Language and Culture as Protective Factors for At-Risk Communities

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ABSTRACT

A comprehensive review and analysis of the literature related to the role of Indigenous language and culture in maintaining and improving the health as well as reducing the risk factors for health problems of Indigenous people. Although much literature exists on various topics related to culture, language and health, the specific focus of this paper was studying the effects of the use of language and culture on the health of Indigenous people. Once all relevant literature was gathered, six linked themes emerged as protective factors against health issues; land and health, traditional medicine, spirituality, traditional foods, traditional activities and language. Findings included evidence that the use of Indigenous languages and cultures do have positive effects on the health and wellness of Indigenous people. However, the majority of the existing literature focuses on culture and its effects on health. Therefore, more studies are needed specifically on the potential health benefits of Indigenous language use. Other recommendations for ways forward include more targeted research on urban Indigenous populations, and making links between the loss of traditional land, contaminants in the food chain and the health of Indigenous people in Canada.

KEYWORDS

Indigenous, Aboriginal, culture, language, health, protective factors

INTRODUCTION

Traditional language and culture have an important and sacred role to play in Aboriginal communities all across Canada. Many communities assert that their language and culture is at the heart of what makes them unique and what has kept them alive in the face of more than 150 years of colonial rule. But what role does the use of traditional language and culture play in maintaining health and reducing risk factors for health crises in Aboriginal communities? It is the aim of this paper to answer this question. A comprehensive search was conducted for literature that discusses traditional language and culture as protective factors of health outcomes for Aboriginal people.

Studies have shown that although the health of Aboriginal communities has improved over time, Aboriginal people are still not faring as well as the general population (Health Canada, 2001; Young, 2003). The effect of colonization on the health status of Aboriginal people continues to be profound (Bjerregaard & Curtis, 2002; Hurst & Nader, 2006). Given the overall health statistics of Aboriginal communities in Canada, it is clear that Aboriginal people are at a greater risk of developing serious health problems than the general population (Hurst & Nader, 2006; Minore & Katt, 2007). Whether it is the rate of diabetes, obesity, smoking, the effects of violence, cardiovascular disease, lower life expectancy, mental health

issues, suicide rates, substance misuse, cancer rates, or disease from environmental degradation, Aboriginal people in Canada have good reason to be concerned (Bjerregaard & Curtis, 2002; Health Canada, 2000; Hurst & Nader, 2006; Minore & Katt, 2007; Public Health Agency of Canada, 2004; Wilson & Rosenberg, 2002).

All indigenous languages in Canada are seriously endangered and most are at risk of extinction (Brittain, 2002; Shaw, 2001; Standing Committee on Aboriginal Affairs, 1990). Unlike other minority groups, Aboriginal people cannot rely on new immigrants to maintain or increase the number of speakers (Hallett, Chandler & Lalonde, 2007; Norris, 1998), nor is there a 'homeland' of speakers somewhere else in the world that they can visit if the language ceases to be used in Canada. It is estimated that at the time of contact there were 450 Aboriginal languages and dialects in Canada belonging to 11 language families[1] (Office of the Commissioner of Official languages, 1992). In the last 100 years alone, at least ten of Canada's Aboriginal languages have become extinct (Norris, 1998). There are now approximately 60 indigenous languages still spoken in Canada belonging to 11 language families (Statistics Canada, 2008; Shaw, 2001; Kirkness, 1998; Norris, 2007; Royal Commission on Aboriginal Peoples, 1996). The precise number is difficult to determine because many languages are not standardized making counting dialects complicated (Royal Commission on Aboriginal Peoples, 1996). Only three of these 60+ languages (Cree, Inuktitut and Anishnaabe) are expected to remain and flourish in Aboriginal communities due to their population base (Burnaby, 1996; Norris, 1998). Between 1986 and 2001, the percentage of young children (aged 0-4) who speak their heritage language declined from 10.7 per cent to 7.9 per cent, while 5-14 years old speakers declined from 19.8 per cent to 16.7 per cent despite a growing population of young people (Norris & MacCon, 2003).

In order to understand the impact of these statistics we must remember that "the younger the speakers, the healthier the language" (Norris, 1998, p. 12). This translates to a dangerous situation in Canada as the statistics show that in many communities, fewer and fewer children and young people are learning their heritage language. Following decades of government imposed bans on many traditional cultural practices such as Sundances and Potlatch ceremonies, in addition to widespread punishment for generations of children for speaking their language while at residential schools, many Aboriginal communities are in the process of rebuilding the use and practice of their languages and cultures. The 2006 Census, however, reports more hopeful results. The number of Aboriginal people who reported speaking an indigenous language held steady from the previous census (Statistics Canada, 2008). However, we still know little about the link between a healthy uptake of language and culture in a community and the state of health of its members.

DEFINITION OF KEY TERMS

Aboriginal and Indigenous

These two terms are used interchangeably to refer to the First Peoples of Turtle Island also known as Canada, which includes First Nations, Inuit and Métis. Any other direct reference to these individual groups or others (such as Native American) is intentional as the literature quoted may be specific to the named group.

Health

Aboriginal peoples generally define health more broadly than one's overall physical condition. Rather health is seen as wholistic, encompassing all parts of oneself including physical, mental, emotional, and spiritual wellness.

Culture

Systems of belief, values, customs, and traditions that are transmitted from generation to generation through teachings, ecological knowledge and time-honoured land-based practices. Culture take many forms which include (but are not limited to) ceremonies, methods of hunting, fishing and gathering foods, the gathering and use of traditional medicines, traditional diet, spiritual journeying, and traditional art forms such as drumming, dancing and singing. It is also important to recognize that culture is not static, it is dynamic and ever-changing and each community, particularly urban communities, may define and experience it differently.[2]

Protective factors

Language and culture are discussed throughout the paper as "protective factors." This phrase is used to capture the notion of conditions that build resilience, serving as buffers to the negative effects of risks (University of Wyoming, 2008) and at times have the ability to prevent risk factors all-together (Helping America's youth, 2008).

METHODOLOGY

The majority of literature was accessed using online databases such as Academic Search Premier, PsycINFO,

PubMed, Medline, Native Health Database, ERIC, MLA Bibliography, Native North American Bibliography, and First Nations Periodical Index as well as online search engines such as Google Scholar. Grey literature was sought through internet searching using Google as well as the Proquest Thesis and Dissertations database, the Canadian Health Research Database and the Canadian Public Policy Collections. Various combinations of the following keywords were used; *Aboriginal, Indigenous, Inuit, Metis, Indian, American Indian, Native American, First Nations AND culture, language, traditional AND mental, physical, spiritual, health, wellness, or well-being AND protective factors or resilience.* The literature included was English-language only, published in the last 10-15 years up to and including fall 2008.

There is a great deal of literature published on the link between indigenous culture and health. However, a great majority of this literature concentrates on the delivery of health services and ways to make this more "culturally-appropriate" as well as removing language and cultural barriers to accessing health services. Literature of this kind was not included in the review, as it did not capture the essence of the purpose of the paper. Rather the focus was on studies that discussed the use of language or culture and the effects they had on the health of Aboriginal people.

Alternately, the published research addressing traditional indigenous language use as a protective factor to risk was quite sparse. Despite this, the existing research on this topic is quite powerful, drawing some of the sharpest conclusions and is supported by empirical research. It is also important to remember that many Indigenous people state that without language, culture cannot exist. Norris (1998) explains that language is one of the most tangible symbols of culture and group identity. Shaw (2004) further states that the loss of language is tied to a deep psychological loss of identity and culture. The Royal Commission on Aboriginal Peoples (1996) affirms that language is the main vehicle for cultural transference. Kirkness (1998) agrees, quoting the World Assembly of First Nations, "languages of Aboriginal people…are necessary for the transmission of concepts that are critical to Aboriginal culture, and must be retained in order that Aboriginal cultures may be perpetuated" (p. 96). Although the literature which highlights the positive effects of culture use is more abundant than that which focuses on language, since one cannot exist without the other it further strengthens the argument that perhaps more attention should be paid to how language use contributes to health outcomes.

SUMMARY OF LITERATURE

Traditional culture use as a protective factor

The literature related to culture selected for inclusion in this review were that which address the efficacy of traditional culture use and showed evidence of it's positive contribution towards Aboriginal peoples' health and therefore could be categorized as a protective factor against risks of health crises. Efficacy and evidence were broadly defined from empirical research to personal testimony. Using these criteria, the following five themes emerged:

1) Connection between land and health

Two key studies were located which address the importance of land for the health of Aboriginal people. The first study, done by Kathleen Wilson (2003) of McMaster University, was comprised of 17 in-depth interviews from a Northern Ontario Anishinabek community that has a population of 126 on-reserve members. Her argument is based on the belief that "the land, as place, is an integral part of First Nations peoples' identity and health" (p. 83). Many authors believe that the relationship Aboriginal people have with the land shapes all areas of their life: the cultural, spiritual, emotional, physical, and social (Akiwenzie-Damm, 1996; Mercredi & Turpel, 1993; Shkilnyk, 1985). The individuals interviewed in Wilson's study conveyed how utilizing the land helps to maintain balance that is necessary for health.

Participants stated many links between land and health, including the belief that the land is alive and contributes to positive emotional and mental health (Wilson, 2003). Many participants in this study stated that they communicate with rocks and trees as a way of dealing with problems. "It doesn't matter where you go. If I have problems I take a walk in the bush. I talk to the trees and they listen. They take my problems away" (p. 90). Another participant comments on the emotional, mental and spiritual aspects of utilizing the land, "I hunt, I camp, I fish and I have always done that and I always feel good when I'm out there in the bush. To me it's almost like a cleansing. I can go out there and I just feel so good, like my mind gets so cleared. I love it" (p. 90). This statement embodies the notion of a direct link between the land and how it supports health and healing (Wilson, 2003).

The second study found a connection between health and land by Wolsko, Lardon, Hopkins and Ruppert (2006) and the Yup'ik people of Southwestern Alaska examining indigenous conceptions of wellness. The research team conducted six focus groups with a total of 64 Yup'ik adults from the Yukon-Kuskokwim Delta region of Alaska. Many

of the participants expressed that the subsistence lifestyle, which by definition is inextricably linked to the land, is at the core of wellness for Yup'ik people (Wolsko et al., 2006). One participant links traditional activities to mental health in a similar way to one of the participants in the previous study, "I go fishing and hunting, fishing in the ocean. It just makes your head clear, just the wind in your face, just sitting there" (p. 358). Another participant states, "You know, just walking out in the Tundra and looking at the surroundings. That's a form of stress release. To become part of nature is a form of stress release" (p. 359). The authors conclude that participants consistently emphasized that "the wilderness helps to both heal and sustain a sense of well-being" (p. 360).

Nancy Turner (2006), an ethnobotanist, shares many important insights in her report about traditional medicine, health and well-being of Indigenous people in Canada which includes explaining the deep relationship First Peoples have with "their home places and with the hundreds of species of plants and animals they live with and depend upon" (p. 18). She further states that caring for the land and species is seen as the responsibility of First Peoples and quotes Dawn Smith a Nuu-chah-nulth woman working at the University of Victoria, " if our environment is not healthy, how can we be healthy?" (Turner, 2006, p. 22).

2) Traditional medicine

Although the existence of traditional medicine goes back to time immemorial, little has been documented about the efficacy of it. This may be intentional on the part of traditional medicine people or a lack of connection between empirical research and how efficacy of traditional medicine can be measured. University of Saskatchewan professor James Waldram (2000) published a convincing article which aims to stimulate a further investigation into the judgment of the efficacy of traditional medicines. Waldram (2000) poses the distinction between curing and healing, the first of which emphasizes the removal of pathology, while the latter refers to a broader process of repairing multiple dimensions of oneself. He goes on to say, "[h]ealing…can be directed toward alleviating physical pain and suffering but often also concerns itself with repairing the emotional state, possibly even leaving the pathology itself unaltered" (p. 606). Also, he asserts that healing may be seen by Indigenous people as a lifelong process in which total recovery may never be achieved. His argument is an interesting and worthwhile distinction to consider when judging the efficacy of the use of traditional medicine as a contributor to Aboriginal people's health outcomes.

Mohawk scholar Dawn Martin Hill (2003) confirms that the literature on indigenous medicine makes direct links to land, language and culture. Several authors give good evidence of the contribution that traditional medicine makes to the health of Aboriginal people, and in some cases, non-Aboriginal peoples (Waldram, Herring & Young, 2006; Wolsko et al., 2006; Ootoova et al., 2001; Turner, 2006). One recent example is the use of evergreen tree extracts and blueberry plant roots to control Type II diabetes (Floren, 2004). Some say that the efficacy of traditional medicine is as much about the person's belief in it as it is about the medicine itself, and that "true believers" are those most likely to be healed by traditional medicine, ceremonies and healers (Hill, 2008, p. 8). This illustrates the strong link between traditional medicine and spirituality. Although some might argue that personal testimonies are not "scientific evidence" the stories of successful use of traditional medicines are included as this is a necessary and legitimate source of data when investigating issues pertaining to indigenous traditions. For example, a participant in Wilson's (2003) study describes his belief that,

> Harvesting medicine is medicine. I really think about the therapeutic aspect involved in knowing that you are out there being spiritually connected to Mother Earth and what she provides for you. You are picking plants and putting down tobacco, thanking her for what she has given but at the same time you are rejuvenating yourself. You are healing yourself within… (p. 90).

A Yup'ik participant from the focus groups done by Wolsko et al. (2006) relates his own witnessing of the effectiveness of traditional medicine, "When my uncle had TB, his mother had him drink Labrador tea. And when he went for a checkup they saw one of his lungs had healed" (p. 354).

An additional historic example is given in a Health Canada (1995) publication:

> The early North American Indians were familiar with disease and knew how to prevent it. In fact, the Indians of the Quebec area came to the rescue of Jacques Cartier in the spring of 1535. The Indians advised him to feed the crew a tea made from the needles and bark of the eastern white cedar – one of the many foods they used which was a rich source of vitamin C. The men quickly regained their health and learned a valuable lesson (as cited in Milburn, 2004, p. 422).

3) Spirituality as a protective factor

Several important articles link spirituality as a protective

factor in buffering against health risks in indigenous communities. One particularly key piece was a literature review published in 2008 on resilience and indigenous spirituality (Fleming & Ledogar, 2008). They identify Marc Zimmerman and Les Whitbeck, whose studies are reviewed later in this paper, as the authors most associated with cultural involvement as a protective factor or buffer to health crises such as suicide. Fleming and Ledogar's (2008) review of the literature on spirituality as a resilience factor concludes that the contributions made are most specifically in relation to the risk areas of alcohol abuse and suicide. One study by Garroutte et al. (2003) interviewed 1456 American Indian youth and found a commitment to cultural spirituality was significantly associated with a reduction in suicide ideation and attempts.

The therapeutic benefits of spiritual practices such as smudging, sweat lodge ceremonies and other indigenous spiritual traditions have also been widely noted (Wilson, 2003; Waldram et al., 2006). A study done by Perry Kendall (2002), the BC Provincial Health Officer, highlights the transformation of the community of Esketemc which was once rife with alcoholism, violence, sexual abuse, and suicide. The leadership made a decision to try to turn things around and they largely credit the "conscious placing of spirituality in the center of this process" (Provincial Health Officer, 2002, p. 67) for their success through the rediscovery of spiritual traditions such as the sweat lodge and the sacred pipe among others things. Another study, conducted with Navajo families who used ceremonial treatment for asthma, showed that all of the families who participated in ceremonies for healing reported relief of the symptoms (Van Sickle, Morgan & Wright, 2003). However, they also reported the decline in asthma attacks to be short-lived ranging from one month to one year (Van Sickle et al., 2003). One might see this as proof that the ceremonies did not "cure" the infliction, yet western medicine also has no cure for asthma but rather has medicines to manage it. The study concludes that western medicine and indigenous ceremonial practices have the potential to work in tandem, however the greatest barrier is the cost of ceremonies which are not covered by medical plans (Van Sickle et al., 2003). It is important to note that there are several examples that exist of health centres that are attempting to incorporate both indigenous medicine and western biomedicine approaches (Maar, 2004; Province of Manitoba, 2008).

4) Traditional foods

Receveur, Boulay and Kuhnlein (1997) define traditional foods as both plant and animal harvested from the local environment. Michael Milburn (2004), a scholar from Cape Breton University, defines indigenous nutrition as "culturally and bio-regionally specific food-related knowledge that results in a dietary pattern, meeting basic nutritional needs while avoiding Western diseases" (p. 421). He states further that, "Native foodways are based on an intimate and spiritual connection to the land, the plants, and the animals" (Milburn, 2004, p. 426). Receveur et al. (1997) warn against the effects of a shift away from a traditional food diet due to the losses of traditional systems and culture-specific knowledge which will inevitably increase diet-related chronic health conditions. Indigenous populations are already seeing the effects of a changing diet and lifestyle patterns with rates of diabetes three times the national average in Canada and higher rates of cardiovascular disease in American Indians (Milburn, 2004).

Milburn (2004) states, "Traditional diet and lifestyle patterns provide protection against western diseases, as rates of chronic, degenerative disease were historically very low in Indigenous populations" (p. 415). Medical doctor Denis Burkitt claims, "the only way we're going to reduce disease is to go backwards to the diet and lifestyle of our ancestors" (as cited in Milburn, 2004, p. 413). Borré's (1994) innovative study on the consumption of seal by the Inuit demonstrates that, "feeling good is dependent on eating the animals that are found in nature" (p. 6). Other authors also state that eating traditional foods leads to a feeling of good health whereas non-traditional foods are seen as weakening (Adelson, 2000; Mackey, 1998; O'Neil, Elias & Yassi, 1997). There are additional benefits to traditional food gathering besides dietary, such as higher levels of physical activity, a spiritual connection (Provincial Health Officer, 2002; Milburn, 2004; Wilson, 2003; Wolsko et al., 2006) and emotional healing benefits (Wilson, 2003). Milburn (2004) and Turner (2006) convey that in indigenous cultures there is no clear distinction between food and medicine, as food is medicine.

5) Traditional activities

The Canadian Census Aboriginal Peoples' Survey (Statistics Canada, 1991) defines participation in traditional activities as "traditional ways of doing things such as hunting, fishing, trapping, storytelling, traditional dancing, fiddle playing, jigging, arts and crafts, pow-wows, etc." (as cited in Wilson & Rosenberg, 2002, p. 2020). Based on variables included in the Aboriginal Peoples' Survey (APS), three were chosen as measures of attachment to traditional activities for Wilson and Rosenburg's (2002) study; they were participation in traditional activities, having spent time on the land in the last year acquiring food or teaching children traditional ways, and as a separate measure, acquired food through hunting, trapping or fishing. Their findings showed that Aboriginal people who spent time on the land and

acquired food through traditional ways were less likely to report being unhealthy compared to those who answered "no" to these questions. However, the measure of health status based on participation in traditional activities was not significant. Wilson and Rosenberg believe that the measure for participation in traditional activities was too crude and calls for "a more nuanced analysis of cultural attachment" (p. 2028). However, other authors have found participation in traditional activities to be an effective protective factor against adverse health conditions such as depression and substance abuse (LaFromboise, Hoyt, Oliver, & Whitbeck, 2006; Whitbeck, McMorris, Hoyt, Stubben, & LaFromboise, 2002; Zimmerman, Ramirez-Valles, Washienko, Walter, & Dyer, 1998). Lastly, a study with Inuit women in the Arctic also concluded that "loss of traditional practices and language" affected their well-being and that of their community (Healey & Meadows, 2008, p. 31).

The concept of enculturation is defined as the degree to which an individual is maintaining one's cultural identity by embedding oneself in traditional cultural norms and values such as traditional language, practices and spirituality (Whitbeck, Chen, Hoyt, & Adams, 2004; Wolsko et al., 2006; Zimmerman et al., 1998). Enculturation as a protective factor against alcohol misuse is gaining evidence. Herman-Stahl, Spencer and Duncan (2003) report that American Indians with low orientation towards cultural practices are 4.4 times more likely to misuse alcohol compared with their peers who are more culturally oriented. Based on a three-year study of nine reserve communities, four in the US and five in Canada, Torres Stone, Whitbeck, Chen, Johnson, and Olson (2006) conclude that, "enculturation has a significant positive effect, and it remains the only significant predictor of alcohol cessation…" (p. 242). Whitbeck et al. (2002) strengthen this view, stating that of those included in their study the, "protective influence of tradition was greatest for those who reported above average levels of traditional activities" (p. 411).

A participatory action research project based out of the University of Victoria states that healing circles, traditional foods, cultural ceremonies, drumming and dancing groups, and athletics are important aspects of culture that have a "powerful positive and transformative impact on the individuals who engage in these activities" (Riecken et al., 2006, p. 278). Carolyn Kenny (1998) quotes Douglas Cardinal delivering a keynote address at the Fourth Annual Conference of the Canadian Aboriginal Science and Technology held at UBC, "[A]rt was not a separate world in our language. It was the way we lived" (p. 77). She goes on to describe expression as it exists in its many forms in Aboriginal communities such as ceremonies, song, dance, mask, and storytelling (Kenny, 1998). Indigenous psychologist Rod McCormick (1995) found in a study of indigenous healing that expression was the most important factor rating it at 35 per cent in his list of themes of healing. These studies make a strong case for the use of culture through art as a protective factor of risk in Aboriginal communities.

Perhaps the most poignant example to date, Ghislaine Goudreau completed her doctoral dissertation with a study of the health benefits of hand drumming with an Aboriginal women's group. Goudreau (2006) states, "Our bodies contain internal rhythms such as heart rate and brainwaves" (p. 18). She relates the natural phenomena of entrainment, a theory that states that external rhythms such as drumbeats have the ability to realign our internal body rhythms. Through her study, Goudreau is able to claim that it appears the drum is a tool that can be used to calm our body rhythms if we are under stress as well as boost the immune system. Also it has been shown that participating in drumming circles increases the number of beneficial "killer cells" in the body that seek out and destroy specific disease organisms (Bittman, Berk, Felten, & Westengard, 2001). Drumming can also increase the number of Alpha brain waves (Maxfield, 1990; Neher, 1962) and according to Friedman (2000), "Alpha brainwaves are associated with states of relaxation and general well-being" (p. 44). Participants in Goudreau's drum group consider drumming as a way of praying, a way to connect to the spirits, have the potential to awaken the spirit, and as a tool to release emotions. In a more recent publication of Goudreau's (2008) thesis research, she details that participants in her study also stated pain-relieving effects and a relief from mental stress through their participation in hand-drumming circles.

Resilience through "cultural capital"

The sociological term cultural capital is used to describe the transmission of educational advantage from one generation to the next (Sullivan, 2007). This concept is largely based on a Euro-western worldview of individual nuclear family units as the main source of cultural transference. However, many authors have been criticized for their narrow interpretation of this concept (Sullivan, 2007). Pacini-Ketchabaw and Bernhard (2001) expand the term to include the home language of immigrant families as a source of cultural capital. They argue that language is one of the most important practices for cultural production and reproduction and further state that, "the vitality of a language indicates how well a group is maintaining itself in society" (p. 7).

Traditional language use as a protective factor

Most of the literature found on the topic of traditional language use and health focuses on the negative effect of indigenous-only language use in the home which has the effect of lowering rates of access to health care (Bird, Wiles, Okalik, Kilabuk, & Egeland, 2008; Hahm, Lahiff, Barreto,

Shin, & Chen, 2008; Schumacher et al., 2008).

After many days of searching for any literature relating indigenous language use to increased health and wellness, or as a protective factor to risk of health crises, one article was finally located. It was published in 2007 by three researchers, two of whom (Michael Chandler and Chris Lalonde) are well-known and highly regarded for their research on factors which contribute to lower suicide rates in Canadian First Nations communities. The third author, Darcy Hallett, was a recent doctoral student of Michael Chandler. In their article they state, "as far as we have been able to determine, there are no previous studies that have attempted to demonstrate a specific link between indigenous language loss and community-level measures of health and wellbeing" (Hallett et al., 2007, p. 394). Based on the literature search conducted for this paper, this assessment appears to be accurate even in the fall of 2008. Despite this fact, the research they present is powerful and lends encouragement for further research in linking traditional language use specifically with health outcomes, and the potential it has to act as a protective factor against health risks.

Their recent work on language use as a protective factor stems from the seminal work of Chandler and Lalonde first published in 1998 where they studied five years of data on youth suicide rates in First Nations communities in British Columbia (Chandler & Lalonde, 1998). In the original work on youth suicide rates Chandler and Lalonde (1998) sought to offer some explanation for the wide variation of youth suicide rates in BC communities which ranged from no known suicides in over half of the 196 communities to 500-800 times the national average. They identified six measures of "cultural continuity" defined as 1) self-government, 2) engagement in land claims, 3) existence of education services, 4) tribal-controlled police and fire services, 5) on-reserve health services, and 6) existence of cultural facilities (Chandler & Lalonde, 1998). Communities which did not identify with any of the factors defined as indicators of cultural continuity (see above) were assigned a zero, while communities with all six factors present were assigned a six. Next, they compared youth suicide rates in each community against the existence of these six factors separately and then all-together as a score of 0 to 6. Those communities which had none of the factors present had a rate of suicide 137.5 per 100,000, a significant difference from those communities which had all six factors present and report zero suicides. Obviously a very convincing argument for the effect of these six factors; however, there has been criticism of their work. Some believe that the term 'cultural continuity' is misleading as none of the six factors may in fact be measuring the continuation of culture in the community but rather local administrative control of their nation (Hallett, 2005). In his doctoral work, Hallett adds the measure of indigenous language knowledge to the mix of "cultural continuity" factors arguing that it holds the potential to be a more direct indicator of the role that cultural preservation plays (through language) in predicting the effects that cultural continuation has on creating healthier communities with fewer youth suicides.

In order to avoid the dangers of circularity, the indigenous language knowledge factor was analyzed separating from the other six pre-existing measures. The findings were significant; bands with higher levels of language knowledge (measured by a majority of its members having conversational-level abilities) had fewer suicides than those with lower levels (Hallett et al., 2007). In fact, the rates of suicide in the bands with high language knowledge levels were "well below the provincial averages for both Aboriginal and non-Aboriginal youth" (p. 396). What is further, when the language knowledge factor was added into the mix of the other six measures "the presence of the language factor made a drastic difference in suicide rates" (p. 397). In all cases but one, the suicide rate dropped to zero when the language factor was added (2007). Although Aboriginal language knowledge was found to have correlations with the other six measures, its independent contribution is significant. Hallett et al. state that overall, the results show that the use of indigenous languages is a "strong predictor of health and wellbeing in Canada's Aboriginal communities" (p. 398).

One other study was located which had an indigenous language component in its measurement of links to health outcomes and protective factors. Interestingly though, because of the remote geographic location in the arctic, virtually all community members were fluent speakers of the local indigenous language (Greenlandic) and therefore, the protective influence could not measured (Bjerregaard & Curtis, 2002).

In conclusion, the link between language and culture for indigenous communities cannot be overemphasized. Although the research findings for this phenomena are limited to one study, the implications are important and the potential vast. Language is also often recognized as one of the most tangible symbols of culture and group identity (Blair, Rice, Wood, & Janvier, 2002; Norris, 1998), and the main vehicle for cultural transference (Norris & Jantzen, 2002; Royal Commission on Aboriginal Peoples, 1996). Without the language of one's ancestors, individual and collective identity gets weakened and it is likely that the culture would die out within a few generations. As conveyed by a group of indigenous language preservationists, no new songs could be written in our languages, ancient songs would no longer

be understood, we would no longer be able to communicate with the spirit world in our language and no one would be able to understand our sacred prayers (Indigenous Language Institute, 2002). Therefore although less abundant in findings, this area of research may very well be the most important of the subject matter at hand.

DISCUSSION

Context

Based on the literature review, it is clear that there are not a lot of in-depth studies examining the influences of cultural beliefs, values and language on health. The key studies reviewed, however, clearly indicate the positive influence of culture on Aboriginal communities and individuals.

In their study of traditional and contemporary Dene perspectives on health, Parlee and O'Neil (2007) argue that improving the applicability of health care requires rethinking not only medical practices but also the meaning of "health." As such, there are many shared or similar indigenous views and concepts related to the term. Traditionally, most Aboriginal cultures did not have a word for "health" because it was not seen as a separate entity but as part of a larger whole. In the western Cree dialect, the closest words describing health are *miyomahcihowin*—"feeling well" and *miyopimâtisowin*—"the good life." Both of these concepts are seen as antidotes to *ahkosowin*, the Cree word for sickness or "out-of-balance." The Lutsel K'e Dene describe health in their language as "the Dene way of life" (Parlee & O'Neil, 2007), and the Yup'ik Inuit word describing health similarly translates as "to live a good life" (Wolsko et al., 2006).

Like many Aboriginal cultures, central to the Yup'ik Inuit way of life is the practice of maintaining a balanced reciprocity between human, natural and spiritual realms. Many nations today describe this type of reciprocity and the rights and responsibilities that go with it as "traditional protocol." The Yup'ik have their own term for this process:

> Critical to this ethic of care and respect is the cultivation of ella, translated generally as conscious awareness of the creative force which sustains a harmonious way of life (Wolsko et al., 2006, p. 348).

Maintaining a careful balance of reciprocity between realms is precisely what has sustained indigenous cultures since time immemorial. Many oral teachings supported by Elders and spiritual healers would maintain that it is a responsibility and duty of conscious individuals to strive for living within this conceptual framework. Not living according to concepts such as ella leads to a falling out of balance, thereby creating an opening for sickness and other forms of ill-health. It is therefore something that is taken quite seriously by enculturated individuals and communities. These holistic core world-views are very closely related to many of the broader definitions of health and integrated approaches to wellness that are becoming more common to health professionals and caregivers as well as many culturally-oriented healing centres.

Holistic world-views are complex, especially to individuals who are not enculturated or familiar with an indigenous language or world view. Traditional core values, concepts and beliefs are clearly imbedded in the language of a particular culture. It is a common argument of traditionalists and language preservationists, that the more one understands their language and the teachings associated with that language, the more access they have to core traditional knowledge that can help them to develop a stronger sense of identity. If this is true than it can also be argued that the further one is separated from their language, the more disconnected they may be from the core traditional knowledge needed to develop a stronger sense of identity.

It is clear that Aboriginal language and culture, because of their inter-connected nature, may be difficult to analyze completely separately. It is also clear however, that whether they are viewed separately or together, both have much to contribute to individual and community identity and wellness. As such, they are undeniably key protective factors for at-risk communities.

OPPORTUNITIES & CHALLENGES

Six largely interrelated themes emerged from the literature review and a brief overview of the prominent research in each area was provided in the first section of this report. Each theme will now be explored with an emphasis on analysis, key issues and questions for further discussion.

1) Connection between land and health

A few research studies focused on the connection between the land and health. To examine this further it is important to explore Aboriginal concepts of the land as they relate to culture and well-being. Like many Aboriginal nations, the Anishinabek interviewed in Wilson's (2003) study refer to the land as Shkagamik-Kwe or "Mother Earth" (p. 88). This view of the earth is not just a metaphor or symbolic gesture; the earth is recognized literally as a feminine spirit with nurturing qualities and characteristics. Like other spirits that are part of Aboriginal cosmologies, Mother Earth is interacted with

and acknowledged through prayer, ceremony, meditation, and other daily and seasonal modes of communication.

In pre-contact times, all life forms, be they plant, animal or natural elements such as minerals and even natural phenomena like weather, were considered to be alive or to have spirits. This is clearly evidenced in Aboriginal languages, as most do not have words to describe these natural entities inanimately. When referring to an animal in the Cree language, there is no "it," only "he/she." The implications of these world-views can be both profound and devastating. They are profound in the sense that Aboriginal concepts allow individuals to gain a deeper sense of identity and live a life of balanced reciprocity according to traditional holistic cosmologies that still function in the modern age, thereby creating a pathway to health and wholeness. Restoring, nurturing or simply having access to these non-linear, non-western worldviews provides Aboriginal people not just a sense of identity and well-being but an alternative way of being in the contemporary world and a means to deal with some of the struggles of existing in mainstream society.

The potentially devastating implications for recognizing the earth and all plants and creatures as literally "alive" lies in the fact that enculturated individuals consciously see their sacred homelands and territories diminished through encroachment, industrial activities and other forms of western development. Across Canada, there are many stories of desecrated family and communal sites; destruction of traditional hunting, trapping and fishing sites; destruction of prime habitats and harvesting sites; and the depopulation of wildlife, food and medicinal species integral to subsistence activities. Turner (2006) provides one example of the "drastic decline" of abalone and salmon along the West Coast. In their study of Dene health perspectives, Parlee and O'Neil (2007) make a strong argument for the degradation of Dene land having direct negative impacts on various aspects of Dene health:

> The rapid pace and scale of change and instability associated with mining and other kinds of large-scale resource development are also problematic and can give rise to a range of social crisis such as anomie or suicide, which Durkheim attributes to a loss of social norms and structures regulating individual behaviours (p. 114).

Aside from having to witness the irreverent destruction of living entities and Mother Earth's bounty, traditional land-users must also cope with the powerlessness resulting from their limited abilities to minimize and mitigate government sanctioned exploitation, which is often viewed as predominately benefiting the dominant society. To illustrate the foreign nature of these developments, most Aboriginal languages do not have words to describe the western concept natural resource, a phrase that implies that these living entities or Mother Earth's gifts are commodities designed exclusively for the monetary benefit of humankind. This is in stark contrast with the Aboriginal view of reciprocal balance between nature, humanity and other life forms. How resource development impacts Aboriginal health is clearly an area that requires further study (Izquierdo, 2005).

2) Traditional Medicine

One of the difficulties of this theme is the use of a limited western concept to describe the holistic approaches of Aboriginal healing, as is made clear in Dr. Dawn Martin Hill's (2003) work on traditional medicine in contemporary contexts. A vast array of methods or combination of methods from counseling, ceremony and herbal curing to shamanic guidance are used to treat specific pathologies or long-term illnesses in Aboriginal communities. Various terms related to traditional healing often mean different things to different communities. These concepts are varied, complicated and difficult to grasp through the western scientific lens (Martin Hill, 2003, pp. 5-12).

While scientific analysis might be able to determine the exact medicinal components of a specific plant, this process is often completely irrelevant to the Aboriginal process of healing and curing. From time immemorial there have always been specialists in herbal and plant medicines but even these healers used a combination of ritual and prayer, often to specific spirits. According to Cree oral tradition, not only was each plant considered alive, it might also have connected spirits that would have to be acknowledged by the healer. It was often a negotiated, reciprocal process with strict protocols to which one must adhere. A healer had to be given the "guidance" to use certain plants and it was widely recognized that this spirit power is what gave healing life to the herbs being utilized. This is why Elders describe traditional healing as a process based largely on spiritual faith. [3] Waldram et al. (2006) and Turner (2006) also acknowledge the necessity of the spiritual component of preparing, using and administering medicines and the effects these are likely to have on the efficacy of the treatment. Waldram et al. (2006) add further that this is one area that scientists cannot "test" which can lead to accusations of fraudulence, yet, there are acknowledgements from the scientific community that many indigenous medicines and practices are, in fact, effective.

One important area not yet addressed is research regarding traditional medicine and healing, including an

identification of current medicinal/ herbal practitioners, levels of activity, and the current state of retention and transference of traditional medicinal knowledge. It is a widely known fact that due to colonial impacts, those knowledge systems are not as firmly grounded as they once were. Many of the most widely recognized Elders and practitioners have died in recent years, and others have reached the age where they can no longer provide active services. Many Aboriginal communities have lost these practices altogether and now have to receive healing treatment and guidance from out-of-region practitioners, quite often from other nations. The language and cultural communication barrier between some Elders and the younger generations could be further weakening the knowledge base due to fewer people being trained as medicine people. In addition, there is a growing concern in many communities about what constitutes an Elder. Some Elders and practitioners, while not seen as charlatans, are not taken seriously because of their own unhealthy lifestyles and attitudes. These realities could lead to limited knowledge and superficial understanding due to lack of proper training which in turn leads back to questions related to authority, authenticity and exploitation. In addition, as pointed out in a paper by the National Aboriginal Health Organization (NAHO) (2008) with wider recognition of the benefits of traditional medicine comes greater risks of exploitation and appropriation of tribal knowledge. Therefore, protective mechanisms would also need to be put in place.

All of these factors illustrate a need for a nation-wide dialogue, or think-tank process, to assess the overall state of knowledge, retention and transference. This would allow for an effective nation wide strategy. Researchers will also need to be aware of cultural adaptations and the increasing incorporation of western biomedicines and practices with traditional healing, as these phenomena will likely increasingly give rise to continuous issues and debates.

3) Spirituality as a Protective Factor

New seekers and students of Aboriginal spirituality are bound to be confused by the various concepts and definitions of "traditional" spirituality. Because of the devastating colonial impacts and policies, many pre-contact indigenous beliefs and ceremonies survived only in small pockets. Much of the spiritual/cultural renaissance evident throughout North America today is actually a mixture of some pre-contact practices, combined with newer "pan-Indian" ceremonies popularized through decades of intertribal sharing and borrowing. It is not uncommon to see an Arapaho ceremony in a Métis community or to partake in a Lakota ceremony in Secwepemc territory. Some communities have also incorporated western religious influences into their spiritual practices. Many concepts such as the Medicine Wheel, Sweat Lodge, and the Pipe ceremony, originating on the prairies, spread quickly throughout the continent and today are used extensively as teaching tools and healing methods in many communities, often with varying degrees of success. The Aboriginal addictions recovery field, in particular, has been very successful at incorporating traditional ceremonies and cultured teachings with western therapeutic approaches for several generations.

It is questionable whether the full spectrum of pre-contact belief systems can ever be fully and accurately revived but one factor that would be key in attempting such a process is Aboriginal languages. Languages are the window to the soul of a culture and much can be determined about traditional worldviews and value systems through careful analysis and study of words, concepts, phrases, omissions, and comparisons with western languages and views. Does an indigenous word for "sky," when it's translated literally really mean just the noun sky or does this word reveal something deeper, with more profound cosmological and mythical connections? Why do many indigenous languages have no words for time, resource, economics, or please and thank-you? The only way to answer these kinds of questions is to decipher original indigenous terms from newer post-contact words that have been incorporated since contact, and research their original and literal meanings. In doing so, the spiritual nature, along with core traditional beliefs are revealed. Core spirituality can never be fully understood without an understanding of the language. This process is not possible unless a language is relatively intact. Since many of the studies examined in this paper indicate that culture, and therefore language, leads to stronger identities and wellness, language revitalization must also be considered in Aboriginal health research and health promotion initiatives.

Another aspect to consider about spirituality is that it is often the entry point to cultural rediscovery. Aboriginal spirituality is highly relational and this is one of the reasons that it is considered to be healing by the people who practice it. The community that is created by shared spiritual practices, shared expression and support, is part of why spirituality is a protective factor against health risks.

One factor that is not highlighted in many of the studies, are descriptions of specific traditional spiritual teachings. A common belief and practice amongst Elders and traditional spiritual practitioners is the showing of respect to the spirit world by reinforcing the private and personal nature of sacred teachings. Often, sacred