with this group of youth whom have had negative experiences with and/or witnessed physical victimization. An Aboriginal understanding of knowledge requires that this information provided by the Creator be shared, and not hidden from the inquirer.

Limitations of the Present Study

There are two key limitations to the results of this study. First, the data is not generalizable beyond the cohorts from which it was collected. Although further research is needed to validate the findings, this exploratory study contributes a beginning point. Second, the reliability of the data is limited in consideration that interviewing the youth in the NNHC counselling office proved to be distracting at times; there was a mother-tongue language barrier between the interviewers and youth (i.e., English was a second language for some of the youth, although programming at the treatment centre is in English); the grade four literacy level of some of the youth in their journal entries; emotional fluctuations in youth depending on the day (interviewers attended NNHL for a brief period of time); and the need for further opportunity to establish rapport with the youth before the interviews took place. These are important considerations for future research.

Conclusion

The key finding of this study—that participating in the EAL program provided a culturally-relevant space for the youth, is by extension beneficial to their healing in the NNHC program. This is a contribution to the literature, where it is well sourced that cultural understanding is foundational to the well-being of Aboriginal peoples and communities



(McCormick 2000; First Nations and Inuit Health Branch 2010). Interpreting the findings of this study from within an Aboriginal worldview imparts the knowledge that spirituality consists of a relationship with all of creation. This is evident in the youths' spiritual exchange with the horses, their engagement in complementary communication and experience of it as a spiritual exchange, and the presence of authentic occurrences for youth that are not limited by Western culture. A gap within the youth residential treatment literature is the limited inclusion of culturally specific knowledge in the development of instruments that measure client outcomes and evaluate client gains (Bettmann and Jasperson 2009). Gaining insight into the dynamics of healing for the youth in this study may be applicable to other programming and populations and should be considered.

A potential next step for NNHC is to examine how Aboriginal ways of knowing—elucidated through the concept of space within the EAL program—is reinforced in the youths' residential treatment curriculum, including classroom and cultural teachings (e.g., sweat lodge). This is particularly important given that the majority of youth entering the treatment centre have limited cultural knowledge. Association with other spiritual exchanges, such as connection to the land, could be explored. This is supported in the revisioning of Western-centred ecological perspectives emanating from some disciplines such as social work, for example (Besthorn and Canda 2002; Coates 2003; Ungar 2003; West 2007).

A suggested next step for research is to gain a more in-depth understanding into the dynamics of healing from solvent abuse for First Nations and Inuit youth through EAL program participation. Pre- and post-program interviews with the youth could provide enhanced understanding. A possible next step for research is also to examine the impact of EAL program participation when the youth return to their home communities. Post-residential treatment effect is well established as an area in need of research generally (Hiller et al. 2002; Hubbard et al. 2003) and particularly in the areas of discharge transition and successful post-discharge outcomes (Casey et al. 2010). From within an Aboriginal worldview, greater understanding of the cultural significance of the horse and its benefit to youths' healing would be informative.

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