Horse as Healer: An Examination of Equine Assisted Learning in the Healing of First Nations Youth from Solvent Abuse¹

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Contributions: This article is a collaborative community-based effort of the identified authors, with Ernie Sauve representing Elders Herb, Gladys, and John (a pseudonym), staff and members of the Board of Directors of the White Buffalo Youth Inhalant Treatment Centre, and Tamara MacKinnon representing the staff of the Cartier Equine Learning Centre.

Acknowledgement: Two of the authors of this article, Darlene and Colleen, were driving from Saskatoon to Sturgeon Lake First Nation to meet with two of the Elders who are trusted with providing spiritual and cultural guidance at the White Buffalo Youth Inhalant Treatment Centre. As they passed a road-side cross (referred to by Darlene as a shrine) to mark the passing of an individual(s) through a motor vehicle accident, they began a discussion that observed how these "shrines" would not exist to the extent they do if there were no vehicles, and, in place, horses were once again the primary mode of transportation. When their morning meeting with the Elders was coming to a close, a final thought was shared by one of the Elders, Herb. He said that the iron horse (i.e., automobile) has contributed its share to the illness (e.g., materialism) that plagues society today. Another of the Elders, Gladys, reflected that all is interconnected in life, and everything (e.g., seasons) comes full circle. In many ways, this article represents a piece of the circle of life for each of the authors. We are happy to be able to share this with the reader, and are grateful for what we have learned in the process.

ABSTRACT

Canada is an international leader in providing residential treatment to First Nations youth who abuse solvents. The residential centres are linked through the national Youth Solvent Addiction Committee (YSAC), which provides theoretical direction for the treatment provided at the centres. In this article, we discuss YSAC's culture-based model of resiliency, and illustrate it through the offering of Equine Assisted Learning (EAL) at one of the residential centres — the White Buffalo Youth Inhalant Treatment Centre. YSAC has expanded the Western concept of resiliency, which focuses on the individual, to include both the individual and community. A Western worldview associates several resiliency dynamics with an individual, including insight (which is internal) and external relationships; whereas from a First Nations worldview, YSAC identifies an individual at the same time being their inner spirit (internal) and relations with their collective community. White Buffalo's application of a culture-based model of resiliency is illustrated from the intersecting perspectives of its program, the Cartier Equine Learning Centre's EAL program, and Elders' stories. We also highlight through the EAL example how YSAC's culture-based model of resiliency and a Western health promotion approach are complementary. There is much to be learned from YSAC's holistic approach to treatment and healing for both First Nations and Western health promotion responses to substance abuse. A limitation of this article is that we discuss the theoretical intersections between a culture-based model of resiliency, EAL, and health promotion, but do not test them empirically. We conclude the article with five key research suggestions as next steps to further our understanding of EAL, and with a specific emphasis on how it relates to First Nations community health.

The healing path supported by the [White Buffalo] program is about making connections to one's self as well as the universal family of Creation. Youth drawing on community supports to strengthen their resilience is central to the Creation story (Dell, Hopkins, and Dell, 2005, p. 8).

Introduction

Canada is an international leader in providing residential treatment to First Nations youth who abuse solvents. Of its 8 treatment centres, 5 have been in operation for over a decade, a laudable achievement given that internationally most centres close down within the same year they are established

(Substance Abuse and Mental Health Services Administration, 2003). The Canadian centres are linked through the national Youth Solvent Addiction Committee (YSAC) network. The network provides theoretical direction for the treatment provided at the centres and strength-based counselor training opportunities, emphasizing a culture-based resiliency model. One of the YSAC treatment facilities, the White Buffalo Youth Inhalant Treatment Centre, has expanded its programming to include Equine Assisted Learning (EAL). White Buffalo has partnered with the Cartier Equine Learning Center to offer EAL.

In this article, we discuss how YSAC's culture-based model of resiliency is put into practice at White Buffalo through the example of EAL. The application of this model to a horse-assisted learning program is a unique contribution to the literature. YSAC has expanded the Western concept of resiliency, which focuses on the individual, to include both the individual and community. Within a Western worldview, several resiliency dynamics are associated with an individual, including insight (which is internal) and external relationships. Within a First Nation's worldview, an individual is at the same time their inner spirit (internal) and relations with their collective community. Resiliency is "... a balance between the ability to cope with stress and adversity [inner spirit] and the availability of community support" (Dell, Hopkins, and Dell, 2005, p. 5). This definition is operationalized at White Buffalo through traditional First Nations teachings alongside such programs as EAL, with specific attention paid in this case to the historic and contemporary role of the horse within the lives of First Nations people. Both concepts which comprise YSAC's definition of resiliency — the inner spirit of an individual and their community support — are illustrated using the example of EAL from the intersecting perspectives of White Buffalo's volatile solvent abuse program, Cartier Equine Learning Center's EAL program, and Elders' stories.

Using the example of EAL, we also highlight in this article how YSAC's culture-based model of resiliency and a Western health promotion approach are complementary. Both emphasize the importance of the individual *and* the larger community in understanding and responding to health needs. It follows that there is much to be learned from YSAC's holistic approach to treatment and healing that can be of assistance to both First Nations and Western health promotion responses to substance abuse. A limitation of this article is that we discuss the theoretical intersections between a culture-based model of resiliency, EAL, and health promotion, but we do not test them em-

pirically. We conclude the article with five key research suggestions as next steps to further our understanding of EAL, and in particular as it relates to First Nations community health.

VOLATILE SOLVENT ABUSE

According to a 2005 report commissioned by the World Heath Organization, the deliberate inhalation of volatile solvents and aerosols² is an increasing global problem. In Canada, attention to volatile solvent abuse (VSA) among Indigenous youth was publicly recognized with a widely played media clip in 1993 of Innu youth in Davis Inlet, Newfoundland getting high by sniffing gasoline. In 1996, a major response to VSA was undertaken on the part of First Nations people and Health Canada's First Nations and Inuit Health Branch; several residential youth solvent treatment centres were established.

Volatile solvent abuse is the deliberate inhalation of fumes or vapours given off from a substance for its intoxicating and mind-altering effect (National Drug Abuse Information Centre, 1998). Volatile solvents are a large and diverse group of chemical compounds located in hundreds of household and industrial products, including paint thinner, glue, gasoline, and correctional fluid (Dell and Beauchamp, 2006; Howard et al., 2008). The health effects of inhaling can be acute, and include frostbite and burns (Albright et al., 1999; Janezic, 1997), brain and nerve cell damage (Basu et al., 2004; Dewey, 2002), and sudden heart failure (Ballard, 1998; Wille and Lambert, 2004). The social effects are equally destructive, and include poor academic performance (Basu et al., 2004; Carroll et al., 1998), decreased mental wellness (Kurtzman et al., 2001; Mosher et al., 2004), spiritual harm (Etsten, 2005; Dell and Graves, 2005) and problem behaviour, such as delinquency (Best et al., 2004; Jacobs and Ghodse, 1998).

The rate of VSA among First Nations and Inuit youth, and youth generally, is not well documented in Canada. The most recent national survey on substance use and abuse among Canadians 15 and older found that 1.9% of males and 0.7% of females reported using a volatile solvent in their lifetime (Adlaf, Begin, and Sawka, 2005). This is an increase from the 1994 reported

^{2. &}quot;A solvent is a chemical in a liquid or semi-solid state that dissolves other substances (e.g., nail polish remover). The word volatile refers to the rapid evaporation of chemicals in products to a gas or vapour when they are exposed to air.... Aerosol and spray cans contain a product (e.g., shaving cream) under the pressure of a propellant. Propellants are typically solvents and are used to dissolve the content of the can so it can be sprayed" (Dell and Beauchamp 2006, p. 1). Volatile solvent abuse is commonly referred to as inhalant abuse, since inhaling is the mode of ingestion.

lifetime solvent use rate of 1.2% of males and 0.3% of females (Canadian Centre on Substance Abuse, 1994). Canadian research indicates that the majority of solvent abusers are between the ages of ten and seventeen, with peak use between twelve and fifteen (Adlaf and Paglia, 2003; Barcelo et al., 1998; Youth Solvent Addiction Committee, 2004). Volatile solvents are often the first mood-altering substance used by children and youth because they are readily available, inexpensive, and easily concealed (Basu et al., 2004; Wille and Lambert, 2004).

Research and practice have indicated higher rates of VSA among youth experiencing disenfranchised life conditions. This has been documented among street youth, inner city youth, and some First Nations and Inuit youth living in select rural and remote areas of the country (Research Group on Drug Use, 2004; Manitoba Office of the Children's Advocate, 2003). VSA among First Nations and Inuit youth has been linked to high rates of poverty, boredom, loss of self-respect, unemployment, family breakdown, and poor social and economic structures (Dell et al., 2003). These issues are connected to the historic impact of residential schooling, systemic racism and discrimination, and multigenerational losses of land, language, and culture. For example, a 2003 report from Pauingassi First Nation in Manitoba revealed that half of the children on the reserve who were under 18 years abused solvents (Manitoba Office of the Children's Advocate, 2003).

Given the damaging biopsychosocial and spiritual effects of VSA, and the myriad of impoverished social conditions surrounding chronic use, the treatment of youth who abuse solvents has largely been ineffective. The literature suggests that residential treatment programs for inhalant abuse rarely survive for a multitude of reasons, including the degree of difficulty that treating solvent users entails (Beauvais, 1990; Dinwiddie, 1994). Solvent abusing youth have been typecast as "out of control" and "untreatable." It has been widely accepted that brain damage from ingesting solvents is extensive and irreversible, though recent research (Cairney et al., 2002) and practice (YSAC, 2008) have refuted this.

RESIDENTIAL TREATMENT FOR VOLATILE SOLVENT ABUSE IN CANADA

In 1996, the decision to build several residential treatment facilities for volatile solvent abuse created significant unease about which model of recovery they should operate under. There was a dearth of research on effective treat-

ment approaches for youth VSA on which to draw, and conflicting theories about youth substance abuse residential treatment in general (Dell and Graves, 2005). There was some consensus among clinicians and researchers, however, that residential treatment can be helpful for individuals who have special needs or require intensive programming (Jumper-Thurman and Beauvais, 1997). In response, the emerging solvent treatment facilities in Canada formed the national Youth Solvent Addiction Committee (YSAC) as a mechanism to develop an overarching culture-informed approach to treatment, and to share individual centre successes and lessons to treating youth who abuse solvents. YSAC's mission is to provide culturally appropriate, therapeutic, inhalant treatment and community-intervention programming for First Nations youth and their families. YSAC comprises treatment centre Directors, field experts, and representatives of Health Canada's First Nations and Inuit Health Branch.

In line with the literature and understanding, the majority of youth who enter into the YSAC programs have extensive histories of mental, physical, social, and spiritual abuse (YSAC, 2008). Focusing on the cultural foundation that the centres share, and their commitment to a strength-based approach to treatment and healing, YSAC guided the centres' early development with the concept of resiliency, that is, how well a person can recover or bounce back in spite of significant stress. YSAC began with the work of Wolin and others on the seven resiliency dynamics (Wolin and Wolin, 1998; Resiliency Center, 2002). These dynamics were found to coincide with parallel conceptions of traditional teachings and holistic healing within First Nations³ culture (Banai, n.d.) (see Table 1).

Key to YSAC's development of a culture-based model of resiliency was understanding the role of an individual's inner spirit; inner spirit is the "motivator and animator of one's life" (Dell, Hopkins, and Dell 2005, p. 5) and that it is nurtured through traditional First Nations teachings and healing. Within YSAC's model, inner spirit and community cannot be disentangled from one another, as is commonly done within a Western worldview. An individual's inner spirit is intertwined with their family, community, and the land and cannot be understood apart from them. YSAC's holistic concept of resiliency is suggested to "assist youth in uncovering their inner spirit [and] strengthen their spirit by drawing on available community resources" (Dell, Hopkins, and Dell, 2005, p. 5) (see Figure 1).

Anishinabe teachings.

Table 1: Wolins' Resiliency Traits

Wolins' Resiliencies	Traditional Teachings
Morality	Interconnectedness; respect; humility; faith
Humour	Teasing as acceptance and welcome; balances the seriousness of
	life; facilitates learning
Creativity	Survival; tool making; continuance of life
Initiative	Personal courage; integrity; freedom; autonomy; promotes
	wholeness and quality of life for all
Relationships	Kinship; sharing; unconditional love; generosity; community
Independence	Mastery; taking on of adult roles; courage; non-interference;
	reciprocity
Insight	Vision quest/fast; strength; knowing self in relation to all else;
	identity development in relation to gender, spirit name and
	clan

(Dell, Hopkins, and Dell (2005, p. 6).

Figure 1: YSAC's Culture-Based Model of Resiliency



White Buffalo Youth Inhalant Treatment Centre

The White Buffalo Youth Inhalant Treatment Centre is a six-month residential treatment program for female, First Nations adolescents. It is located on the Sturgeon Lake First Nation, near Prince Albert, Saskatchewan. The program is based on the concept of living therapy, which integrates four cornerstones of treatment that parallel teachings of the medicine wheel — spiritual, emotional, mental, and physical. Underlying this framework is adherence to YSAC's culture-based resiliency model. A foundational concept of the White Buffalo program is nurturing the inner spirit, which is practised through traditional First Nations teachings and holistic healing (e.g., fasting, sweat

lodge). Alongside this, through structured programming, White Buffalo attempts to realign the youths' association with and reliance on their greater community. It is foundational in First Nations worldview to see the world through the collective of community.

Putting its culture-based resiliency model into practice, White Buffalo also positions *itself* as a traditional nurturing community. In line with First Nations worldview, children are appreciated as a gift and their rearing is a joint parental and community responsibility. White Buffalo's focus on a culture-informed community is demonstrated through traditional teachings and direction provided by Elders, as well as the commitment and practices of treatment staff. The Elders focus their energies and gifts on reinforcing a sense of self, identity, and cultural understanding within the youth; the staff extends their energy and expertise to influence and support the youth through programming, recreation, and cultural activities. Bonds are established (e.g., via a sense of community, kinship, and culture) that support a continuum of care such that continued nurturing through contact at a distance often takes place when youth return to their home communities.

Given the dearth of empirical research to draw upon to develop and expand VSA programming at White Buffalo, when an opportunity presented itself in 2005 to integrate animal-assisted learning, specifically the use of horses, into its program, it was pursued. It is well-cited in the literature that animal-assisted interventions, in particular those with horses (i.e., equine), is an increasingly popular adjunct to traditional modes of working with high need youth with histories of emotional and behavioural trauma (Drawe, 2001; Ewing et. al., 2007; Lefkowitz, 2005; Reimer, 1999). However, a significant distinction to be noted is that the White Buffalo treatment centre views this approach as not entirely new, but rather, a return or (re)introduction to what is already known about the horse within a cultural context.

THE HORSE

The Spanish introduced the horse to North America and First Nations people and communities. Since the point of introduction, the horse has had significant working (e.g., hunting and gathering) and ceremonial (e.g., Horse Dance) roles in the culture and lives of some First Nations. For some, the horse has historically been viewed with a profound sacredness, just as there is sacredness believed to be in all living things. The horse specifically is identified as having a strong spiritual power. The horse is seen to be a "teller of truth" and desires to do the "right thing." Hence, it is believed that the horse

will lead individuals in the "right direction." A horse's spirit is believed to be able to assist others in understanding their place in the circle of life. Lawrence (1998, p. 137) explains that the Native American

worldview ... sees little distinction between people and animals and does not make the sharp separation between them that is characteristic of Western culture. 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.

An Elder at White Buffalo shared a story that speaks to the important ceremonial role of the horse to First Nations. As he tells it, when he was a child during World War II, his home community organized a giveaway and powwow for the men and women who were serving in the military. Community members gathered to perform a traditional welcoming ceremony, and the ceremonial animals were guided in. At this point in history, the horse was adorned with regalia (e.g., shawls, beading, and ribbons). A typically slow and lethargic mare was one of the ceremonial horses, and as she entered the arena, on her own volition she stood on her hind quarters and circled it sideways in a ceremonial horse dance. She became animated, it was said, in response to the intent and spirit of the ceremony. This is one story that illustrates not only the horse's sacredness and connection to ceremonial activities for First Nations, but also its intuitive nature.

Intersections between YSAC's Culture-based Model of Resiliency and a Western Health Promotion Approach

YSAC's holistic, culture-based model of resiliency is akin to a Western approach to health promotion. That is, neither focus solely on the eradication of an illness or disease. Substance abuse programming has generally *not* been holistic in its approach to and understanding of healing, but rather, predominantly disease based. From a health promotion perspective, health is understood to be a state of unity or balance across the physical, mental, social, and spiritual components of an individual's well-being, rather than merely the presence or absence of disease. The historical drawback of the disease-based approach has been the majority placement of substance abuse outside the context of this understanding, as well as the community within which it takes place; there has been no recognition of the precipitating impacts of the determinants of health.

The underlying assumption of a determinants of health perspective is that "reductions in health inequities require reductions in material and social inequities" (no page, internet source) (Public Health Agency of Canada, 2004). Quite simply, "[t]he conditions in which people grow, live, work and age have a powerful influence on health. Inequalities in these conditions lead to inequalities in health" (no page, internet source) (World Health Organization, 2007). In 2006, the Assembly of First Nations added to this understanding and proposed Indigenous-specific indicators of well-being. In addition to the determinants of health commonly applied within the mainstream (e.g., income and social status, education and literacy), First Nations-specific indicators were identified, including health care, land and resources, and language, heritage, and culture (Assembly of First Nations, 2006). Key to understanding their inclusion is recognizing the devastating impact that colonialism has had in the lives of First Nations peoples in Canada and Indigenous peoples world wide.

Nowhere is the need for an inclusive understanding more evident than within the VSA area for First Nations youth. Research has shown that chronic solvent abusers are disproportionately located in impoverished social environments and are most likely to use solvents as a coping mechanism (e.g., to suppress hunger) (Alberta Alcohol and Drug Abuse Commission, 2003; Bates et al., 2005; Corbett et al., 2005; Howard and Jenson, 1999; Liu et al., 2002; Perron and Loiselle, 2003; Van Til and Poulin, 2002). If VSA is to be fully understood, it cannot be separated from larger social factors (community) and individuals (inner spirit). The whole individual, alongside social and political processes and structures, needs to be accounted for in understanding and responding to any health issue. Within a culture-based model of resiliency, EAL may be one such approach to the healing of First Nations youth from solvent abuse.

EQUINE ASSISTED LEARNING

Very little literature exists that specifically defines and describes EAL. Much of what has been written is vaguely identified within the broader area of Animal Assisted Therapy (AAT). AAT is an area that has, for the most part, been based on an understanding of the use of small companion animals within the context of healing relationships between animals and humans. The first documented empirical study that investigated both the healing benefits of animals and the potential benefits of animals as cofacilitators in therapy was published in 1962; Boris Levinson used his dog in therapy with

children (Hallberg, 2004; Heimlich, 2001 as cited in Schultz, 2005; Levinson, 1984; Morrison, 2007). With ongoing interest and research into understanding the contributing factors that may enhance a person's sense of physical, psychological, and spiritual health and healing, the role of the animal has evolved to a place of significance with its inclusion in a range of therapeutic interventions and programs. Although a long-standing and growing body of literature exists related to the use of small animal companions in increasing one's sense of wellness, a more recent and less studied phenomenon gaining international growth and attention is a movement toward the inclusion of horses in learning programs. These programs specifically aim to develop and enhance an individual's communication skills, self-awareness, and ability to interact with others.

Equine Assisted Learning (EAL) is a relatively new field within the area of equine-assisted programs and draws primarily on the tenets of experiential learning - learning through hands-on experience. While resonating with some of the "core values" (MacKinnon, 2007, p. 1) found within other equine-assisted interventions (e.g., Equine Assisted Psychotherapy, Therapeutic Riding, Hippotherapy), in general terms EAL is an educational program that is facilitated within a group format and focuses on ground activities rather than riding. In EAL programs, participants engage in structured, facilitator-led sessions that include constant feedback related to participants' experiences (EAGALA, 2008; Horses and Humans Research Foundation, 2008; MacKinnon, 2007; NARHA, 2008). The sessions provide opportunities for participants to become involved in situations that require interaction with the horse and the group, and to reflect on these experiences. The overall intent is to create opportunities whereby participants, through direct experience with the horse, learn about self, internalize this awareness within the sessions. and generalize it to other life situations (EAGALA, 2008; MacKinnon, 2007; NARHA, 2008).

Given the horse's superior intuitive nature, direct interaction with it is a unique experience. Yorke (2003, p. 2) describes the essential difference between horses and humans based on categories of predator and prey, in that "humans are predators and horses are prey which has required a significant degree of trust despite domestication." The horse's intuitive nature has evolved as a mere function of survival; it is constantly attuned to its surroundings and the subtle communication within the herd as a response to ever-changing environments. In this way, horses have been observed to have acute communication skills within their social structures and highly adaptive

behavioural responses within those structures (MacKinnon, 2007). Thus the horse has the ability to respond intuitively to human behaviour and intent, which results in immediate feedback from the animal (Frame, 2006; Graham, 2007; Hallberg, 2004; Kersten and Thomas, 1997; MacKinnon, 2007; Shultz, 2005; Tramutt, 2003). This response creates opportunities for an EAL participant to react both cognitively and behaviourally in relation to the cues from the horse. In the broadest sense, EAL is an approach aimed at increasing life skills through hands-on doing, and has been identified as useful in building communication, problem-solving, and team building skills, as well as enhancing personal awareness and a sense of self (MacKinnon, 2007; NARHA; Rothe et. al., 2005).

CARTIER EQUINE LEARNING CENTER AND EAL

White Buffalo introduced EAL into its treatment program in collaboration with the Cartier Equine Learning Center in September, 2005. Located north of Prince Albert, Saskatchewan, Cartier's Centre is noted as a leader in establishing industry standards in the area of EAL certification and program development (Saskatchewan Horse Federation, 2008). According to the Cartier Equine Learning Center, "EAL is an effective approach to human development through horsemanship" (MacKinnon, 2007, p. 1). The Cartier EAL program "is a learner based educational experience with horses" (MacKinnon, 2007, p. 1) that focuses on communication and the wisdom of the horse for its teaching ability. The program aims to achieve better understanding within individuals about themselves and their environments through participating in horse-focused exercises and debriefing about the exercises to bridge the gap between the arena-based experience and real life (MacKinnon, 2007).

The Cartier Equine Learning Center identifies its program as unique because it offers participants a structured curriculum incorporating a variety of "building block" lessons and learning opportunities based on immediate outcomes and feedback. Lessons are taught in three domains through groundwork with the horse: understanding (e.g., respect), skills (e.g., communication), and life (e.g., consequential behaviour). A critical element in creating meaningful experiences for program participants, in addition to the objective-driven curriculum, is the approach used in facilitating the curriculum (MacKinnon, 2007). Key to the Cartier program is the high skill level of the facilitators, who through their own expertise and understanding work to identify "teachable moments" in the arena as the horses and participants interact (see Photo 1). The facilitator guides the activities to "draw out the

human-vs-horse dynamic and individual-vs-group interaction" (MacKinnon, 2007, p. 5). A fundamental guiding philosophy of the program relates to the horse in that

[b]y their intuitive nature and innate sensitivity, horses can provide facilitators with a window into the participant's personality. As facilitators listen to a horses's non-verbal communication, together they have the ability to walk participants through to finding [potential] life-altering change. (p. 4)



Photo 1: Cartier's Equine Assisted Learning

ESTABLISHING THE RELATIONSHIP BETWEEN RESILIENCY AND EAL

Although not specific to EAL, there is some support in the available literature of a linkage between participating in Animal Assisted Therapy (AAT) and individual resiliency. For example, a study by Hayden (2005) found that resiliency, in particular the protective processes of resilience, is linked with equine facilitated psychotherapy in working with adolescents. This link is also identified in the work of Waff (2006) and her overview of a therapeutic program using animals with middle and high school aged participants. Waff highlights her understanding of the parallels between common treatment goals of AAT and resiliency characteristics put forward by Eggert et al. (1994, as cited in Waff, 2006) in prevention programs for at-risk youth.

The concepts of inner spirit (YSAC's culture-based model of resiliency) and insight (Wolins' trait) are operationalized in the literature as an increase in self-esteem with Animal Assisted Therapy generally (Campbell-Begg, 1998; lannone, 2003) and with horses specifically (Brouillette, 2006; Frame, 2006; lannone, 2003; Schultz, 2007). Horses have been identified as nonjudgmen-

tal, and as Reichert (1998, p. 177) indicates, by possessing this characteristic the horse may be a useful medium in relation to enhancing a "sense of selfesteem and promot[ing] the expression of feelings." Rothe et. al. (2005, p. 375) further note that interaction with a horse can assist a young person in exploring "feelings, powers of intuition and energy, understandings of self, nature, relationships and communication."

The literature generally supports that opportunities to interact with animals provide a starting place to explore and develop trust and a relationship with another living being (e.g., relying on one's community) (Latella, 2003). McNicholas and Collis (2006, p. 69) suggest, for example, that "[s]ocial 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." Specific to the horse, Graham (2007, p. 48) writes that "[t]rusting relationships are demonstrated in various interventions that require specific interactions between horse and participant such as brushing or caring in other ways for the horse." Additionally, given its vulnerability and sensitivity, relationship building is often easily established (Johnson, 2001; Karol, 2007). Although not EAL specific, some equine-assisted interventions have demonstrated an increase in trust/unconditional love and acceptance among participants (lannone, 2003; Johnson, 2001). There has also been an increase in community involvement identified through therapeutic horseback riding programs (lannone, 2003).

Intersecting White Buffalo, Cartier Equine LEARNING CENTRE'S EAL PROGRAM, AND YSAC'S CULTURE-BASED MODEL OF RESILIENCY

INNER SPIRIT

The White Buffalo program aims to nurture and/or renew the inner spirit of youth. Spirituality is believed to be the foundation of First Nations reality, which comprises mental, physical, emotional, and spiritual components. In addition to counselors and Elders, White Buffalo offers EAL to provide youth with a sense of connection to a nonhuman and culturally revered life form to help assist in reviving their spirit. There is a connection made between a cultural activity (in this case the horse) and an individual's spirit (uncovering and strengthening it). "In the First Nations perspective, the attachment to a Creator and ways of accessing the Creator through spiritual ceremonies and

practices are important factors in building resilience" (Dell, Hopkins, and Dell, 2005, p. 7). For White Buffalo, the horse externally validates traditional values the youth learn in treatment programming; the horse puts into practice cultural teachings (e.g., horse reacts uniquely to youth who are expressing frustration). It is also important to note that the youth are typically fearful of the horse upon introduction, which is similar to how they initially respond to participating in traditional cultural programming (e.g., sweat lodge).

Cartier Equine Learning Center EAL program

Through Cartier's EAL program the horse may be a means to connect with the inner spirit of an individual in an unencumbered way. As relayed, the program is developed based on the understanding of a parallel process that occurs between the specific weekly learning objectives within the curriculum, and the connection and relationship between the EAL participant and the horse (MacKinnon, 2007). The youth learn through exercises with the horse about others' and their own feelings and instincts. For example, they learn to understand or "feel" when it is appropriate to approach a horse. From a First Nations worldview, in terms of knowing self in relation to all else, the horse is also identified as a connection with nature. The facilitators help the youth to develop this relationship with the horse in a nonjudgmental way. The horse reads body language and intuitively understands what people do and not what they say (MacKinnon, 2007). The EAL participants are provided opportunities to learn about their self and possibly connect with their inner spirit through the horse's intuitive nature and being. (see Photo 2)



Photo 2: Cartier's Equine Assisted Learning

Elders' story

According to the Elders, it is believed by some First Nations that all animals have a spirit whose purpose is to guide and help individuals. The animal spirit

is integral to survival and therefore this devout relationship with the animal spirit is viewed as personally significant to each individual. The horse spirit is a friend and teaches about sharing and the profound sacredness found within the act of sharing. The horse program gives the youth some sense of a connection with another life form. It fosters a connection that is based on the horse's ability to sense a person's spirit which becomes a unique and personal experience for each of the youth. Through the horse, the youth may be provided with opportunities to reflect on spirit and identity, and apply an interpretation that is meaningful in their own growth and self understanding.

Community

Given the demographic backgrounds of the youth who enter the White Buffalo program, there is a serious inability to bond with others (at the individual and community levels) due to a lack of trust and trusting oneself. The majority of the youth are survivors of abuse, and thus fear is a major emotional experience for them. In addition to providing the youth with a sense of teamwork in the EAL program, specific sessions focus on offering them a chance to develop and test relationships with others in the program, and more specifically, the horses. One particular session outcome is related to building personal self-confidence through trust. Although this outcome is achieved through several activities, one activity in particular requires the youth to approach and be present with the horse through physical touch; nurturing the animal through the act of direct care (e.g., brushing). Following this EAL session and upon their return to White Buffalo, the youth were observed demonstrating a sense of increased self-nurturance through self-care. The connection between self-care and trusting relationships with oneself and others is a part of the cultural teachings at White Buffalo.

Cartier Equine Learning Center's EAL program

The horse is a herd animal that exists within a complex hierarchy that includes a strict social order, expectations of behaviour within the herd, and respect (MacKinnon, 2007). Based on this understanding of the horse, the Cartier EAL program curriculum focuses on mutual trust and respect, including the value of relationships. The horse may be a "safe" starting point for learning trust (internally in individuals and externally with others) and consequently overcoming fear, and developing healthy relationships. In the EAL program the youth learn to trust the horse because more often than not they begin by being afraid of it. In establishing a trusting relationship with the

horse, the youth also learn that there are others they can trust (e.g., the program facilitators), and ideally will begin to look to others for support in their lives. This includes maintaining relationships with White Buffalo treatment staff once they return to their home communities, trusting their spiritual connection to other horses, and seeking out healthy community supports. (see Photo 3).



Photo 3: Cartier's Equine Assisted Learning

Elders' Story

One of the Elders shared how when he raised horses he periodically sent them out to pasture. One time a particular horse fell ill, and knew to return from the pasture to his stable (home) to be cared for. He was provided with medicine, and when he felt well enough, he returned on his own volition to the pasture. The Elder shared this story as an analogy of how the youth were coming "home" to White Buffalo for VSA treatment. The youth are learning, through the trusting relationships that they develop at White Buffalo and the EAL program, that they are part of a supportive community.

CONCLUSION AND NEXT STEPS

Research and practice have indicated higher rates of volatile solvent abuse among youth experiencing disenfranchised life conditions. This is true for some First Nations youth in Canada. Both inner and external strength are vital to coping with the effects of economic, social, psychological, and spiritual stresses. The Youth Solvent Addiction Committee, and each of its treatment

centres, applies a culture-based model of resiliency to treating and healing from volatile solvent abuse. The model focuses on assisting youth in uncovering their inner spirit and strengthening their spirit by drawing on available community resources. YSAC has drawn upon Wolins' and others' work on resiliency and parallel conceptions in traditional teachings and holistic healing within First Nations culture. The White Buffalo Youth Inhalant Treatment Centre has applied its understanding of the culture-based resiliency model in the programming it offers, including EAL. This article has addressed two significant gaps in the literature as they relate to EAL, First Nations community health, and their intersection: (1) a theoretical model — YSAC's culturebased resiliency model — has been applied to an EAL program through the intersecting perspectives of White Buffalo's volatile solvent abuse program, Cartier Equine Learning Center's EAL program, Elders' stories, and the peerreviewed literature; and (2) through the example of EAL, the compatibility and contributions of YSAC's culture-based resiliency model with a Western health promotion perspective have been illustrated.

There are five key suggestions in terms of next steps for research to help move the field of EAL forward, particularly as it relates to First Nations community health. First, there is a notable absence of empirical evidence surrounding the effectiveness of animal-assisted interventions, and in particular EAL. Although the literature highlights anecdotal accounts that indicate positive outcomes (Beck and Katcher, 2003), these are countered by an increasing number of authors who identify the need for well-designed and rigorous research through the use of comparison or control groups, standardized instruments, random samples, and increased sample sizes (Kaiser et al., 2004; Klontz et al., 2007; Mallon, 1992). Specifically, tests of physical, mental, social, spiritual, psychological, behavioural, academic, cultural, and cognitive aspects of an individual before, during, and after participating in an EAL program would be insightful. Alongside this, consideration must be given to community-based and First Nations methodologies in the design and collection of such information (Castellano, 2004; Fletcher, McKennitt, and Baydala 2007; Schnarch, 2004). With the growing number of equine-assisted programs, implementation of empirically and culturally sound outcome research and evaluation studies will be critical in demonstrating efficacy and contributing to the overall legitimacy of equine-assisted methods and their effectiveness specifically in improving the health of First Nations. Fine (2000, p. 181) echoes this sentiment in relation to the broader area of animal-assisted interventions in her statement that "the lack of documentation and thorough investigation leaves a large void on the efficacy of this approach."

Second, as noted, there is a serious absence of theoretical models and frameworks within both the broad area of animal-assisted and more specifically equine-assisted interventions (Brouillette, 2006; Ewing et al., 2007; Reimer, 1999). According to Kruger and Serpell (2006, p. 27), a key concern cited in the literature is that "[t]he field of animal-assisted interventions currently lacks a unified, widely accepted, or empirically supported theoretical framework for explaining how and why relationships between humans and animals are potentially therapeutic." Although there is an array of diversity in the various animal-assisted interventions, and within equine interventions specifically (e.g., EAL, Therapeutic Riding, Hippotherapy, and Equine Assisted Psychotherapy), it is important that there be consistency in understanding for the validity of the field generally. For example, a theory that explains the nature of the change process brought about by EAL is virtually nonexistent. For programs that are built on a theoretical foundation, it is important that this be documented and evaluated within the peer-reviewed literature. Alongside this concern, it is equally important to develop, document, and evaluate the topic-specific and cultural competence of such programs for the populations they are being offered to (e.g., First Nations youth who abuse volatile solvents). This is particularly important in Western Canada, where there is an increasing use of equine-assisted programs with "at risk" First Nations and Métis youth.

Third, in viewing itself as a nurturing community, White Buffalo is considering how an EAL program may contribute to community building beyond its residential treatment centre into the surrounding Sturgeon Lake First Nation. This idea is based on White Buffalo's and other community organizations' positive experiences with EAL through the Cartier Equine Assisted Learning Program. The development of EAL is envisioned as part of a larger health plan to increase the emotional, mental, physical, and spiritual wellness of the Sturgeon Lake First Nations community. In particular, EAL in combination with cultural programming could be a means to address an underserved segment of the community where the effects of drugs and alcohol are identified. As well, having the program directed and "owned" by the Sturgeon Lake First Nation supports self-governance and could be a viable means of improving its social, political, and economic well-being.

Fourth, diversity as it relates to EAL needs to be accounted for. For example, the question of how gender relates to the horse generally, and EAL specifically, should be examined. The White Buffalo Youth Inhalant Treatment Centre is an all-female program, and different mastery skills are associated

with males and females in First Nations culture (e.g., female nurturance). This is consistent with the literature that examines animals and gender specific nurturing behaviour in children; it is an identified area in need of further study (Mallon, 1992). A further example is that similarities and differences in the cultural role and understanding of the horse and teachings among First Nations in Canada need to be accounted for (e.g., draw upon Elders' knowledge).

A fifth and final recommended next step for the future, although on a grander scale, is testing the applicability of YSAC's culture-based resiliency model within White Buffalo's use of the EAL specifically, and the substance abuse field generally. We have highlighted in this article the compatibility between YSAC's culture-based model of resiliency and a Western health promotion approach. Although they are not equitable, they complement one another. Both account for the individual and community in their approaches to understanding and responding to health needs. And YSAC's model further contributes the understanding that the concepts of inner spirit and community cannot be disentangled from one another, as is commonly done within a Western worldview. An individual's inner spirit is intertwined with family, community, and the land. It follows that there is much to be learned from YSAC's holistic approach to treatment and healing that can be of assistance to both First Nations and Western health promotion responses to substance abuse. An innovative approach, such as EAL with First Nations youth who abuse solvents, may be a mechanism to promote this.

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