Electronic Thesis and Dissertation Repository

3-27-2012 12:00 AM

The Aftermath of Intergenerational Trauma: Substance Use Risk and Resiliency

Laurel E. Pickel
The University of Western Ontario

Supervisor
Dr. Susan Rodger
The University of Western Ontario

Graduate Program in Psychology
A thesis submitted in partial fulfillment of the requirements for the degree in Master of Education
© Laurel E. Pickel 2012

Follow this and additional works at: https://ir.lib.uwo.ca/etd

Part of the Community-Based Learning Commons, and the Counseling Psychology Commons

THE AFTERMATH OF INTERGENERATIONAL TRAUMA: SUBSTANCE

USE RISK AND RESILIENCY

Spine Title: Historical Trauma Resiliency in Canada's First Nations

(Thesis format: Monograph)

by

Laurel Elizabeth Pickel

Submitted in partial fulfillment

of the requirements for the degree of

Master of Education

School of Graduate and Postdoctoral Studies

The University of Western Ontario

London, Ontario, Canada

April 2012

THE UNIVERSITY OF WESTERN ONTARIO

SCHOOL OF GRADUATE AND POSTDOCTORAL STUDIES

CERTIFICATE OF EXAMINATION

Supervisor

_____

Dr. Susan Rodger

Supervisory Committee

_____

Dr. Jason Brown

Examiners

_____

Dr. Alan Leschied

_____

Dr. Elizabeth Nowicki

_____

Dr. Andrew Johnson

The thesis by

Laurel Elizabeth Pickel

entitled:

The Aftermath of Intergenerational Trauma: Substance Use Risk and Resiliency

is accepted in partial fulfilment of the
requirements for the degree of
Master of Education (Counselling Psychology)

Date_____   _____

Chair of the Thesis Examination Board

ii

Abstract

The present study explored resilience factors to substance use within Canada's First Nations adults. This was explored through a lens of historical trauma experienced as a group through the Residential School establishments. Secondary data from phase II (2008/10) of the Regional Health Survey were analyzed in coming to determine the effects of resiliency factors in the lives of abstainers/low substance users, moderate users and heavy users. An overview of survey data was first provided, outlining experience with resilience factors in the lives of trauma survivors only. Logistic regression was then applied to all participants meeting criteria for abstainers/low use and heavy use groups. Several of the resilience factors were found to be predictive of abstinence/low use. Implications for our Northern Partners of the Mamow Ki- ken- da- ma- win team, First Nations communities, as well as the counselling field in general are discussed from a strengths-based perspective.

Keywords: First Nations, Adults, Historical Trauma, Substance Use, Resiliency.

Dedication

For the incredible First Nations people, who have so courageously shared their stories

with me, shared their hope with me, and for always reminding me to laugh.

For my incredible husband: I am so thankful to have you in my life. Every day I count more reasons as to why this is. My rock, who has helped me through this in more ways than I could possibly list, thank-you.

Table of Contents

List of Tables

List of Figures

List of Appendices

The Aftermath of Intergenerational Trauma: Substance Use Risk and Resiliency

"I feel like I have been carrying a weight around that I've inherited. I have this theory that grief is passed on genetically because it's there and I never knew where it came from. I feel a sense of responsibility to undo the pain of the past. I can't separate myself from the past, the history and the trauma. It has been paralyzing to us as a group" (A Lakota Woman in Brave Heart & DeBruyn, 1998). This quotation from a Lakota woman speaks so strongly to the experiences of North American Aboriginal populations. A plethora of past research validates this experience, highlighting the disproportionate amount of Aboriginal people reporting experiences of family violence and incarceration, involvement with child welfare systems, mental health and suicide concerns, and lastly, substance use (Canadian Centre for Justice Statistics, 2001; National Association of Friendship Centres, 1999; Indian Affairs and Northern Development, 2003; Public Health Agency of Canada, 2006). These findings go beyond their horror on paper and are a reality for many Aboriginal individuals, families, and communities.

The goal of the present study was to explore these impacts of trauma, particularly as they pertain to substance use patterns in Canada's First Nations Adults. This was done by examining Regional Health Survey (2008/10) data from a national sample of adult trauma survivors of the Residential School Establishments and their descendants. However, this study was designed not from a risk, but a strengths-based perspective, in examining the impact of resiliency aspects in the lives of this collectively wounded group. Ultimately, we set out to explore how these resilience-based mechanisms buffer one's susceptibility to substance use.

Historical Trauma

According to Brave Heart (2003), the current realities facing Aboriginal groups today are a remnant of the trauma experienced directly by whole generations, then unintentionally passed on to later generations. More specifically, what we are seeing today is a cumulative emotional and psychological wounding which has occurred over the lifespan and across generations, emanating from massive *group* trauma experiences. This process as a whole has been labeled intergenerational trauma, or historical trauma (HT). Brave Heart (2003) further notes that this historically transmitted trauma continues to affect today's populations of Aboriginal people and has led to a historical trauma response (HTR). HTR represents a behavioural manifestation of transmitted trauma in that it is defined as a cluster of features that develop as a response. Typical examples include mental health concerns (posttraumatic stress, depression and anxiety), low self-esteem, suicidal ideation, violence and abuse (emotional, physical and sexual), loss of child-rearing skills, and substance use (Watson et al, 2002; Brave Heart, 2003).

Brave Heart (2003) provides a framework for understanding HT and HTR in reflecting upon historical and modern losses. Historical losses include histories of colonization, assimilation and Residential School establishments. From these, traumatic out of home placement ensued for Aboriginal children in which forced language, culture, tradition, and spirituality were of notable concern. Further, many of these out of home and school environments were fraught with instances of emotional, physical and sexual abuse (Brave Heart, 2003). These cumulative group experiences of trauma left many First Nations children without safe parental and cultural role models, forcing them to piece together fragmented strategies in adapting to two cultures and subsequent parenthood (Shepard, O'Neill & Guenette, 2006).

Wesley-Esquimaux and Smolewski (2004) highlight the strong effects of these Residential Schools within the context of forced assimilation and transmission of trauma from one generation to the next. As such, they note the profound impact of HT on women of childbearing age who have mothers, grandmothers and/or other family members who have experienced the Residential Schools. With these past losses combined with modern losses of unemployment, poverty, poor housing, social and geographical isolation and poor health/high morbidity rates, is it any wonder that trauma responses such as mental health and substance use are so prevalent within this population?

Historical Trauma and Substance Use

Substance use in particular has been a prevalent response to trauma in this group (Walters et al, 2002). This finding has been supported in past research reporting that with the exception of Inuit populations, drug use was by and large the most prevalently perceived health problem amongst Canada's Aboriginal people, regardless of location (Newbold, 1998). In consideration of this as well as the historical trauma context in which it occurs, the literature too, mirrors such findings in that there have been strong associations made between diagnoses of posttraumatic stress disorder (PTSD) and substance use (Breslau et al, 1991; Fullilove et al, 1993). In their study based on disorders comorbid with PTSD, Robin et al (1997) report that this cumulatively experienced trauma as well as specific traumas contribute significantly to not only to high rates of substance use, but depression as well. One of the leading hypotheses here is that it serves as a vehicle for numbing the psychological pain associated with such trauma, and in essence, provides a coping mechanism (Brave Heart, 2003). This being said however, there remains a large gap in the literature examining substance use in Aboriginal populations. Most of the current studies are restricted to reservation based populations involving

youth; very little information is available pertaining to adult populations, particularly within Canada (Walters et al, 2002).

Even still, the issue around substance use in this group remains a problem as reported by Whitbeck et al (2004). Here, two scales were developed and subsequently presented to elders and tribal advisory groups in attempt to quantifiably measure historical trauma. The Historical Loss Scale was developed to measure perceived loss and how frequently these losses come to mind. The second scale, Historical Loss Associated Symptom Scale, measured the feelings pertaining to these losses. They were then administered to American Indian families (28-59 years) with children on two reserves from the Midwest US and two Canadian Reserves in Ontario.

The results of this study indicate that the modern generation of American Indian adults possess frequent thoughts around historical losses and that these thoughts are associated with negative feelings. This is particularly noted around the aspect of substance use, as the highest percentage of daily thoughts of perceived loss revolved around effects of alcoholism in this group. Almost one half of participants (45.9%) thought of alcohol-associated losses at least once a day or more, and two thirds (63.5%) thought of it at least weekly. These findings support the presence of HT in this group, particularly in relation to the on-going issue of substance use.

As seen in this study, alcoholism remains a great source of loss within Aboriginal populations; it is the most prevalent substance consumed by this population (Mail & Johnson, 1993). Compared to other races, Aboriginals tend to begin using alcohol at an earlier age, use it in higher quantities and experience more negative implications from its use (Oetting & Beauvais, 1989). However, much ambiguity remains around quantifying user typologies, as an ideal measure of substance use would account for both frequency

and quantity of use (Meara & Greenfield, 2008). Past studies involving Aboriginal populations have largely focused on the quantity aspect of substance use (Walters et al, 2002); however, the frequency aspect remains an import aspect to consider.

In his study examining substance use patterns in American Indian students, Beauvais (1996) developed a measure including three levels of substance use. The first, a low or no involvement group who were not using at the time of data collection or within the prior 30 days. Secondly, a moderate involvement group consisting of those who get drunk or use drugs at least once per month and lastly, a heavy group that use one or more drugs several times a week. As indicated in recent trends within this literature, more research is needed pertaining to the use of illicit substances within Aboriginal adult populations, particularly within Canada.

Stress-Related Factors & Substance Use

Aboriginal status. It is evident that substance abuse related to the intergenerational trauma prevalent amongst this group is present today. In consideration of this, there has been some research put forward around the psychosocial stressors associated with substance use within this group and the disproportionately high rates found within. A primary example of this is a study completed in 2003 by Craib et al. In this study, the authors examined HIV incidence rates among Aboriginal and non-aboriginal IV drug users (14 years and older) as well as predictors of HIV acquisition. Participants completed a semi-annual interviewer- administered questionnaire between May 1996-2000. This interview gathered information regarding participant demographics, IV drug use and sexual behaviour. Venous blood samples were taken at each visit and were tested for HIV antibodies. Regression models were used to evaluate frequency of drug use and sexual behaviours as predictors for time to HIV acquisition. Data analysis

revealed that HIV incidence rates in the Aboriginal group were significantly higher
(almost twice as high) than in the non-Aboriginal group. In females, frequent speedball
(cocaine and heroin) use and ongoing binges of injection drug use were found to be
predictors of time to HIV acquisition whereas speedball and cocaine injection were
predictors for males. In the larger picture, the authors relate entrenched poverty and
trauma experienced by this population to disproportionately high rates of substance use.

Past abuse. A second study examined the social stressors regarding substance use
in Aboriginal populations (Pearce et al, 2008). In this study, the authors examined the
extent to which sexual abuse was predictive of HIV vulnerability through drug use and
sexual activity in Aboriginal youths in urban British Columbia. Participants included 'at
risk' Aboriginal youths (14-30 years) defined as those who were smoking or injecting
illicit drugs. Participants underwent an administrator-administered questionnaire to gather
information on demographics, drug use and sexual activity. Venous blood samples were
also taken to verify for HIV presence. Experience with sexual abuse was investigated; it
was defined as any type of sexual activity that participants reported as being forced or
coerced into. It was found that individuals reporting sexual abuse tested significantly
more positive for HIV, had more lifetime sexual partners and engaged in use of injection
drugs significantly more than non-abuse individuals. Again, these authors relate the
findings here to a larger framework considering the holistic context of historical trauma.

Geographic location. Another psychosocial stressor to be considered in
Aboriginal vulnerability to substance use is geographic location. Isolated Northern
communities located farther away from medical/counselling services and with less access
to educational resources such as computers with internet access leads one to wonder if
this potentially puts more isolated reserves at risk of substance use. On the other hand,

Aboriginal individuals living dispersed among urban communities may feel more marginalized from their culture and have greater access to substances. This question was addressed in a study completed by Newbold (1998) in which perceived Aboriginal health status across different locations was examined. Data for this study was obtained through the Aboriginal People's Survey (1991) in which different geographic locations (reserve, urban, rural, and North) were compared. It was found that drug use was by and large the most prevalently perceived health problem regardless of location with only Northern Inuit populations not ranking this as so. That is, overall, 58% of respondents noted this to be the most important health problem.

In terms of perceived solutions overall, education and awareness was rated as most important with service access and counselling as important secondary solutions. On the other hand however, May (1996) reported that rates of alcohol use specifically, remain high in Aboriginal populations however, there is a large variation over time, reservation community and region. This study also indicated that urban populations of American Indians tend to exhibit higher drinking rates than reservation populations. These studies provide valuable insight with respect to stressors associated with geographic location. It appears that Aboriginals perceive substance use to be problematic amongst their people regardless of location however, it is unclear as to what patterns of substance use occurs over time and across regions.

Gender. There exists an extensive past literature drawing linkages between experiences of mental health and substance use (Poulin et al, 2005; Torikka et al, 2001; Brown et al, 1996). What is more, gender differences have been observed in both prevalence of mental health diagnoses as well as patterns of substance use. One such study by Poulin et al (2005) supports this notion where it was found that amongst Atlantic

Canada's adolescents, elevated depressive symptoms were reported by 8.6% of females and only 2.6% of males. Furthermore, alcohol use, cigarette smoking and cannabis use were found to be independent predictors of depressive symptoms in females whereas only cannabis use predicted these symptoms in males. In terms of the context of trauma however, past research has revealed a high incidence of comorbid PTSD and substance use disorders (Najavits et al, 1997; Najavits et al, 1999). Women in particular show high rates of this dual diagnosis (30 percent to 59 percent) most commonly resulting from past experiences of repetitive childhood physical and/or sexual assault. Rates for men are found to be two to three times lower and typically stem from combat or crime trauma (Najavits et al, 1997).

In line with this, Sonne et al (2003) examined the relationship between gender and comorbid PTSD and substance dependence disorders in a sample of outpatients. Assessment data were gathered around level of substance use severity, trauma history, PTSD symptomology and comorbid psychiatric disorders. Results indeed indicated a gender-related difference with respect to substance use. Regarding alcohol, men reported an earlier age of onset of alcohol use, greater use intensity and craving as well as more severe legal problems due to this substance usage. Women on the other hand were more likely to test positive for other substances, notably cocaine, at treatment. Also noteworthy is the finding that PTSD more often preceded substance dependence in women than men; this is consistent with the substance use literature highlighting that women have been found to use in response to a stressor, whereas men tend to use as an overall lifestyle (Sonne et al, 2003; Compton et al, 2000).

Such findings with respect to gender and substance use imply differences in etiologies of this dual diagnosis. As such and also, consistent with the literature, women

reported greater exposure to sexual traumas, greater frequency and avoidance of trauma-related thoughts and feelings as well as a greater social impairment as a result of PTSD. In support of this, Ouimette and Brown (2003) note that gender-specific risk rates suggest that women may be more vulnerable than males in terms of PTSD and substance use comorbidity. This may be seen by way of self-medication of such trauma symptoms (Najavits et al, 1999; Sonne et al, 2003). However, more research is needed to determine trends that exist specifically within the context of Canadian Aboriginal populations having collectively experienced historical wounding.

Contextual Considerations

Moreover, in considering potential stressors as well as resiliency factors regarding substance use with Aboriginal populations, traditional practices are an important factor in perceptions of health and well-being. Wyrostok et al (2000) assessed First Nations' attitudes towards traditional healing processes. Participants included First Nations individuals attending post-secondary institutions within the urban area of Edmonton, Alberta. A questionnaire was constructed and administered to participants in gaining information around three variables: interest, values and experience pertaining to traditional healing practices. Despite differing experiences with Native rituals, First Nations people reported a strong interest in traditional healing and its importance to counselors around incorporating it into treatment; 64% of respondents indicated interest in talking about traditional healing and 90% would like to read more about these practices. This further supports the idea of the importance around traditional healing practices within this population and the potential for being a resilience factor against maladies such as substance use.

A Strengths-Based Perspective: Resiliency Factors

Past research has largely supported the prevalence of substance use in Aboriginal populations; this literature has identified many stressors associated with substance use, as noted above. In doing so, it has supported the importance of healing from a traditional standpoint and identifies these traditional healing practices within this population as great strengths and potential resilience factors against maladies such as substance use. Thus, looking from the opposite perspective of health and well-being, the question of resiliency and strengths against substance use arises.

In terms of the literature pertaining to concepts of resiliency, less is known particularly within Aboriginal populations living in Canada. However, within this literature a definition of resilience is described as, a positive adaptation in response to adversity (Waller, 2001). Adversity is typically identified as two categories of stress. Firstly, it is found in challenging life circumstances such as racism or parental drug use for example. Secondly, adversity may exist in relation to experiences of trauma such as experiencing or observing abuse, or death of a parent (Masten & Coatsworth, 1998). Adversity, then, is said to be a type of stress which is associated with jeopardizing positive adaptational outcomes and potentially leading to psychosocial problems such as substance use, delinquency, or dropping out of school for example.

From this and given the historical context of trauma and pervasive loss as experienced by this group, the notion that substance use serves as a coping mechanism in numbing associated psychological pain becomes strengthened (Brave Heart, 2003). It is clear from this perspective that this cumulatively wounded group is not turning to substance use as a means of pleasure or thrill seeking; this is a response to temporarily escape years of generational loss and adversity rooted in the context of trauma.

On the other hand from a strengths-based perspective, resiliency factors are said to bring about positive outcomes in that they act as buffers between individuals and psychosocial stress (Fraser, 1997). Past studies have supported the notion that a given balance of these protective, resilience factors can dampen or mute the impacts of various negative stressors (Werner & Smith, 1992). However, with respect to substance use, one of the most perplexing observations is that some individuals are able to abstain or give up problematic involvement where as others are unable to resist usage despite the losses and negative consequences associated with it.

Context for the Research Question

The remaining question from this observation is then, why; why do some individuals remain resilient to substance use? And particularly from the First Nations perspective; how is it that some individuals remain resilient in resisting substance use and others do not despite their similar history and exposure to historical trauma? Previous work in this field has attempted to identify differences stemming mainly from research around strengths and resilience factors found in various aspects of culture and language, spirituality and religion, family and social support, and experiences of power and control, amongst others (Whitbeck et al, 2004; Torres Stone et al, 2006; Waller et al, 2003; Ungar et al, 2008). It is with these demonstrated areas of individual and community strengths that this strengths-based study sought to identify which particular aspects might reliably predict resilience to substance use.

Enculturation. A vast past literature has supported the effects of discrimination-induced stress as experienced by minority groups in terms of physical and mental health compromises (Kessler et al, 1999; Krieger & Sidney, 1996; Williams et al, 1997). In looking at this literature base around stressors associated with substance use in Aboriginal

populations, it has become apparent that this approach has overlooked some resilience factors also important to consider. In examining these strengths contributing to resiliency, Whitbeck et al (2004) explored the effects of discrimination and historical loss, but also resilience factors as experienced by American Indians regarding alcohol abuse. It was hypothesized that historical loss would mediate the effects of discrimination on meeting 12-month diagnostic criteria for alcohol abuse whereas a potential resilience factor, enculturation, would have the opposite effect.

Enculturation was defined as the degree to which an individual is embedded in his or her cultural traditions as evidenced by traditional practices, language, spirituality, and cultural identity (Whitbeck et al, 2004; Zimmerman et al, 1994). Perceived discrimination assessed such aspects as how often participants had been insulted, treated disrespectfully, ignored, or were a recipient of a racial slur whereas enculturation was assessed via three basic proponents: traditional practices, traditional spirituality and cultural identity. Participation in traditional practices included measurements of three dimensions including pow-wow activities, knowledge and use of tribal language and at least 19 types of traditional activities. Participants then reported on the dimension of traditional spirituality by reporting on their participation level in spiritual activities and if these activities were important to them. Items for the dimension of cultural identification addressed questions such as the degree to which they participated in American Indian culture and how much their family lived by this culture.

It was found that historical loss was positively associated with alcohol abuse in women. Enculturation had a significant negative effect on alcohol abuse. This information adds support to the notion that historical loss and discrimination does in fact, impact alcohol abuse while also highlighting the importance of resilience factors such as

enculturation, which appears to be negatively associated with such harming behaviours as substance use.

A second study examining enculturation-based resilience was completed by Torres-Stone et al (2006). This group examined the impact enculturation had on alcohol cessation among American Indians. Here, the authors evaluated the influence of enculturation specifically through dimensions of traditional practices, traditional spirituality and cultural identity on alcohol cessation. Data collection took place over a three year period on four American-Indian reservations and five Canadian First Nations reserves.

Alcohol cessation was measured as a dichotomous variable, indicating that individuals no longer drank alcohol at all after a period of prior use. Drug or alcohol treatment was measured by asking whether and how many times respondents had gone through treatment. In terms of measuring substance-associated problems, a six item scale was used including impact-related questions such as whether participant substance use interfered with work or school, whether it resulted in physical fights, whether it caused trouble with their family, and so on. In terms of enculturation, these measures were determined by the participating tribes as used in the study above by Whitbeck et al (2004).

The results indicate that two of the three enculturation components, participation in traditional activities and traditional spirituality had significantly positive effects on alcohol cessation. This finding suggests that these two aspects of enculturation may play an important role as resilience factors in initiating and maintaining alcohol cessation however; further research is needed to establish clear connections between initiating sobriety and maintaining it.

Culture and language. As mentioned in the previous two studies pertaining to culture, knowledge and use of tribal language is included as an important indicator. This is reflected through much of the literature particularly, regarding Canada's Aboriginal people. From the 2002/03 Regional Health Survey's results document, *Adults, Youth and Children Living in First Nations Communities*, great importance is drawn to the language-culture connection. Further, it is noted from this research that this connection is: "intrinsic to the total health of the total person and they are related to all other aspects of health […] language connects people to their past and provides spiritual and emotional grounding. The Royal Commission explicitly identified revitalization of languages as a key to healthy individuals and communities" (pp. 33).

Unfortunately, numerous reports indicate that Aboriginal languages are being lost over time, given their past contextual history of trauma. Examples of this include a report from the Assembly of First Nations (2004) in which the state of First Nations language was described as being in 'crisis'; UNESCO (1996) reported that Aboriginal Languages in Canada are "among the most endangered in the world". Given the connection of language and culture to health, and given the current state of these constructs, a call for further research is needed around the resilience of individuals in the face of this decline.

Culture as treatment. In examining the question of resiliency, particularly in the context of substance use within Aboriginal populations, it is becoming more apparent that resilience factors such as participation and involvement within one's cultural norms may shed light on this question. Along with this idea around the contributions of culture to resiliency, Spicer (2001) found that aspects of culture are not just resilience factors; culture may be seen as a *treatment* for substance use. This was examined in his qualitative work in which it was found that Aboriginal individuals who have successfully quit

drinking attribute this to cultural terms and focus on the ways that, in sobriety, they have been able to live the life they have long seen as correct, or proper, for their people.

More specifically, restoration of culture and cultural norms within their own lives has served therapeutic ends. Spicer spent 30 months living amongst and observing his Aboriginal participants then conducted interviews around drinking history with 50 members from the community. From these interviews, it became apparent that both drinkers and non-drinkers emphasized the many ways in which they felt that alcohol was incompatible with the way of life destined for Aboriginal people; alcohol is viewed as a corrupting imposition from the White world and abstinence is valued as an ideal for these people as a group and an ideal for themselves as individuals. Thus accordingly, the alcoholism prevalent in this group is seen as cultural degradation. In the sobriety process, individuals become able to engage in their Aboriginal culture and this is seen as therapeutic as they are taking part in a 'restoration of the self' in living the life destined for them as an Indigenous person.

As can be seen from these studies examining aspects of culture, there have been some important results drawn pertaining to resilience within both abstainers and individuals maintaining sobriety. From the Whitbeck et al (2004) and Torres-Stone et al (2006) studies, both the traditional practices and traditional spirituality aspects of enculturation were reported to be resilience factors in individuals not meeting diagnostic criteria for alcohol abuse and those maintaining sobriety. However, as Torres-Stone et al (2006) points out, further research is needed around resilience aspects of lifetime abstinence, cessation and subsequent maintenance of sobriety in determining the relationship of resilience factors for each. As more becomes understood about the mechanisms of abstinence, cessation, and maintenance of sobriety, a focus has taken

place on the healing aspects of traditional spirituality; most of these findings are based on the Judeo-Christian approach through 12-step programs such as Alcoholics Anonymous however (Hazel & Mohatt, 2001). In light of this, work from Hazel and Mohatt (2001) reported that of participants attributing their alcohol cessation to a single event, only 11% indicated that this was attributed to spirituality. Other research has indicated that a larger proportion (57%) of recoveries attributed cessation to cognitive reasoning around pros and cons of drinking however, spirituality and religious influences were helpful in maintaining sobriety (Sobell et al, 1993).

This draws important implications in many different respects. Firstly, the importance and need of future research to explore the relationship of resilience factors in groups of lifetime abstainers and individuals maintaining sobriety. Also, it brings to awareness that no matter what this pattern may be, factors leading to cessation must also be considered separately as well, in that past research has supported differences between factors leading to cessation and those maintaining sobriety. Such findings hold large implications for structuring treatment programs perhaps, firstly focusing on aversive losses and cognitively weighing pros and cons to substance use in bringing about cessation, then introducing maintaining factors such as spirituality/religion and cultural involvement. As suggested by Torres-Stone et al (2006) a possible direction for future work revolves around longitudinal research further investigating similarities and differences in resilience factors between lifetime abstainers, cessation, and maintenance of sobriety, particularly within adult Aboriginal populations.

Family. Family has been identified as another source of resilience against substance use. Waller et al (2003) completed a qualitative study involving Indigenous adolescents from the Southwestern United States. This study examined stressors and

resilience factors influencing drug and alcohol use and resistance. It was conducted by creating focus groups situated in three urban middle schools. The purpose of these focus groups was to collect data around factors contributing to substance use and resistance as told by student narratives and personal experiences.

A semi-structured interview schedule was administered throughout the focus groups consisting of questions related to perceived stressors and supports. Participants then had the chance within the group to take part in sharing their experiences through this story-telling format to questions such as: "have you ever been offered cigarettes, drugs or alcohol, and if so, what did you do?" and "what makes it hard to resist drugs or alcohol?". As reflected by the following statement from one of the male participants, the main findings of this study found that the dual roles of family, particularly cousins and siblings, often had a profound impact on respondents' ability to resist substances; they functioned both as adversities and strengths:

> "We went to [my cousin's] house. He said, "you want a drink?". We said "no.". I said "no, I don't want to," and sometimes he says "you don't have to if you don't want to". [Sometimes] it's alright [with him]."

Other times, responses indicated siblings and cousins' supportive behaviours in discouraging the use of substances and helping participants to escape situations where they were under pressure to engage in use. The authors highlight the distinction between substance use in Anglo versus Indigenous adolescents in that Anglo populations are more apt to be influenced by peers whereas Indigenous youth are more heavily influenced by family, mainly cousins and siblings. This is attributed to differences in the view and role of family between the two cultures. Among Indigenous people, family is known as a complex web of relationships including but not limited to relations by blood, clan, tribe,

formal and informal adoption. These 'extended families' are viewed the same way that Anglo culture views members of 'immediate family'. Along with this, many Indigenous cultures foster attitudes of interdependence, cooperation, and mutual assistance; essentially, they live in complex relational networks consisting of this extended family. From this, it is quite evident that family plays a large role in the life of an Aboriginal individual and thus may lead to inferences with respect to family being the most influential stressor and support against substance use.

Resiliency from a Canadian perspective. In examining resiliency, attention is drawn to the importance of geographical location and the differences that exist between areas in political structure, access to health care, and levels of social development. As such, multinational health studies run the risk of unintentionally contributing to an assumption of homogeneity among country-specific samples. This can lead to over generalization errors about a given population residing in different locales. In consideration of this, Ungar et al (2008) examined aspects of resiliency in specifically Canadian youth that fit an 'at-risk' description in the context of a larger 11-country international qualitative study.

The goal of this study was multifaceted in that it firstly examined the suggestion that specific differences are present between individuals even within the same country. Secondly, it explored cross-country themes in resilience common to this national at-risk group. This was done by selecting 19 youth facing adversity from various regions in Canada based on three criteria: the youth must be at an age of transitioning from childhood to adulthood; the young person has been exposed to at least three psychosocial stressors that pose significant adversity; the youth were known to their community to be 'coping well'.

Data collection occurred through the use of focus groups and ongoing consultation with the members of the research team from each community. The youth all took part by consenting to an open-ended interview based on questions developed by the international team. These consisted of such items as: "What kinds of things are most challenging for you growing up here?" and "What does being healthy mean to you, others in your community and family?".

It was found that no single pattern of adaptive behaviour could be identified across the entire international sample of youth or even among the Canadian youth within this study. However, the researchers for this study did find seven themes common to all participants internationally including: access to material resources, access to supportive relationships, development of a desirable personal identity, experiences of power and control, adherence to cultural traditions, experiences of social justice, and experience of a sense of cohesion with others. Despite the evidence that these themes were common to youth internationally, they manifested in unique patterns for each individual participant. This suggests implications for both similarities and differences to be considered in studying patterns of resiliency in not only international but also national populations.

The Current Study

In reflecting upon the current literature with regards to substance use within Aboriginal populations, there are many stressors contributing to it. These include factors such as Aboriginal status as well as and particularly, associated trauma and historical trauma effects stemming from notably, forced assimilation efforts of the Residential Schools. Despite differences in geographic location, these stressors remain consistent as does the perception of a problem associated with substance use in these communities. On the other hand, more is becoming known with respect to strengths and resiliency within

this population. As such, factors associated with various aspects of culture, family, spirituality, and access to resources have been identified as resilience factors in abstinence and maintenance of sobriety. It has even been suggested that some of these aspects are involved in the healing process associated with reaching sobriety.

Despite this wealth of literature, some voids remain around the topic of resiliency and Aboriginal substance use. In comparison to stressors, relatively little is known with regards to the resiliency factors. Many of these studies took place in the United States or involved youth populations undergoing a transitional life period; much is left unknown with regards to strictly Canadian Aboriginal adults. Another gap in the literature that is addressed in this study is that pertaining to substance use involving a variety of drugs. Much of the previous research has examined stressors and resilience factors only around alcohol use. This may exclude a large group of Aboriginal people as some reservation communities have constituted a 'dry' policy. Implications of gender will also be explored in terms of substance use patterns and resilience.

Also, in working with Aboriginal populations, it is recognized that we are working in the shadow of many years of 'research' practices that did not honour lived experiences of Aboriginal people and communities, or the strengths and gifts of these people. Many of the methodologies composing this past literature base consist of non-Aboriginal research teams leading development and delivery of data collection. In order to best respect the importance of this cultural lens, the methodology of this study will include analysis of secondary data available from phase two (2008/10) of the First Nations Regional Longitudinal Health Survey (RHS) involving First Nations adults living in reservation communities. This survey was developed for First Nations, by First Nations people across Canada. In terms of data collection, all interviewers were First Nations individuals from

each participating community trained by RHS coordinators. Data is owned and controlled by and for First Nations. As such, this study addresses previous limitations in that it has incorporated a methodology sensitive to this culture from a person-centered, First Nations perspective.

In this study, we set out to determine what differences exist in gender and resilience factors between abstinent/low users, moderate substance users and heavy substance users in a sample of adult First Nations people living across Canada. Our first objective included providing an overview of descriptive statistics involving only those reporting attendance of themselves, a parent, or a grandparent at a Residential School establishment. The purpose of this specifically, was to explore participants' response patterns pertaining to historical trauma and resilience from substance use. Our second analysis involved a substance use comparison within the general population of adults reporting no attendance versus those reporting personal or familial attendance at a Residential School establishment.

From this, we hypothesized that individuals who abstain from substance use will report significantly more experiences with resilience factors of cultural traditions and spirituality/religion, access to supportive relationships, experiences of power and control and traditional language abilities. On the other extreme, we hypothesized that heavy users will report significantly fewer experiences with these variables; this combination will be more prevalent among females reporting personal attendance or familial attendance at a Residential School. With regards to the moderate users, we hypothesized that they may report significantly more experience with these resilience factors in comparison to the heavy users, but fewer experiences in comparison to abstainers/low users.

It should be noted that within this review of the literature, the terms Aboriginal or Indigenous people are often used. These names, meaning, 'native to the area' are collective terms, capturing the descendants of the original peoples of North America including First Nations, Inuit, and Metis groups specifically, within Canada. The present study involved solely data from First Nations groups living across this country. Further comparisons are made with this group's unique experiences as reported on the RHS and the context of the collective Aboriginal literature. Further clarification around the terminology of these groups is offered by The National Aboriginal Health Organization at: http://www.naho.ca/publications/topics/terminology/

Methods

Participants

This descriptive field study aimed to examine the impacts of historical trauma and resiliency factors in terms of substance use in an adult Canadian First Nations population. Data were taken from phase two of the First Nations Regional Longitudinal Health Survey (RHS). Phase two of this extensive Canadian study took place between the years of 2008 and the Fall of 2010 with a sample of approximately 10, 000 First Nations adult participants (18 years and above) from a total of 216 reservation communities across Canada. Figure 1 below depicts an overview of the general adult gender and age demographics. Data were obtained directly from these adult individuals upon collection of informed consent and overview of the study. The RHS itself was conducted using stratified sampling techniques with strata defined as community size. In the present study, purposive sampling techniques were employed including specifically, Canadian First Nations adults reporting abstinence from or low substance use, moderate substance use or heavy substance use over the past 12 months prior to the study. An on-line copy of the adult RHS (2008/10) can be found at: http://www.rhs-ers.ca/sites/default/files/ENpdf/RHS_2008/RHS-A2.pdf.

Figure 1 Survey data from the RHS 2008/10 reveal that the adult First Nations population (18 years and older) is young; approximately 30% is younger than 30 years of age while 13% are 60 years and above.

Age pyramid of First Nations adults living on-reserve and in northern First Nations communities
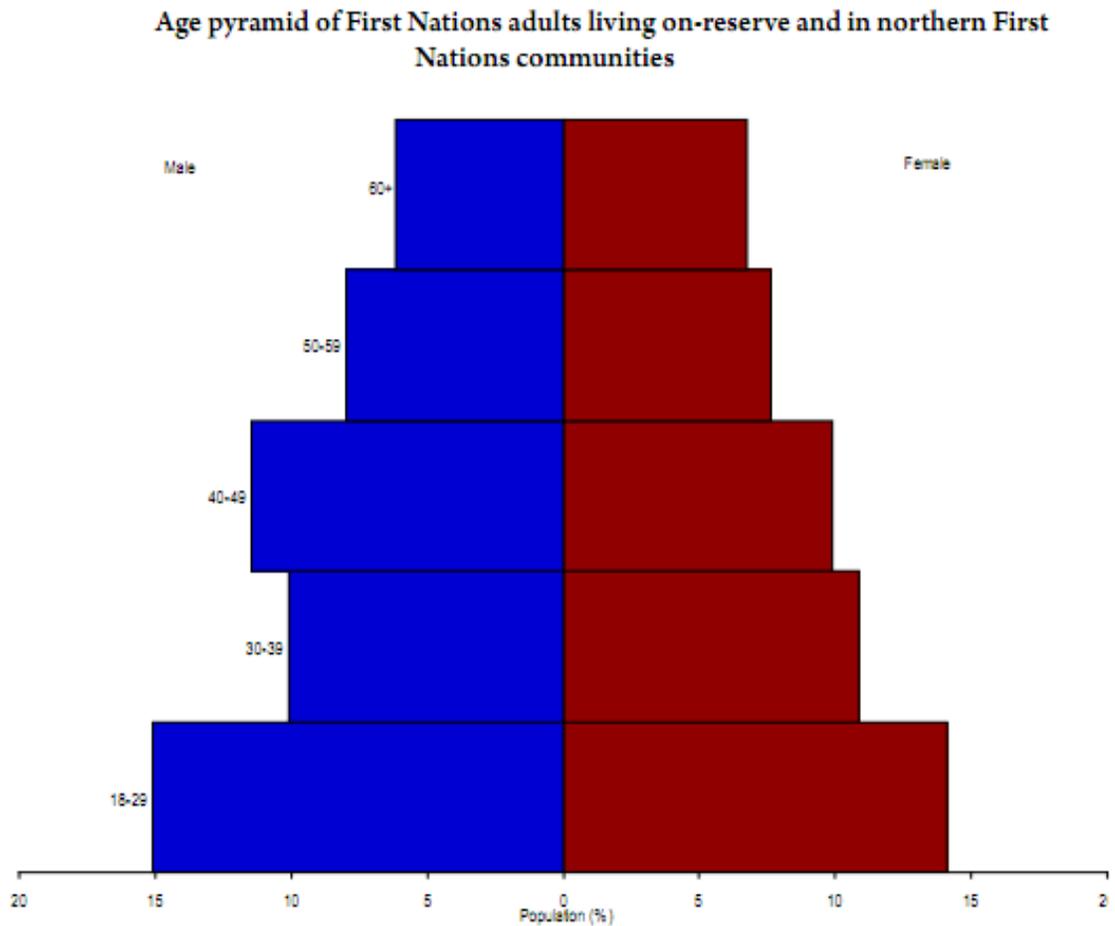
(Image used with permission from FNIGC, 2011)

The preliminary descriptive statistics involved only those reporting attendance of themselves, a parent, or a grandparent at a Residential School establishment. This was done in effort to better understand the experiences of historical trauma and resilience from substance use in the lives of survivors involved in this study; Residential School attendance was used as a proxy measure for trauma. Our second analysis was opened up to the general adult population of abstainers/low users and heavy users. This involved a comparison of the adults reporting no attendance (of self, parent or grandparent) versus those reporting school attendance (of self, parent or grandparent) so as to control for the effects of reported trauma compared to no reported trauma in this sense.

Measures

Findings from the present study were based on secondary data from phase two (2008/10) of the RHS. Measures selected from this survey were done so as to best reflect the resilience factors identified in the relevant literature. The RHS itself is the only national health survey operated by First Nations, for First Nations populations. The Assembly of First Nations Chiefs Committee on Health mandated that a nation-wide First Nations health survey be implemented longitudinally, every four years. The main objectives of the RHS are to provide scientifically and culturally valid and reliable information, while enhancing First Nations capacity and control over research. The items on this survey were developed in a manner that would allow the authors to address issues of relevance in the areas of well-being that are related to First Nations peoples specifically. The RHS is collected using a Computer Assisted Personal Interview (CAPI) system, with over 250 laptops across the country. The data are gathered by trained local field workers, and the survey is conducted in person, within the selected Canadian communities. The final versions of the RHS questionnaires were reviewed and approved

by the First Nations Information Governance Centre (FNIGC). OCAP specific principles can be found at: http://www.fnigc.ca/node/2.

Access to and analysis of data in this study adhered to ethical guidelines established by the First Nations Principles of OCAP (ownership, control, access and possession) as outlined by the First Nations Information Governance Center . As owners of the data arising from their communities, this means that the First Nations people control the processes of data collection, storage, access and distribution. In respect of these procedures, this study has taken the appropriate steps in gaining permission for access to national data. According to our terms of use under OCAP and in partnership with our Northern Partners, the results of this study will firstly be shared back with the First Nations Information Governance Center and our First Nations Partners before anything else.

Historical trauma. As previously outlined, Wesley-Esquimaux and Smolewski (2004) highlight the strong effects of Residential School establishments within the context of forced assimilation and transmission of trauma from one generation to the next. As such, they note the profound impact of historical trauma from these schools on women of childbearing age who have mothers, grandmothers and/or other family members who have experienced the Residential Schools. What is more, phase one RHS data (2002/03) indicate that those adults reporting at least one parent's attendance at a Residential School were more likely to have thought about committing suicide when compared to those with no parental attendance. Similarly, those reporting the attendance of at least one grandparent were more likely to have attempted suicide when compared to those reporting no grandparent attendance (FNIGC, 2002/03). As such, experience with Residential schools was included as a proxy measure for trauma in this study.

Under the section *Residential Schools* on the RHS, participants were asked

whether they, their parent(s) or their grandparent(s) attended a residential school and if

their overall health and well-being was affected by this attendance. Participants who

indicated that they themselves, and/or a parent(s) or grandparent(s) attended a Residential

school were included as survivors of trauma.

Substance use. On the RHS, participants were asked: "Have you used any of the

following substances in the last 12 months (without a prescription)? *For each, please*

select the answer that best describes your usage". Substance use options included the use

of the following substances: chewing tobacco, marijuana (weed, grass)/hash, PCP/angel

dust, acid/LSD/ amphetamines, ecstasy, inhalants (glue, gas, paint), sedatives/downers

(valium), cocaine/crack/freebase, codeine/morphine/opiates (percodan, Tylenol 3 etc.),

and heroine. In terms of frequency of substance use, participants could report: never,

about 2-3 times/year, about once a month, about 2-3 times a month, about 2-3 times a

week, about once a day, or refused, for each drug. With respect to alcohol specifically,

participants were asked: "During the past 12 months, how often have you had 5 or more

drinks on one occasion?" One drink includes one beer, one glass of wine or one shot

(ounce) of hard liquor. Participants could then report: Never, less than once per month,

once per month, 2-3 times per month, once per week, more than once per week, every day

or refused.

Based on the patterns of substance use outlined by Beauvais (1996) and the

categorical data available through the RHS, in this study, abstainers/low users were

defined as reporting never having used any of these substances in the past 12 months or

only having used them once or twice. Moderate users were defined as using one to three

times per month, and heavy users were defined as using two or three times per week and up to once a day within the past 12 months.

Resilience factors. The following six resilience factors were explored for personal buffering effects around historical trauma and further, substance use. These included: participation in cultural traditions, importance of traditional spirituality, importance of religion, access to supportive relationships, experiences of power and control, and language abilities. An overview of the resilience questions and responses as they appeared to participants in the RHS can be seen in Appendix A.

1. Participation in cultural traditions. Under the section of *Community Wellness and Traditional Culture* on the RHS, participation in cultural events was assessed. In terms of assessing attitudes towards cultural traditions and making further inferences about one's involvement with these activities, participants were asked the following on the RHS: "Do you take part in your local community's cultural events?". Participants then had the option of selecting the following responses: always, sometimes, rarely, never, don't know, and refused. The proportions of participants from each substance use group that responded to each option listed above were compared. Responses of "don't know" and "refused" were not included in the analysis.

2 and 3. Value of spirituality and religion. As indicated through past research, aspects of traditional spirituality and religion have been identified as influential resilience factors in maintaining abstinence (Whitbeck et al, 2004; Torres-Stone et al, 2006). In terms of assessing attitudes towards spirituality and religion, then further, making inferences about one's experience with related activities, participants were asked the following on the RHS: "How important is traditional spirituality in your life?" and "How important is religion in your life? (eg. Christianity, Buddhism, Islam)". Participants then

had the option of selecting the following responses: very important, somewhat important, not very important, not important, don't know, and refused. The proportions of participants from each substance use group that responded to each option listed above were compared. Responses of "don't know" and "refused" were not included in the analysis.

      4. Access to supportive relationships. In assessing potential resilience factors against substance use, access to supportive relationships was examined. This was determined by examining responses to the question: "People sometimes look to others for companionship, assistance, guidance or other types of support. Could you tell me how often each of the following kinds of support is available to you when you need them: Someone to confide in or talk about yourself or your problems." Participants were given the following options to select from based on their experiences: all of the time, most of the time, some of the time, almost none of the time, refused. The proportions of participants from each substance use group that responded to each option listed above were compared. Responses including the option of "refused" were not included.

      5. Experiences of power and control. In terms of assessing the potential resilience factor involving individuals' experience with and perceptions of personal power and control, data from the following question appearing on the RHS will be used: "Please indicate how strongly you agree or disagree with the following statements: I have control over the things that happen to me". Participants were then given the following options to respond to based on their personal experiences with power and control: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree, don't know, or refused. The proportions of participants from each substance use group that responded to each option

listed above were compared. Responses of "don't know" and "refused" were not included in the analysis.

  6. Language. In terms of assessing the resilience associated with language usage and comprehension, data from the following question under the language section on the RHS was used: "Can you understand or speak a First Nations language?". Participants were given the following options to choose from based on their current experience with a given First Nations language: yes, no, don't know, refused. Responses of 'yes' and 'no' were used in the analysis, whereas responses of 'don't know' and 'refused' were not included.

Analysis

  Analysis of the data began with an overview of participants' descriptive information including gender, age, experiences around residential school attendance, and the resilience factors. The sample for this analysis consisted of RHS data from individuals reporting abstinence, moderate substance use, and heavy substance use as well as a context of historical trauma in either attending a Residential School establishment themselves, or having a parent or grandparent who attended. For information purposes in better understanding the experiences of survivors within this study and for informing later regression analyses, these data are displayed in the preliminary descriptive statistics section of the results. Data were analyzed using SPSS software in producing firstly, an overview of substance use and resilience factor experience then eventual regression analyses.

  This preliminary overview informed our predictions in running a direct entry logistic regression. Due to the small number of participants meeting criteria for moderate use, this group was left out of the regression, allowing for a more robust analysis between

dichotomous levels of the dependent variable; abstainers/low users and heavy users groups. This analysis was opened up to not only trauma survivors but the adult population at large falling into these two substance use categories. This was done so as to compare the effects of historical trauma between those reporting a personal or familial past of trauma within the Residential Schools and those who did not.

Specific predictor variables for the regression analysis included gender, age, education and income levels, as well as the six resiliency factors of cultural participation, spiritual/religious value, access to supportive relationships, experiences of power and control, and aboriginal language experience where clients were asked: "Do you take part in your local community's cultural events?"; "How important is traditional spirituality in your life?"; "How important is religion in your life (eg. Christianity, Buddhism, Islam)?"; "People sometimes look to others for companionship, assistance, guidance or other types of support. Could you tell me how often each of the following kinds of support is available to you when you need them: Someone to confide in or talk about yourself or your problems."; "Please indicate how strongly you agree or disagree with the following statements: I have control over the things that happen to me"; "Can you understand or speak a First Nations language" (see Appendix A).

Based on regression modeling for the different levels of substance use, inferences were made about the impacts of gender and resilience factors between each group and ultimately, what our Mamow ki-ken-da-ma-win partners can do within their communities to facilitate substance healing from a strengths-based perspective.

Results

Preliminary Descriptive Statistics: Trauma Survivors

Demographic factors. The descriptive statistics here included only individuals reporting self, parental and/or grandparental attendance at a Residential School establishment as a proxy measure of trauma. Estimated weighted sample demographics indicated that, 50.7% (*n* = 132, 184) were male, and 49.3% indicated that they were female (*n* = 128, 356). Regarding age, the RHS preliminary results for the phase two data indicate that adult data included individuals 18 years and older from 216 reservation communities across Canada. Specifically, the age variable was divided into three categories: 18-34 years (39.1% of participants); 35-54 years (41.4% of participants); 55 years and older (19.5% of participants). Income and education levels were explored as control variables in the greater context of resilience. As such, 37.3% (*n* = 94, 699) of participants indicated that they graduated from high school where as 62.7% (*n* = 159, 350) did not. In terms of income, participants were asked: "In 2007, did you receive any social assistance?". In response to this, 39.9% (*n* = 133, 874) indicated that they had, where as 60.1% (*n* = 88, 739) indicated that they had not.

Historical trauma. In examining the collective effects of trauma experienced within this group and across generations, an examination of Residential School attendance ensued. Table 1 below outlines attendance at these schools across the generations including the number of participants who attended (19.7%, *n* = 49, 800); the number of participants with at least one parent who attended (52.7%, *n* = 118, 962); and the number of participants with at least one grandparent who attended (46.2%, *n* = 76, 026). As can be seen from this information, the participants' parental generation composed the highest attendance rates at the Residential School establishments. In terms

of the experiences there, participants who indicated that they had attended a Residential

School were asked: "Do you believe that your health and wellbeing has been affected by

your attendance at residential school?". In response to this question, 54.3% ($n = 22,770$)

indicated that yes, their health was impacted and it was impacted in a negative way;

32.8% ($n = 13,986$) indicated that they experienced no impact; and 13.7% ($n = 5858$)

indicated that yes, their health was impacted and impacted in a positive way.

Table 1

Overview of Residential School attendance by Generation

Person of Reference	Attendance at Residential School (Yes/No)	Estimate	Weighted Estimate (*n*)
Participant	Yes	19.70%	49, 800
	No	80.30%	203, 626
Participant's Parent(s)	Yes	52.70%	118, 962
	No	47.30%	106, 783
Participant's Grandparent(s)	Yes	46.20%	76, 026
	No	53.80%	88, 672

Substance use. A frequency distribution was formulated for each substance investigated on the RHS as seen in Table 2, below. For each substance, a breakdown of the user typology as well as a total weighted estimate of the number of individuals who responded to the question regarding each substance is included. As can be seen from this table, alcohol and cannabis use reflect the highest proportions of moderate and high usage at 48.10% and 3.2% for moderate use and 15.40% and 18% for heavy use. All other drugs listed fall within a range of 0% to 1.6% for moderate and heavy use.

Table 2

Frequency Distribution of Substance Use in Historical Trauma Survivors

Substance	User Typology	Estimate	Weighted Estimate (*n*)	Total
Alcohol	Abstainer/Low	36.50%	56, 522	
	Moderate	48.10%	74, 637	
	Heavy	15.40%	23, 876	155, 034
Cannabis	Abstainer/Low	78.80%	194, 967	
	Moderate	3.20%	7980	
	Heavy	18%	44, 562	247, 510
Cocaine	Abstainer/Low	97.50%	243, 080	
	Moderate	1.30%	3245	
	Heavy	1.20%	2922*	249, 248
Amphetamine	Abstainer/Low	99.40%	248, 112	
	Moderate	0.30%	817*	
	Heavy	0.30%	349**	249, 655
Inhalants	Abstainer/Low	99.99%	249, 400	
	Moderate	**	**	
	Heavy	0.01%	123	249, 529
Sedatives	Abstainer/Low	98.0%	244, 211	
	Moderate	0.90%	2128*	
	Heavy	1.10%	2859	249, 198
Hallucinogens	Abstainer/Low	99.60%	248, 872	
	Moderate	0.30%	731*	
	Heavy	**	**	249, 927
Opioids	Abstainer/Low	97.90%	244, 270	
	Moderate	0.50%	1162*	
	Heavy	1.60%	3987	249, 420

*Large Coefficient of Variation, interpret with caution ($0.166 < CV < 0.33$)

**Some numbers were suppressed and not reported here due to a large coefficient of variation ($CV > 0.33$) or $n < 5$. This does not equal zero.

Resilience factors. On overview of the resilience factors for the historical trauma survivors is displayed by the figures below. As can be seen in terms of traditional spirituality in Figure 2, 43.7% report this to be very important in their lives, with 36.2% noting it to be somewhat important. Religious importance (Figure 3) was somewhat smaller, with 32.9% reporting this factor to be very important, and 35.4%, somewhat important. As seen in Figure 4, sometimes taking part in the community's cultural events was rated highest at 46.4% whereas 20.7% noted that they participated always or almost always and another 20.4% noted to rarely ever take part. Along with cultural significance (Figure 5), 69.9% of historical trauma survivors noted that they could speak or understand a First Nations language.

In terms of social support, participants were asked how often they had someone to confide in or talk about their problems to. As seen in Figure 6, "all of the time" was the most common response at 47.8%, with "most of the time" and "some of the time" reported as 25.4% and 20.2%. Similarly, experiences around power and control were explored in asking participants whether or not they agree with having control over the things that happen to them. As seen in Figure 7, the most common responses were strongly agree (36.5%) and agree (46.6%).

Figure 2   Proportion of historical trauma survivors reporting personal importance of traditional spirituality.
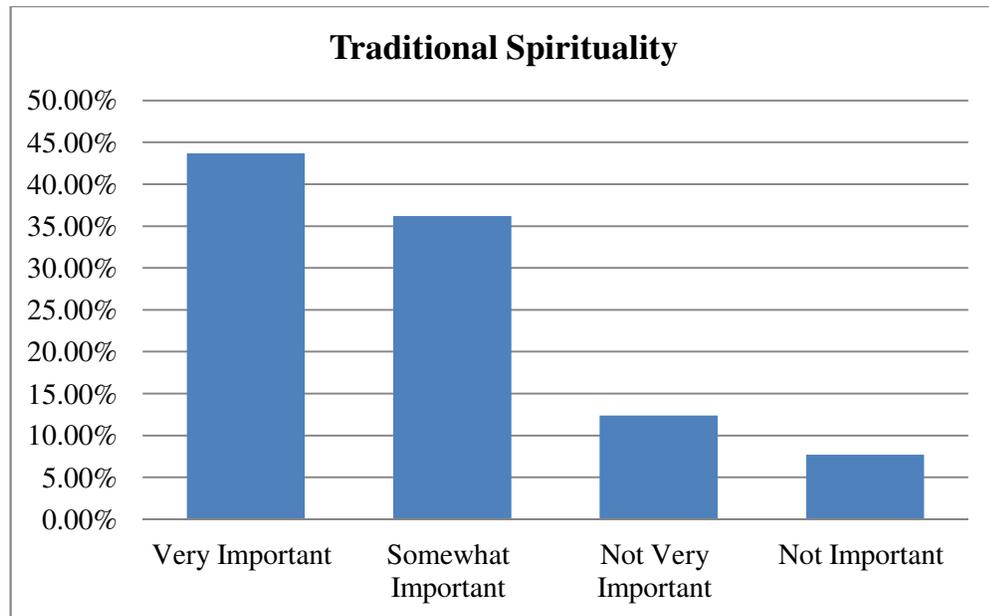
Figure 3   Proportion of historical trauma survivors reporting personal importance of religion.
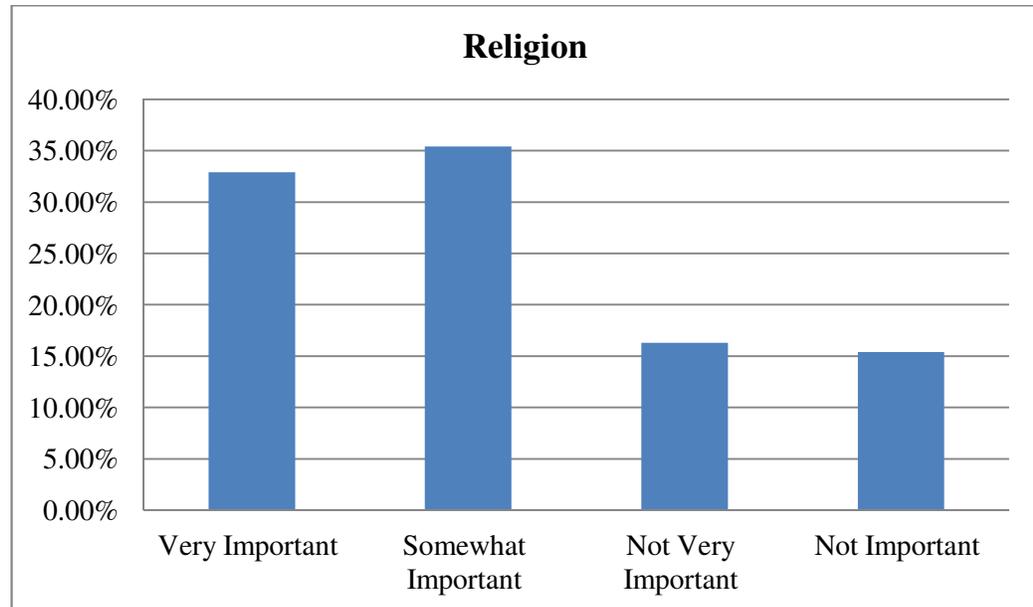
Figure 4   Proportion of historical trauma survivors reporting personal participation in community cultural events.

Cultural Participation
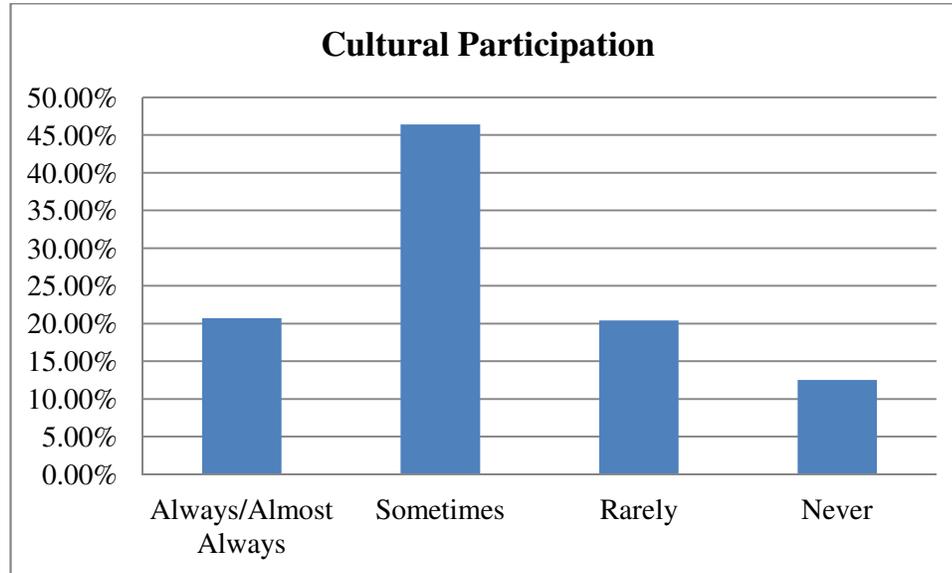
Figure 5   Proportion of historical trauma survivors reporting personal
                  ability in speaking or understanding a First Nations language.
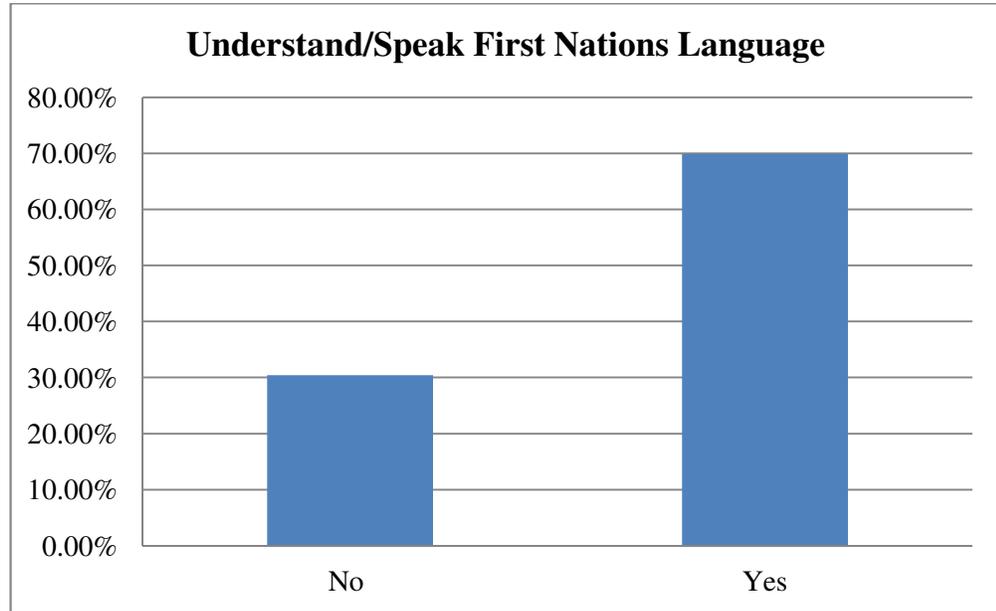
Figure 6   Proportion of historical trauma survivors reporting personal experiences around availability of social support.

Chart: **Available Social Support**

Y-axis: 0.00% to 60.00%

Bars:
- All of the Time: ~48%
- Most of the Time: ~25%
- Some of the Time: ~20%
- Almost none of the Time: ~7%

X-axis label: **"How often do you have someone to confide in or talk about yourself or your problems"**
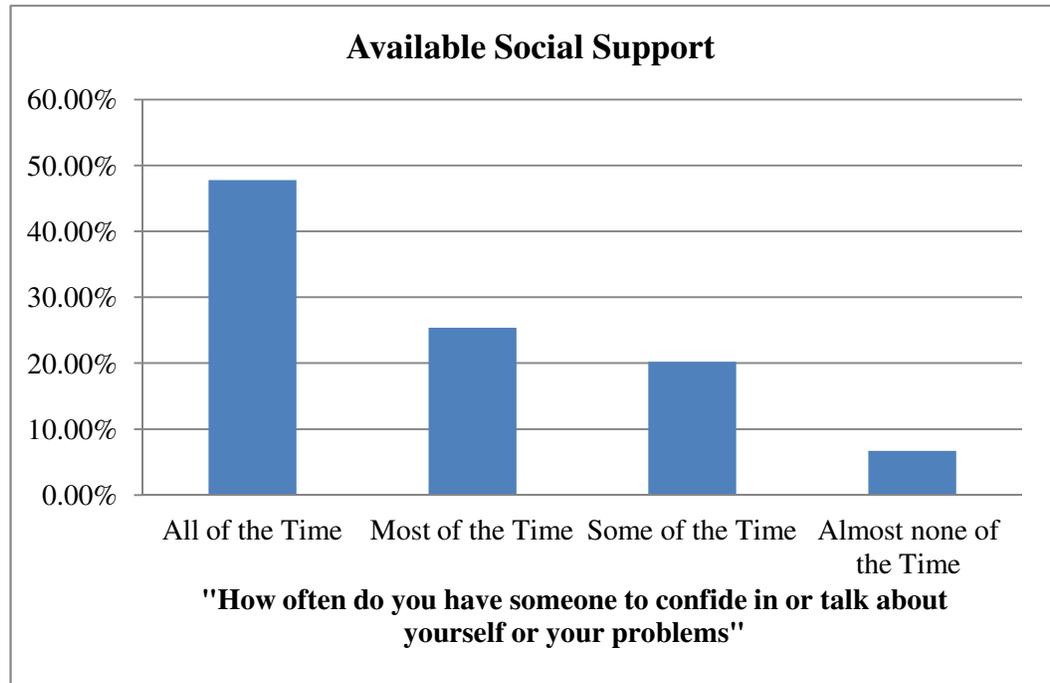
Figure 7   Proportion of historical trauma survivors reporting personal experiences of power and control.

Power and Control

"How strongly do you agree with: I have control over the things that happen to me"
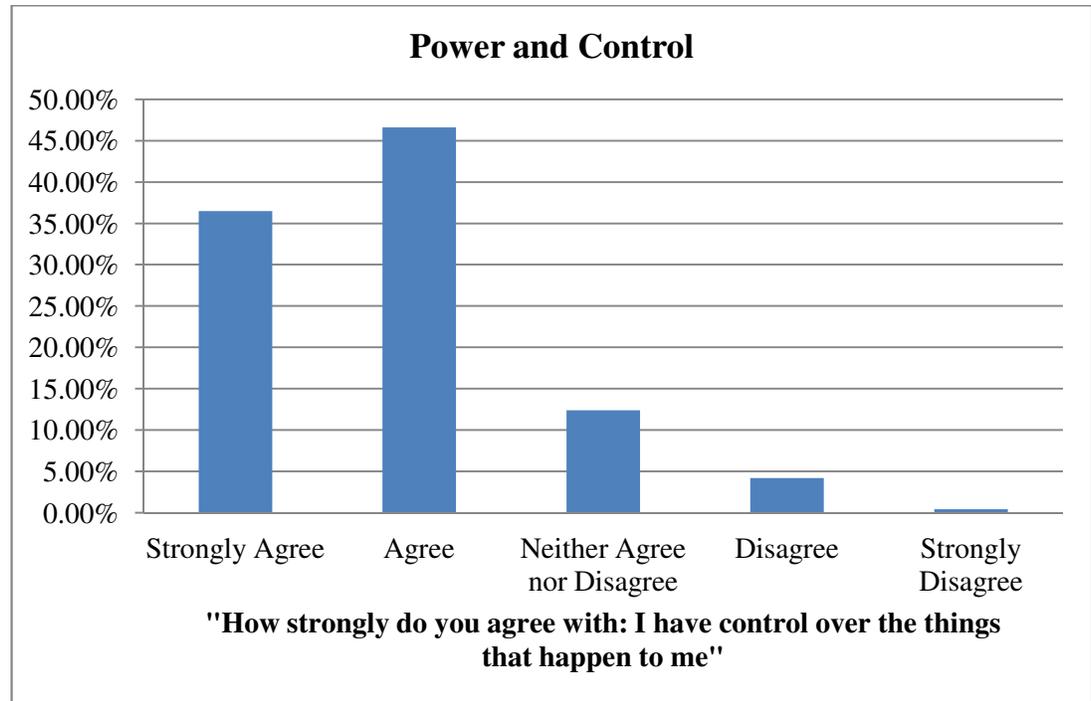
The sample data for this overview consisted of RHS data from individuals reporting abstinence/low substance use, moderate substance use and heavy substance use as well as familial attendance of a Residential School establishment. The data were primarily organized and analyzed using SPSS software so to inform our later predictions in a direct entry logistic regression model.

Gender. An overview of descriptive statistics was provided in exploring the effects of gender on the dependent variable, level of substance use. Based on the response patterns seen in Table 3 below, females comprise a higher proportion of the abstinence/low substance use group over males. On the other hand, males report a higher instance of moderate as well as heavy substance use patterns when compared to females.

Table 3

Overview of Substance Use Patterns by Gender for Historical Trauma Survivors

Gender	Abstainer/Low User	Moderate User	Heavy User
Male	46.10%	56.90%	64.70%
Female	53.90%	43.10%	35.30%

Resilience factors. Survey data was then reported around participants' experience with the resilience factors. Table 4 below provides an overview of the response patterns observed between the three levels of substance use and the experience with participation in cultural traditions, traditional spirituality, religion, available social supports, experiences of power and control, and finally, abilities with traditional languages.

Cultural Traditions. For this resilience factor, participants were asked: "Do you take part in your local community's cultural events?". As can be seen in Table 4 below regarding cultural traditions, indeed, differing response patterns were observed between the abstainer/low use group (21.8%) and the heavy users group (17.2%) in terms of always attending community cultural events. The moderate users group did fall between the abstainers/low users and heavy users group (20.5%). Conversely, this pattern was reversed regarding cultural participation in terms of responses to the 'rarely' option; the heavy users group did report high instances of rarely attending events (23.1%) when compared to the abstainers/low users group (19.2%). Again, the moderate user group fell between these two extremes (21.9%).

Traditional Spirituality. For this resilience factor, participants were asked: "How important is traditional spirituality in your life?". As highlighted in Table 4 below under the traditional spirituality section, the abstainer/low user group and the heavy user group too, displayed differing response patterns concerning the 'very important' option. Survey data revealed that abstainer/low users were more likely to report this resilience factor to be very important to them (44.7%) versus the heavy users group (40%). The moderate user group fell between these two groups (40.1%).

Religion. For this resilience factor, participants were asked: "How important is religion in your life? (eg. Christianity, Buddhism, Islam)". As outlined in Table 4 below

under the religion section, three differing response patterns were noted. The first was in regards to the 'very important' option. Abstainers/low users were more likely to report this resilience factor as being very important to them (35.3%) where as heavy users were less likely to report this (23.2%). Moderate users again fell between the two groups (27.3%).

Secondly, this pattern of significance reverses for the options of 'not very important' and 'not important', where heavy users were more apt to select this response (21.4% and 18.7%) when compared to abstainers/low users (14.9% and 14.3%). Moderate users fell between these two groups for the option of 'not very important' (21.2%); however, for the option of 'not important', they fell above both groups (18.8%).

Social Support. For this resilience factor, participants were asked: "People sometimes look to others for companionship, assistance, guidance or other types of support. Could you tell me how often each of the following kinds of support is available to you when you need them: Someone to confide in or talk about yourself or your problems". As highlighted in Table 4 below, again, differing response patterns were observed. The first was observed within the 'all of the time' option. Here, the abstainers/low users group were more apt to report experience with having a social support available all of the time (50.5%) when compared to the heavy users group (40.6%). Again, the moderate users group fell between these two groups (42.9%).

On the other hand, this pattern reversed when examining the option of 'some of the time'. Here, the heavy users group reported greater instances of having social support available some of the time (25.4%) when compared to the abstainer/low user group (18.3%).

Power and Control. For this resilience factor, participants were asked: "Please indicate how strongly you agree or disagree with the following statements: I have control over the things that happen to me". As can be seen from Table 4 below under the section of power and control, the abstainers/low use group did report the highest instances of 'strongly agree' and 'agree' responses to this resilience factor, whereas the heavy users reported the lowest instances of responses to this option, with moderate users falling between both groups. Alternatively, the 'disagree' option reversed this response pattern between the heavy users group (5.5%) and the abstainers/low users group (3.6%); the moderate users group fell above both of these groups (6.9%).

Language. For this resilience factor, participants were asked: "Can you understand or speak a First Nations language?". As can be seen from Table 4 below, the proportions of responses among the groups were approximately equal; abstainers/low users (69.9%) , moderate users (67.5%), and heavy users (70.0%).

Table 4

Effects of Resilience Factors on Patterns of Substance Use for Historical Trauma Survivors

Resilience Factor	Likert Response	Abstainer/Low User	Moderate User	Heavy User
Cultural Traditions	Always	21.8%	20.50%	17.2%
"Do you take part in your	Sometimes	46.80%	45.80%	45.70%
local community's				
cultural	Rarely	19.2%	21.90%	23.1%
events?"	Never	21.10%	11.80%	14.00%
Traditional Spirituality	Very Important	44.7%	40.10%	40%
"How important is				
traditional	Somewhat Important	35.20%	36.50%	40.10%
spirituality in your life?"	Not Very Important	11.80%	14.40%	14.40%
	Not Important	8.30%	9.10%	5.60%
Religion	Very Important	35.3%	27.30%	23.2%
"How important is				
religion	Somewhat Important	35.50%	32.60%	36.70%
in your life?"	Not Very Important	14.9%	21.20%	21.4%
	Not Important	14.3%	18.80%	18.7%
Social Support	All of the Time	50.5%	42.90%	40.6%
"How often do you have	Most of the Time	25.50%	24.70%	25.70%
someone available to	Some of the Time	18.3%	24.70%	25.4%
confide in or talk about	Almost None of the Time	5.80%	7.70%	8.40%
yourself or your				
problems?"				
Power and Control	Strongly Agree	36.80%	36.20%	35.20%
"How strongly do you agree				
agree	Agree	48.00%	43.50%	44.80%
with: I have control over the	Neither agree nor disagree	11.30%	13.20%	13.70%
things that happen to me?"	Disagree	3.60%	6.90%	5.50%
Language	No	30.10%	32.50%	30.00%
"Can you speak or	Yes	69.90%	67.50%	70.00%
understand a FN				
language?"				

Regression Analysis: Descriptive Statistics for Trauma Survivors versus General Population

As were observed in the preliminary descriptive statistics above, large coefficients of variation and small group numbers were observed in the moderate use group. As such, this group was left out in going forward with the regression analysis. Here, a direct entry logistic regression was run, including the predictor variables by means of assessing their effects on the outcome variable, substance use. Substance use was measured as a dichotomous variable including abstainers/low users on one end, and heavy users on the other.

Demographic factors. Unlike the previous observations, the regression analyses here involved not only those reporting a familial history of Residential School attendance, but all adult participants of the RHS reporting abstinence/low substance use as well as heavy use . This was so, as to control for effects between trauma survivors and those not reporting a history of trauma as measured through this attendance criterion. A general overview of participant demographics can be seen in Table 5 below. In terms of the weighted sample demographics, 48.7% ($n = 57,346$) indicated that they were male, and 51.3% indicated that they were female ($n = 60,497$). Regarding age, the RHS preliminary results for the phase two data indicate that adult data included individuals 18 years and older from 216 reservation communities across Canada. Specifically, the age variable was divided into three categories: 18-34 years ($n = 46,079$); 35-54 years ($n = 48,736$); 55 years and older ($n = 23,028$). Gender, age, income and education levels were explored as control variables in the greater context of resilience.

Table 5

Overview of Factor Demographics for Adult First Nations Population

Variable	Level	Weighted Count	Weighted Percent
Substance Use	Abstainer/Low User	89128	75.60%
	Heavy User	28715	24.40%
Residential School Attendance - Personal	No	94400	80.10%
	Yes	23443	19.90%
Residential School Attendance - Parent(s)	No	64513	54.70%
	Yes	53330	56.10%
Residential School Attendance - Grandparent(s)	No	66134	56.10%
	Yes	51709	43.90%
Gender	Male	57346	48.70%
	Female	60497	51.30%
Age	18-34	46079	39.10%
	35-54	48736	41.40%
	55+	23028	19.50%
Graduate from High School	No	71704	60.80%
	Yes	46139	39.20%
Received Social Assistance in 2007	No	73388	62.30%
	Yes	44455	37.70%
Traditional Spirituality Important	Important	93602	79.40%
	Not Important	24240	20.60%
Religion Important	Important	79248	67.20%
	Not Important	38595	32.80%
Participation in Cultural Events	Participation	82404	69.90%
	No Participation	35439	30.10%
Language	No	34112	28.90%
	Yes	83731	71.10%
Experiences of Power and Control	Agree	100282	85.10%
	Disagree	17561	14.90%
Available Social Support	Yes	89038	75.60%
	No	28805	24.40%

In terms of the resilience factors, they too, were grouped dichotomously, as can be seen in Table 6 below, outlining the methods for which each predictor variable was defined. Trauma was again investigated in terms of generational attendance at Residential School establishments. The trauma variable itself was measured in three groups where participants' indicated that they themselves, a parent and/or a grandparent had attended one of these establishments.

Traditional spirituality and religion were measured in this study by means of 'important' or 'not important'; RHS responses of 'very important' and 'somewhat important' were placed in the category of important whereas responses of 'not very important' and 'not important' were measured here as not important. Cultural participation too, was measured dichotomously in this study, in categories of 'participation' and 'no participation'; RHS responses of 'always' and 'sometimes' were placed in the participation category, whereas 'rarely' and 'never' were considered here as, no participation.

Next, experiences of power and control were divided into two categories here as well; these included 'agree' and 'disagree'. On the RHS, participants were asked: "Please indicate how strongly you agree or disagree with the following statements: I have control over the things that happen to me". Participant responses of 'strongly agree' and 'agree' were placed into the agree category in this study whereas 'neither agree nor disagree', 'disagree' and 'strongly disagree', the disagree category here. Lastly, social support was explored on the RHS: "People sometimes look to others for companionship, assistance, guidance or other types of support. Could you tell me how often each of the following kinds of support is available to you when you need them: Someone to confide in or talk about yourself or your problems." In this study, available social support was also

measured dichotomously as either yes or no; RHS responses of 'all the time' and 'most of

the time' were placed in the yes category here where as 'some of the time' and 'almost

none of the time' were measured as no.

Table 6

Overview of Factor Definitions for the Logistic Regression Analysis

Variable	Measurement
Residential School Attendance - Personal	No = 0
	Yes = 1
Residential School Attendance - Parent(s)	No = 0
	Yes = 1
Residential School Attendance - Grandparent(s)	No = 0
	Yes = 1
Gender	Female = 0
	Male = 1
Age	55+ years = 0
	35-54 years = 1
	18-34 years = 2
Graduate from High School	No = 0
	Yes = 1
Received Social Assistance in 2007	No = 0
	Yes = 1
Traditional Spirituality	Important = 0
	Not Important = 1
Religion	Important = 0
	Not Important = 1
Participation in Cultural Events	Participation = 0
	No Participation = 1
Language	No = 0
	Yes = 1
Experiences of Power and Control	Agree = 0
	Disagree = 1
Available Social Support	Yes = 0
	No = 1

Regression Analysis: Results

Table 7 below outlines the logistic regression results predicting substance use patterns as predicted by each of the predictor variables. Several outcomes merit mention from these results. Firstly, in terms of the trauma variable, nothing reached significance within the 95% confidence interval limit, however, both parent and grandparent attendance of a Residential School establishment approached significance (p = .096 and p = .092) indicating increased likelihood of substance use by approximately one and one-fifth times for these participants (Exp(b) = 1.20; Exp(b) = 1.23).

Regarding the control variables, each one of gender (p < .001), age (p < .001), education level (p < .001), and income (p < .001) reached statistical significance. Males were found to be at one and three-quarter times the risk of females for substance (Exp(b) = 1.75) use whereas in terms of age, younger age groups were found to be at increased chance for use. Here, it was observed that 18-34 year olds were just under eight times more likely to use (Exp(b) = 7.81) and 35-54 year olds just under four times as likely than the age group of 55 plus years (Exp(b) = 3.90).

Education level was explored in terms of completion of high school. It was found that those who did not obtain a high school diploma were just under one and three-quarter times more likely to use when compared to those who had obtained this level of education (Exp(b) = 1.73). Lastly, income level was measured in terms of receiving or not receiving social assistance in 2007. Observations from the analysis indicate that receiving social assistance doubled the likelihood of use as compared to those not in receipt of this (Exp(b) = 2.07).

Resilience Factors. For the most part, the significance patterns of the resilience factors as observed in the descriptive statistics closely mirror the regression results here.

Both traditional spirituality (p = .014) and religion (p = .001) reached statistical significance. Despite the mutual significance, a different directionality was observed such that individuals reporting importance in traditional spirituality were at an increased likelihood of use (Exp(b) = 1.38) whereas importance in religion was less predictive of use (Exp(b) = 0.67).

Participation in cultural events approached statistical significance (p = .068) indicating that those who took part in the community's functions were less likely to use substances (Exp(b) = 0.81). Available social support was also found to be significantly associated with decreased chance of substance use (p = .014) as those reporting this resilience factor to be available to them were less likely to use (Exp(b) = 0.73). On the other hand, ability to speak a First Nations language as well as experiences around power and control did not reach statistical significance.

Table 7

Logistic Regression Model predicting Substance Use Patterns among RHS Participants

Variable	Wald Chi-Square	Significance Level	Odds Ratio (95% CI)
Residential School Attendance - Personal	χ2 (1) = 0.846	p = .358	1.145 (.86, 1.53)
Residential School Attendance - Parent(s)	χ2 (1) = 2.775	p = .096	1.201 (.97, 1.49)
Residential School Attendance - Grandparent(s)	χ2 (1) = 2.843	p = .092	1.232 (.96, 1.58)
Gender	χ2 (1) = 30.692	p < .001	1.751 (1.43, 2.14)
Age (18-34 vs. 55+)	χ2 (2) = 114.312	p < .001	7.813 (5.33, 11.46)
Age (35-54 vs. 55+)			3.902 (2.75, 5.54)
Graduate from High School	χ2 (1) = 23.998	p < .001	1.735, (1.39, 2.17)
Received Social Assistance in 2007	χ2 (1) = 39.952	p < .001	2.072 (1.645, 2.60)
Traditional Spirituality Important	χ2 (1) = 6.023	p = .014	1.376 (1.06, 1.78)
Religion Important	χ2 (1) = 10.696	p = .001	0.668 (0.52, .853)
Participation in Cultural Events	χ2 (1) = 3.341	p = .068	0.813 (0.65, 1.02)
Can Speak or Understand First Nations Language	χ2 (1) = 2.648	p = .104	0.834 (0.67, 1.04)
Have Control over Things that happen to Me	χ2 (1) = 2.081	p = .149	0.819 (0.62, 1.08)
Have available Social Support	χ2 (1) = 5.985	p = .014	0.732 (0.569, .0942)

Discussion

The goal of this study was to explore the effects of historical trauma on patterns of substance use from a strengths-based perspective. As such, we set out to examine how different aspects of resilience impact First Nations adults across all patterns of substance use, given their collective group experience around historical trauma. Specifically, we explored differences in gender and resilience factors between abstinent/low users, moderate substance users and heavy substance users in a sample of adult First Nations trauma survivors and adult children and grandchildren of survivors living across Canada.

From this, it was hypothesized that individuals who abstain from substance use would report significantly more experience with resilience factors of cultural participation, traditional spirituality, religion, access to supportive relationships, experiences of power and control, and traditional language familiarity. On the other extreme, we predicted that heavy users would report significantly fewer experiences with these variables; this combination was also predicted to be more prevalent among females. Concerning the moderate users, we hypothesized that they would be more likely to report a significant increase in experience with these resilience factors when compared to the heavy users, but fewer experiences in comparison to abstainers/low users.

Predictive Variables of Resilience

With respect to the findings observed in this study, many were in line with our predictions based on previous speculations in the relevant literature. Primarily, in terms of the preliminary descriptive statistics involving only those identified as historical trauma survivors, hypothesized response patterns between groups were observed in most cases, regarding resilience factors. The moderate users group did tend to fall between the other groups' experiences with the resilience factors. This was in line with our predictions as

we postulated that the moderate users would be more apt to report experience with the resilience factors than the heavy users, but less experience with them when compared to the abstainers/low use group. However, more specific statistical analyses must ensue to support significance around these observations.

A limitation of previous research is seen in the absence of a moderate group comparison. In such substance-related studies, particularly within the adult Canadian Aboriginal population, this group is lacking as many past studies of this nature focus on either extremes. This is something that future research may look further into perhaps, from a qualitative perspective; particularly within specific geographical regions, as seems to be the trend in the literature as opposed to a general national sample.

Trauma. Intergenerational, or historical trauma, is a phenomenon known as unintentional transmission of trauma from one generation to the next. What is of particular importance in the context of the Aboriginal people in Canada is their collective experience of this phenomenon as a group. This historically transmitted trauma continues to exist in today's populations of Aboriginal people living in Canada, leading to a historical trauma response; a behavioural manifestation of transmitted trauma, substance use being a common feature.

Brave Heart (2003) produced a framework for understanding this in reflecting upon historical and modern losses. Historical losses include histories of colonization, assimilation and Residential School establishments. From these, traumatic out of home placement ensued for Aboriginal children with forced language, culture, tradition, and spirituality; many of these out of home and school environments resulted in instances of emotional, physical and sexual abuse (Brave Heart, 2003). Wesley-Esquimaux and Smolewski (2004) add to this in drawing focus to the strong effects of the Residential

Schools. They highlight the profound impact of historical trauma on women of childbearing age who have mothers, grandmothers and/or other family members who attended the Residential Schools.

Due to the important and profound impact of the Residential School establishments, the current study identified experience of trauma as indicated through attendance of these schools. To capture the historical, generational component, informal group comparisons were made between observations had for the levels of substance use involving individuals reporting attendance there, as well as attendance of a parent(s) and/or grandparent(s). These historical trauma survivors were then compared with the rest of the general adult group, those not reporting attendance, in the regression analysis. Calculation of substance use likelihood for these two groups ensued. It was found here that participants reporting on the RHS that a parent or grandparent attended one of these schools indeed increased their likelihood for substance use. Despite this finding not reaching statistical significance at the 95% confidence interval level, it approached it, indicating an area for future research in more clearly understanding the mechanisms at work here.

However, a limitation of the current study is the lack of specificity around experiences at the Residential Schools. Perhaps gaining more qualitative insight around the types of experience at these schools could shed more light on the effects and impacts of trauma in relation to substance use. What is more, specific forms of trauma, frequency and age of onset could not be controlled for in this study, all important factors in considering traumatic prognosis (Herman, 1992). On the other hand, not having a personal or familial past with the residential schools does not rule out other experiences of trauma in one's life; this was not explored or controlled for in the comparison group,

not reporting a history with the schools. Finally, great importance within the literature is placed on the notion that historical trauma in the Aboriginal context occurred as a massive, group experience. This happened not only through the residential schools, but through colonization and various other assimilative and racist means (Brave Heart 2003). In consideration of this, as well as through a cultural lens of collectivism and cooperation, it becomes difficult to compartmentalize the effects of trauma when 'family' is often viewed as blood members, clan, tribe, formal and informal adoption (Waller et al, 2003).

Nonetheless, the observations seen here are in line with other findings within the literature. Such studies have found that past abuse as well as Aboriginal status in general, was predictive of higher HIV rates from injection drug use (Craib et al, 2003; Pearce et al, 2008). In the greater social context, the authors from these studies relate entrenched poverty and historical trauma experienced by this population to disproportionately high rates of substance use. Further and more detailed exploration of residential school experiences within this population are needed to more clearly come to understand the effects of trauma and how this is passed on generationally.

Gender, age, education and income. There has been extensive research conducted on the topic of substance use patterns between genders, particularly with regards to experiences of trauma. Some past work completed by Najavits et al (1997; 1999) has found high rates of the dual diagnosis of substance use disorders and post-traumatic stress disorder within women (30% to 50%). These female experiences of trauma typically tend to arise from repetitive childhood physical and/or sexual assault whereas rates for men are found to be two to three times lower and typically stem from combat or crime trauma (Najavits et al, 1997).

In terms of the present study, our results were not in line with these gender-specific-trauma/substance use observations, as we found that males were more likely to use substances. Several different possibilities may be at work here, producing this discrepancy. The Sonne et al (2003) study reported gender-specific results in line with the Najavits studies; however, it was found here that when controlled for substance type, males did report a greater use intensity whereas females were more likely to test positive for other substances at treatment, most notably, cocaine. Our study did not differentiate substance users by specific substance type as the aforementioned observations. Perhaps future studies might differentiate user typologies by specific substance to note different gender responses.

What is more, Sonne et al (2003) also found that PTSD more often preceded substance dependence in women than men; this is consistent with the substance use literature highlighting that women have been found to use in response to a stressor, whereas men tend to use as an overall lifestyle (Sonne et al, 2003; Compton et al, 2000). Such findings with respect to gender and substance use imply differences in etiologies of this dual diagnosis. This highlights the importance of understanding the mechanisms underlying acute, specific effects of blunt trauma versus those underlying historical trauma which ensued as a group, over and across generations. Trauma was measured in this study in a historical sense, including participants reporting they themselves, a parent or a grandparent had attended a residential school. Therefore, not each participant themselves had attended a school nor could they report on the potential experiences of their parents or grandparents as being solely negative; 54.3% (unweighted $n = 1344$) indicated that yes, their health was impacted and it was impacted in a negative way.

What is more, specific forms of trauma, frequency, and age of onset could not be controlled for this way either, all important factors in considering traumatic prognosis (Herman, 1992). Perhaps, a collective multigenerational experience of trauma lends itself more to a 'lifestyle' response as seen more frequently in males, as this trauma has been present, extending across cohorts.

Similarly, as was observed in this study, younger age groups were at significantly increased risk for using substances. Not surprisingly, the phase one RHS results report (First Nations Centre, 2002/03) noted increased injury rates in those reporting use of alcohol. Statistics from the literature with regards to a lifestyle of risk-taking behaviours resulting in violence and injury support this gender dichotomy. According to the phase two preliminary report from the RHS (FNIGC, 2011), young males age 18-24 years are at significantly higher risk than females of that age group for reporting injury at 29.8% versus 19.7%. With increasing age, this increased risk observed with males tends to drop off, closely mirroring that of females at age 55 (12.9% versus 12.6%).

Work from Dell and Lyons (2007) closely mirrors these findings in that they note that predictors of heavy drinking in Aboriginal populations tend to be young, males from lower socio-economic statuses. Given the complex nature of the relationship between alcohol and these factors, it tends to be very much involved in the higher rates of injury, violence and suicide observed in this group. They end by noting that resulting Aboriginal deaths due to alcohol overuse are almost twice as high as those occurring within the general Canadian population.

Looking more closely at the results observed here, we too, not only found younger

males to be at a greater likelihood of substance use, but we also noted that not attaining a

high school diploma as well as receiving social assistance a year prior to the study were

also predictors of substance use. In line with this, the phase two RHS preliminary results

(FNIGC, 2011) indicate a higher proportion of adult males lacking a high school diploma;

females were more likely to have a higher level of education attainment across the board,

including post-secondary education. Interesting interactions were noted in these results

between substance use and education level. Most notably, as the level of education

increased, the proportion of daily smokers tended to decrease. Specifically, this decrease

in proportion of daily smokers was especially significant when comparing respondents

with less than a high school education to those having obtained graduate studies.

Also with respect to education, the RHS phase one People's Report (FNIGC,

2002/03) found that First Nations parents who report having obtained formal education

are more likely to play an active role in the traditional cultural socialization of their

children. In light of this, it has been found that communities with high rates of

educational attainment provide children and youth with higher rates of 'role-model'

examples, impacting drop-out and teen pregnancy rates (First Nations Centre, 2002/03).

As such, it may be noted that higher educational attainment not only facilitates resilience

against unemployment and poverty, but sets an example for children to look up to and

follow.

All in all, from this it is clear that for youth, identifying as male, indicating no

high school diploma, and a low income all pose as some of the potential stressors in

prediction of substance use. Future research is needed in the area of Aboriginal substance

use patterns particularly in light of historical trauma versus acute or generational instances of trauma as primarily seen in the literature. The unique group experience of trauma, colonization and assimilation pose as special considerations in exploring the relationship between gender-related trauma experiences and substance use patterns. This also draws importance to other contextual factors composing social determinants of health. Here, age, income, and education level seem to be quite prominent and warrant further consideration in a strengths-based approach to healing.

Enculturation. Previous research has defined cultural participation, or enculturation, as the degree to which an individual is embedded in his or her cultural traditions as evidenced by traditional practices, spirituality, and cultural identity (Whitbeck et al, 2004; Zimmerman et al, 1994). As can be seen from such a definition, 'cultural participation' is embodied through a vast number of experiences found to act as resilience factors against such stressors as substance use (Whitbeck et al, 2004; Torres-Stone al, 2006).

As is consistent with the past literature around cultural association and participation, we did observe differing response rates for each group involving trauma survivors alone. The direction of these responses was observed as expected in that the abstainer/low users group were more apt to report higher rates of cultural participation than the heavy users group; the same was found in comparison to the moderate group.

Once opened up to the general adult population, this resilience factor approached significance in the regression analysis. Although this was not found to be significant, possible explanations may account for this based on the nature of how this cultural

information was collected. On the RHS, participants were asked: "Do you take part in your local community's cultural events?". In their study examining traditional activities as social determinants of health in Canada's First Nations people, Wilson and Rosenberg (2002) highlight the need for more specific measures of traditional activities rather than grouping them all into a single measure. This removes the ambiguity and conflation that can arise from one, very broad, variable.

For example, in their study, it was found that the odds ratio for the traditional hunting variable predicted that those who had not reported hunting, fishing or trapping their food were actually less likely to be unhealthy compared to those who had. The finding here may be interpreted in various ways. Primarily, one may take from this that hunting and fishing supplement diets, thus, representing a positive predictor of health. Alternatively, it may also serve as an indirect measure of poverty as a last resort to finding food, thus representing a negative covariate of health. Both Wilson and Rosenberg (2002) as well as similar studies from Torres Stone et al (2006) and Whitbeck et al (2004) note that traditional activities can often be defined numerous ways including, but not limited to, hunting, fishing, trapping, storytelling, dancing, pow-wows, etc. This calls for future work to be more specific in determining what relationship given cultural activities have with resilience and over all, determinants of health.

What is more, it is probable that on a national scale, much variance can be found from community to community in the availability and frequency in which cultural activities occur. When one misses out on one or two events, but fewer cultural gatherings and activities occur overall in that community, then this individual's participation rating may look different from someone who missed the same couple of events but had many

more opportunities to participate. As such, an examination of cultural participation must occur on a community level in terms of the rates in which cultural actives can and do take place.

Along with this, Dell and Lyons (2007) note that many First Nations communities hold an abstinence and prohibition policy regarding substances. This arises mainly from the fact that many Aboriginal traditions, customs, values, and cultural activities are incompatible with substance use; individuals involved with substance use are viewed as "out of balance" (Spicer, 2001). However, zero-tolerance policies can lead to further marginalization and exclusion from cultural participation for those already struggling with substances as depicted in the following words of a woman from British Columbia (Poole, 2006):

> If you say that I can't come [to your program] because I am using, then you're telling me that I don't deserve to heal. Until you're clean, you're not good enough. I already have a core belief that I am not good enough and that message just affirms that core belief.

As such, it is so important to not only determine whether or not participants actually participated in cultural events, and which events, but determine whether or not they *wanted* to attend the event. It is important to remember the barriers faced by those, not only using substances, but using in an environment where prohibition is the norm. As such, a very different picture is formed between what one *wishes* to be a part of and what they are *permitted* to be a part of. We were not able to capture this information in our

study; this is an important future direction for research, community development and resilience from substance use.

Further in terms of enculturation, some interesting findings were observed regarding the resilience factors of traditional spirituality and religion. Consistent with trends in the literature, the preliminary overview found that 43.7% of participants noted this resilience factor to be very important to them, and 36.2% noted it as somewhat important; all in all, a large part of the survivor population placed at least some importance on it. Once opened up to the general population in the regression analysis, 79.4% noted this factor to be important to them. This is consistent with Aboriginal philosophies of health centred around the medicine wheel where overall balance and wellness comes from balance amongst not only physical, mental, and emotional elements, but also spiritual (FNIGC, 2011). In terms of the regression specifically, the hypothesized direction regarding traditional spirituality was completely reversed, with the general adult population rating this factor as 'important', being more likely to use.

What is interesting about the way that this factor was explored is that participants were asked how *important* traditional spirituality is to them. In many of the past studies of this nature, again, traditional spirituality was broken down into specific components, not only assessing the importance of this factor in one's life, but specifically, one's actual incorporation of this factor into their life (Whitbeck et al, 2004; Torres Stone et al, 2006). Perhaps here too, as with cultural events, substance users within the community are marginalized from spiritual gatherings when using, leading to inability to incorporate this factor fully into one's life, resulting in further marginalization. A direction that further research may focus on includes more specific measures of spirituality, as well as potential

differences found between finding this factor important and actually incorporating and practicing it in one's life.

Thus, perhaps the same explanation as above is playing out here to a more extreme; this factor has been deemed as important to the majority of the adult population. However, deeming something important and actually practicing it in one's life are two conceptually different places. Perhaps the fact that the individual does find spirituality to be important and knows that using substances is incompatible with being spiritually balanced perpetuates the cycle as further means of covering uncomfortable feelings of guilt, shame, past trauma, etc. Perhaps also, marginalization from zero-tolerance policies prevents one further from breaking this cycle by reintroducing spirituality and the shared fellowship of this amongst the community into their life.

On the other hand, there were significant findings regarding religion congruent with the direction predicted in the regression analyses; this was suspected from the outcomes seen in the preliminary descriptive statistics. Firstly in terms of the preliminary overview involving survivors, abstainers/low users were more likely to report this resilience factor as being very important to them when heavy users were less likely to report this with moderate users falling between the two groups. This pattern then reversed for the options of 'not very important' and 'not important', where heavy users were more apt to select this response when compared to abstainers/low users; moderate users again, fell between these two groups for the option of 'not very important'. Along with this, regression results indicated that those rating this factor as important to them were less likely to use.

Many forces may be underlying these results and the discrepancy between the literature and resiliency found in traditional spirituality. Despite the response averages for

each group going in the direction we expected, there were no significant differences between the groups. With regards to the traditional spirituality/religiosity split, Hazel and Mohatt (2001) note that little research currently exists on alcohol cessation from a traditional spirituality perspective. Rather, much of this research is rooted in Christian foundations as exemplified in the Alcoholics Anonymous 12-step program. Along with this, Torres-Stone et al (2006) make note that future research is needed to determine potentially different mechanisms underlying lifetime substance abstinence versus maintenance of sobriety. Our study did not control for these differences. As such, it may be possible that other religious resources have been used in abstinence and/or sobriety due to lack of information and accessibility arising from traditional spirituality around this issue. Also, many of the past studies reporting the significance of traditional spirituality tend to include a select number of smaller communities. The findings here again could be the result of a general national sample where the unique practices of smaller communities may be lost.

Lastly, previous investigations of enculturation within this field have incorporated aspects of language comprehension and speaking ability (Whitbeck et al, 2004; Torres-Stone al, 2006). As was demonstrated in these studies, 'language' fell under the category of cultural participation. Consistent with this, language was described as important in the RHS phase one report (First Nations Centre, 2002/03): "Language and culture are intertwined. They are intrinsic to the total health of the total person and they are related to all other aspects of health" (pp. 33).

With respect to language, the current study did not find a difference in response patterns between any of the groups; very similar proportions of language abilities were reported across each of the user typologies. Although this is not what we were expecting

to find based on the above accounts of language and its relation to health, again, there likely exists many potential explanations for this. As was also reported in the RHS phase I report, competency with a First Nations language has been linked to barriers in accessing services, particularly, health care and the quality of that health care (pp. 33). Further research is needed in investigating the mechanisms underlying the benefits of language proficiency in a within First Nations culture, but then also how this may result in barriers to other health related services essential to resiliency.

Social support. Family has been identified as another source of resilience against substance use. Waller et al (2003) found this to be so from their qualitative study involving Indigenous adolescents from the Southwestern United States. In the current study, two significant results were observed regarding social support. When asked whether participants had someone available to talk to when needed, the abstainers/low use group indeed, were more apt to report experience with this factor compared to the moderate group and heavy users groups. Conversely, when reporting that someone was available to talk to "sometimes" (see Appendix A), the heavy users responded more so to this option when compared to the abstainers/low users. Regression results were in line with this preliminary overview as it was found that available social support significantly reduced the likelihood of using.

These findings are consistent with the Waller et al (2003) study in that social support was found to be a significant factor in abstinence/low use. Although our study did not specify the exact source of social support, Waller et al (2003) points out that among First Nations people, family is known as a complex web of relationships including, but not limited to, relations by blood, clan, tribe, formal and informal adoption. This tends to foster attitudes of interdependence and from this; leads family to play a large role in the

life of an Aboriginal individual. As such, this speaks to the importance of family as well as the influential support they can offer against substance use.

Power and control. Feeling as though one has power and control over aspects of their life has been found to be an important resilience factor. In support of this, Ungar et al (2008) examined aspects of resiliency in specifically, Canadian youth that fit an 'at-risk' description in the context of a larger 11-country international qualitative study. It was found that no single pattern of adaptive behaviour could be identified across the entire international sample of youth or even among the Canadian youth within this study. However, the researchers for this study did find seven themes common to all participants internationally including, experiences of power and control.

In the context of the present study however, regression results similarly did not produce a significant finding for this variable when opened up to the general adult population. This finding was quite surprising as 85.1% indicated that they agreed or strongly agreed with the notion that they have control over the things that happen to them; further implying that a majority of the general population feels as though they have some power over the things that happen in their lives.

This being said however, findings from the literature rooted in culturally collectivist perspectives indicate that views around power are seen differently than typically promoted in more Westernized cultures (Redpath & Nielsen, 1997). This work has come from the business world in which Aboriginal-operated organizations have been seen to promote collectivist ideals in reluctance to compete, emphasis on consensus decision-making, and balancing family needs with business goals (Anders & Anders, 1986; Dacks, 1983; Dana, 1996). Traditionally, 'power-distances' tend to be small between individuals in Aboriginal cultures, where interdependence and connectedness is

fostered (Anderson, 1995). As such, decisions about oneself and their community tend to be made not by one person, but by many. In light of this, it could be that individuals do feel that they have a voice and important place in determining their future as seen in the culturally small power differentials, however, this resilience factor is perhaps not as heavily weighted as others as possessing power in such a culture is not as domineering as it is in the Western world.

Although our findings did not reach significance as in the Ungar et al (2008) study, implications may be had for future research in more clearly determining aspects of power and control in the lives of adults versus youth. As the Ungar study involved youth, in a transition period of life where gaining more independence is paramount, perhaps this factor is not as focal in the lives of adults as other resilience factors. More research is needed in clarifying the mechanisms underlying this aspect of resilience and age.

Limitations. Despite the promising findings highlighted in this study, there exist some limitations to consider both in terms of interpretation of this work as well as directions for future research. To begin with, this study utilized data collected nationally, from 216 different reservation communities across Canada. The benefit to this approach is that a large and diverse sample can be taken, highlighting more generalized trends across a large geographical region. The limitation to this approach however, is that the trends and tendencies noted in specific regions can be lost when diluted into a more general, national sample. As such, many studies of this nature tend to focus primarily on a small number of specific regions. Also within this vein, RHS data are collected within reservations only. As such, data from urban samples is neglected.

Moreover, another possible limitation of the current study is that it too, neglects to address the differences in lifetime abstinence versus cessation versus maintenance of sobriety. As suggested by Torres Stone et al (2006), more longitudinal work must be done in examining possible differences in resilience factors regarding these three different groups. The present study only examines substance use trends within the past 12 months of completing the survey. Thus, it includes lifetime abstainers as well as those possibly maintaining sobriety within the same category. Future research might focus on the possible differences found within this group.

In terms of substance use, past research has found that incorporating collateral data from other sources close to the participant can promote more accurate self-report (Cunningham et al, 2004). This was supported by the data from Cunningham et al (2004) where participants who provided collateral information reported increased consumption of alcohol and experienced more consequences when compared to those who did not provide collateral information. In this study, solely self-reported data was collected and interpreted, thus, running the risk of potential underreporting or inaccuracies in reporting. Suggestions for future research include incorporation of collateral information in analyzing substance use patterns.

Another limitation of the present study arises from utilization of secondary data. In not designing the surveys and data collection process personally, our study was constructed around this pre-existing data. In many cases such as trauma, cultural participation, and spirituality, variables were collected as aggregates or proxy measures for other more specific and informative information. As such, some of the measures used in our study may have missed important information not captured by this method. Future

studies of this nature may consider using more specific and perhaps qualitative measures useful in capturing valuable, specific information.

A final possible limitation of this study includes the process in which the data were acquired. This study used secondary data from the RHS; due to restrictions in data access policy and resources, the researchers were not able to complete the analyses themselves. Also, due to a number of delays in accessing the data, the exact number and quality of analyses that we had hoped to run were not able to be completed. This calls for re-examination of who is able to access national data and the policies and processes for accessing said data.

Implications. Many implications may be taken from this study within the context of our North-South Mamow partnership, First Nations communities in general, and within the counselling field at large. To begin with, realizing the pervasive complexity of historical trauma as experienced by this group is so important. Trauma itself impacts an individual in many ways, but this case merits special consideration; an entire people, across generations have and are experiencing these effects. Looking through the cultural lens here, we have come to understand the values of connectedness with one's entire family, clan and tribe; the values of spirituality/religion and abstinence from substances in healing a broken spirit; the importance of practicing cultural traditions as a community and the social support that this brings. On the other hand, we have also learned here, that the effects of historical trauma, age, lack of education, poverty, as well as lacking many of these resilience aspects noted above are some stressors predictive of substance use.

This being said, many implications can be taken from this, not from a risk perspective, but one of strengths. As we have come to understand the importance of family and community; changes must evolve on this level. This must involve all ages as

the importance of knowledge transfer between these groups is so essential for cultural

promotion, learning and support. Keeping this holistic approach to health in mind, as well

as the emphasis on linking the individual to their community, Dell and Lyons (2007)

propose a harm-reduction approach to substance use, specifically within Aboriginal

communities. In forming this document, one of the authors consulted 25 different contacts

working in substance-related fields with Aboriginal peoples. They note that the Canadian

Centre on Substance Abuse defined harm reduction as (Thomas, 2005):

> A health-centred approach that seeks to reduce the health and social harms
>
> associated with alcohol and drug use, without necessarily requiring that users
>
> abstain. Harm reduction is a non-judgemental response that meets users 'where
>
> they are' with regard to their substance use.

In general, this concept involves an array of responses to the issue of substance use

including safer substance practices to complete abstinence. At the heart of this approach

however is offering substance users a *choice* in how they will minimize the risks imposed

by this behaviour.

  Along with the importance of choice, Dell & Lyons (2007) reiterate the

importance in involving the community in structuring these programs not only from a

support aspect, but from a culturally relevant perspective. An example highlighting this

fact was found in smoking cessation aids given to First Nations populations. Such aids as

the nicotine patch developed by Western society were seldom used by First Nations

individuals, holding beliefs primarily rooted in behavioural modification (Wardman &

Khan, 2004). As consistent with Waller's (2003) work, the importance of family, and

community cohesiveness are important factors in coming together to not only support,

those undergoing cessation, but to take an active role in developing a culturally relevant approach.

What is more, Dell & Lyons (2007) found that many Aboriginal communities as well as treatment programs identify with models of abstinence and prohibition. Despite the multiple reasons for this, many cultural perspectives are incompatible with substance use; often times this is seen as a crisis of the spirit, or the individual being out of balance (Spicer, 2001). This being said however, a zero-tolerance policy with regards to substance use typically results in leaving no room for moderation or reduced use; moderation is key to harm reduction. As such, perspectives including only abstinence have been identified as barriers to promoting harm-reduction services (Erikson, 1992; Wardman & Quantz, 2006).

Dell and Lyons (2007) go on to note that alternatively, abstinence and harm reduction do not have to be seen as completely incompatible. Among both is the common aim of assisting individuals with managing the harms that they are enduring while using substances. Community services are beginning to adopt this perspective in offering clients a continuum of options. For example, Inuit Tapiriit Kanatami has formed policies around alcohol noting that there is a great need for the development of community-based, alcohol counselling treatment based in both harm-reduction *and* abstinence paradigms relevant to Inuit culture, language, and values (Inuit Tapiriit Kanatami, 2005).

In terms of the practical aspect of harm-reduction, the authors offer some examples that they encountered in their research. The first they make note of is supply management. Here, this is accomplished via management of alcohol sales; either extending or limiting access (Dell & Lyons, 2007). Limiting access of this substance is often achieved by control of product supply and volume as well as the hours in which it is

sold. An example of this is highlighted in Fort McPherson in the Northwest Territories where considerations are being had around a weekly allowance of alcohol. The authors note however, that setting limits as with prohibition, is not a sufficient solution.

A second approach includes regulated consumption. The goal here is to facilitate moderate drinking practices while setting boundaries in place to reduce problems associated with alcohol use (Drake, 2002). For example, in the early 1990's, Mattagami First Nation in Ontario designed a policy attempting to balance between a 'wet' and 'dry' policy where serving alcohol required a special occasion permit as well as Band approval designating the use of a specific building for such times. Similar to this, managed alcohol consumption has been deemed to be a useful harm reduction strategy as it tends to involve those addicted to the substance. The aim is to prevent use of other harmful substances such as rubbing alcohol when the individual is unable to get anything else, to provide the substance to clients in managed quantities, and provide access to crisis services.

In line with the harm reduction strategies mentioned above, similar services have been offered for other substances rather than just alcohol. Providing safer spaces for substance users is another technique for reducing harm (Dell & Lyons, 2007). Here, a safe place is created in which individuals can use substances while reducing their risk in other areas associated with violence and vulnerability. Offering a place where users are protected from legal implications, can encourage consumption at a slower rate and crisis help in the event of overdose. Along with this, injection drug use services have begun taking harm-reduction initiatives including needle exchange programs, methadone maintenance, supervised injection facilities, as well as anonymous HIV/AIDS testing. Being that injection drug use can lead to sharing of needles and consequent transmission

of hepatitis C as well as HIV/AIDS, providing harm reduction as mentioned can be vital in harm reduction of serious and fatal illnesses (Dell & Lyons, 2007).

Moreover, Dell and Lyon (2007) note the importance of gender-related services, particularly for pregnant women; First Nations women in particular are at increased risk of family violence, harassment, discrimination, single parenting, and poverty. Recent research has also revealed that they are particularly at risk of HIV infections from injection drug use (Public Health Agency of Canada, 2004). As such, programs including Sheway in Vancouver's East side operate from a harm reduction model, educating and linking women with resources to assist them in reducing risk behaviours for them and their child. The style here is congruent with traditional Aboriginal services in that it is informal in structure and non-patriarchal, fostering more egalitarian relationships.

All in all however, Dell and Lyons (2007) note a disclaimer to the harm reduction model. Of particular importance is recruiting the participation of the communities in which substance use is a concern. Harm reduction policies must be considered and directed by the community members and leadership. The authors draw relevance to the point that they did not include abstinence-based ideals in their approach to harm-reduction, as it may not be the most helpful or practical response for substance users at a given time and place. They acknowledge that this is not congruent with some values based in abstinence, thus it is important for communities to as a whole, to weigh the pros and cons in establishing such programming. That being said, even harm-reduction strategies alone are not sufficient enough to address the issue of substance use; other social determinants of health merit further exploration and adjustment in facilitating positive change.

As such, this speaks to the implications arising from the social determinants of health explored within this study. For example, not having completed high school significantly predicted increased substance use. This also has been linked in other studies such as the RHS around increased substance use (FNIGC, 2011). Conversely, higher educational attainment has been found to result in increased cultural transmission in childrearing. As such, it is evident that higher education serves as an attribute of resilience. However, high drop-out rates indicate that there are issues with the structure of this system.

Perhaps a shift in education to encapsulate these cultural values within a manner that is congruent with cultural learning may facilitate more continued education. What is more, offering support services for those coping with trauma may make the process of being 'present' in school more bearable. Along with this, forming a community planned-response for individuals who come to school intoxicated rather than just sending them home may also serve as a response to breaking the cycle of substance use rather than further marginalizing substance users. This is particularly important with the younger adults, as this age group was much more likely to be at risk for use.

Along with the theme of substance use and marginalization, community leadership may consider an increase in cultural events within and between the communities involving all ages. This may promote resilience to substance use in offering opportunities for bonds of social support, and further culture-based learning. As was observed in this study, offering culturally relevant activities and having available social support that can arise from these activities can act as resilience against substance use in the face of trauma.

Although using substances is not valued in many Aboriginal cultures, the literature reviewed here has revealed that, further marginalizing users only results in further feelings of worthlessness, which in turn, perpetuates the need for coping through substance use. Again, perhaps forming community policies and procedures for responding to substance users in a way that might still safely incorporate them into community events may begin the process of reintegration and ultimately, healing. What is more, a lack of culturally relevant substance cessation and maintenance programs is a key concern here. More research is needed to learn and develop a sound approach to facilitate this process within a community-based infrastructure.

Implications for counsellors. This study has some important implications for counsellors to take away from and implicate into their practice with First Nations clients. On a personal level, I have come to learn in both my work as a counsellor and with our Mamow project, the immense importance of listening to one's unique worldview. In taking a client-centred perspective, so much more can be gained by allowing these individuals to have a voice in expressing their unique cultural identifications, struggles, strengths, and needs. Leaving aside preconceived notions and personal agendas of what we may think is needed is so fundamental in promoting a learning *together* process and ultimately, resilience in the face of years of broken trauma.

On the other hand however, educating one's self about the historical context of trauma and assimilation practices endured by Canada's First Nations people is so important in coming to know the unique struggles and barriers to health that this group continues to face. Taking this into consideration then requires counsellors to be flexible, straying so much from the ethnocentric roots of traditional psychotherapy to an approach that is congruent with the clients' worldview and values. This comes largely from a

balance in understanding these past collective experiences but exploring the individual's unique cultural identification.

For me personally, consulting the literature from an Aboriginal perspective has been a good start in developing this knowledge base. However, I have found that the learning together process in our Mamow project has been incredibly helpful in listening to the worldview and experiences of First Nations people from their perspective specifically. Seeking out opportunities to speak with Indigenous health-based organizations from my community as well as attending local cultural events run by First Nations people has provided me with such rich and valuable opportunities to witness the experiences, challenges, and strengths of these people.

Also, in striving towards multicultural competence, particularly in working with First Nations clients, counsellors need to take time to develop an increased self-awareness. Nuttgens and Campbell (2010) note that self-awareness is a commendable attribute not only in the professional, but personal lives of counsellors as it is critically tied to our ability to acknowledge and recognize ourselves as beings embedded within a surrounding cultural context. Unfortunately living in Canada, there still exists many stereotypes and racist attitudes within this context directed toward the First Nations people. This is outlined by an Aboriginal adult raised in a non-Aboriginal family (Nuttgens, 2004):

> Who wants to grow up saying, "Well, I'm First Nations so therefore, you know, I'm drunk, and I'm dirty, and I'm stupid, and I'm lazy and I'm…" you know, all the negative stereotypes. Who wants that! No one does.

As such, it is important that counsellors understand and examine the context in which their own values and beliefs were formed and how that may impact their working relationship with First Nations individuals.

In line with this, Nuttgens and Campbell (2010) more specifically, expand on these implications for counsellors in their framework for multicultural competence. They begin by noting that First Nations individuals tend to experience a disproportionate amount of mental health concerns than as seen in the general Canadian population; despite this, they are less likely to continue with receiving health services as many perceive mental health resources to be inaccessible and culturally insensitive (Uchelen et al, 1997). As such, this approach includes aspects of self-awareness, knowledge of the 'other', and therapeutic practice specific to working with First Nations individuals.

First and foremost, they too, implore that counsellors must strive for greater self-awareness. This helps not only in preventing projection of one's own beliefs onto their client, but in keeping our own biases in check as we come to realize that our clients may not see the world in the way that we do. Increased self-awareness can be helpful in acknowledging that the ethnocentric approach to traditional psychotherapy may be interpreted as an attempt to undermine a First Nations approach to health (Duran & Duran, 1995). In line with this, Nuttgens and Campbell (2010) urge counsellors to increase awareness around unintentional racism. Taking a 'colour blind' approach in which the counsellor works as though they are 'blind' to the racial differences and thus, uninfluenced by them, allows for risk of minimizing the oppression faced by this group.

Secondly, the authors note that educating oneself about the 'other' is essential to gaining multicultural competence. As highlighted throughout this study as well as in the literature, First Nations culture holds a vast constellation of group experiences around

traditional customs and spirituality, family and child-rearing, education, health, and trauma. Gaining awareness around the ramifications of such significant group experiences as the Indian Act, Residential School mandates, and cultural retention around traditional approaches to health can assist counsellors in honouring these experiences while cultivating relevant directions for exploration.

What is more, Nuttgens and Campbell (2010) remind us of the equally vast within group diversity around such variables as geographic location, tribe, education, income/employment, gender, etc. As such, counsellors need to remain cognizant of the fact that these differences exist and check assumptions that they may bring to working with a given First Nations individual. In other words, counsellors should regard clients as the experts in their own experiences but should simultaneously initiate independent efforts to educate themselves about some of the experiences and concerns that are experienced collectively by First Nations people.

Lastly, Nuttgens and Campbell (2010) note important therapeutic practices for counsellors working with First Nations individuals. Here, they begin by noting that achievement of multicultural competence is reflected in the counselling relationship by applying interventions that honour and respect the cultural group's beliefs about healing and health (Morissete & Gadbois, 2006). As such, it has been proposed that multicultural counselling not offer culture-specific interventions, but client-specific ones. This is to prevent counsellors from generalizing norms from an entire group onto one specific person. This too, has been reflected in Brave Heart's (1999) work, noting that First Nations people often identify with more than a single culture. As such, it is suggested that counsellors take a *client-centred, community-based* approach as a means to balance contemporary as well as traditional interventions. This means essentially, that the client is

made the expert of their own experiences that are brought to the counselling room.

However, it is also equally important to consider the client's culturally relevant beliefs

around healing which may involve consultation or referral to a traditional healer and other

community-based remedies.

Conclusion

This study explored the historical trauma effects of the Residential School establishments as experienced by First Nations adults across Canada. The lasting effects of this forced assimilation process has resulted in various trauma responses and of particular interest here, substance use. It should be noted that substance use has largely been identified as a leading concern in the First Nations communities nationally; however, this is not arising as a means of thrill-seeking. This has been seen as a wide response to numbing the psychological pain arising from a collective past of trauma.

Much of the literature pertaining to experiences of trauma and substance use in First Nations populations focuses on stressors leading to this coping mechanism. A void in strengths-based research highlighting the resilience of these people and communities called for an exploration of what leads one to resist substance use given a collective past of trauma. This study specifically, investigated the resilience effects of various factors between groups reporting different degrees of substance use. Such factors included: cultural participation, traditional spirituality, religion, available social support, experiences of power and control, and ability to speak or understand a First Nations language.

Some important results and implications arose not only for our Northern partners and counsellors at large, but for First Nations communities across the country. Firstly, improvements in the data collection, access, and dissemination process are suggested. As noted here, many limitations arose from this study in that many variables were widely aggregated and used as proxies of measures such as trauma and traditional experiences. We were delayed in accessing the data needed for this study and in some cases, were not able to report the ideal information that we had originally planned due to limited

resources and personnel operating the RHS databases. These barriers speak to the process then, of disseminating and sharing the rich wealth of implications with the communities which make this process possible. Ultimately, this current protocol stands as a barrier to gaining the knowledge and evidence which is instrumental in facilitating healing within these communities.

Now in seeing such results, it is clear that various aspects of resilience are more likely to be present within the lives of abstainers/low users versus heavy users. These serve as important mechanisms for healing; however more research is needed in understanding the mechanisms underlying the process of cessation versus sobriety maintenance. Harm-reduction strategies have been suggested as a means to initiating the process of healing in a safe and respectful manner with regard to the client. Such an approach calls for the need of community efforts in bringing about these changes both in a culturally relevant way and by means of reducing marginalization and exclusion of those using.

In closing, many implications can be taken from this study into the world of counselling. It has been suggested that both through my personal experiences in producing this study as well as those from the counselling literature, some main themes emerged. Firstly, as a counsellor, examining one's own values and social norms is essential to gaining awareness around our perceptions of clients. Also, striking a balance of viewing the client as an individual, an expert of their own experiences while educating one's self on more general cultural experiences is necessary in meeting them where they are. With First Nations clients specifically, taking a client-centered, community-based approach not only allows for this, but the consideration of culturally relevant approaches to healing.

References

Anders, G. C. & Anders, K. K. (1986). Incompatible goals in unconventional organizations: The politics of Alaska Native corporations. In Redpath, L. & Nielsen, M. (1997). A comparison of Native culture, non-Native culture and new management ideology. *Canadian Journal of Administrative Sciences, 14*(3), 327-339.

Anderson, R. B. (1995). The business economy of the First Nations in Saskatchewan: A contingency perspective. In Redpath, L. & Nielsen, M. (1997). A comparison of Native culture, non-Native culture and new management ideology. *Canadian Journal of Administrative Sciences, 14*(3), 327-339.

Assembly of First Nations. (2004). *Getting results for First Nations*. In First Nations Regional Longitudinal Health Survey. (2005). *Results for adults, youth and children living in First Nations communities*. Ottawa: First Nations Centre.

Beauvais, F. (1996). Trends in drug use among American Indian students and dropouts, 1975 to 1994. *American Journal of Public Health, 86*(11), 1594-1598.

Brave Heart, M. (2003). The historical trauma response among natives and its relationship with substance abuse: A lakota illustration. *Journal of Psychoactive Drugs, 35*(1), 7-13.

Brave Heart, M., & DeBruyn, L. M. (1998). The American Indian holocaust: Healing historical unresolved grief. *American Indian and Alaska Native Mental Health Research, 8*(2), 56-78.

Breslau, N., Davis, G.C., Andreski, P., & Peterson, E. (1991). Traumatic events and posttraumatic stress disorder in an urban population of young adults. *Arch General Psychiatry, 48*, 216-222.

Brown, R. A., Lewinsohn, P. M., Seeley, J. R., & Wagner, E. F. (1996). Cigarette smoking, major depression and other psychiatric disorders among adolescents. *Journal of American Academy of Child and Adolescent Psychiatry, 35*, 1602-1610.

Canadian Centre for Justice Statistics. (2001) In Wesley-Esquimaux, C. & Smolewski, M. (2004). *Historical trauma and Aboriginal healing*. Ottawa: The Aboriginal Healing Foundation.

Craib, K., Spittal, P., Wood, E., Laliberte, N., Hogg, R., Li, K., Heath, K., Tyndall, M., O'Shaughnessy, M., & Schechter, M. (2003). Risk Factors for elevated HIV incidence among aboriginal injection drug users in Vancouver. *Canadian Medical Association Journal, 168*(1), 19-24.

Compton, W. M., Cottler, L. B., Abdallah, A.B., Phelps, D.L., Spitznagel, E.L., & Horton, J.C. (2000). Substance dependence and other psychiatric disorders among drug dependent subjects: Race and gender correlates. *The American Journal of Addiction, 9*, 113-125.

Cunningham, J. A., Wild, T. C. & Cordingley, J. (2004). Using collaterals to validate self-reports of problem drinkers: Any impact on client attrition and quantity of drinking reported? *Addictive Behaviors, 29*, 615-621.

Dacks, G. (1983). Worker-controlled Native enterprises: A vehicle for community development in Canada. In Redpath, L. & Nielsen, M. (1997). A comparison of Native culture, non-Native culture and new management ideology. *Canadian Journal of Administrative Sciences, 14*(3), 327-339.

Dana, L. P. (1996). Self-employment in the Canadian sub-Arctic: An exploratory study. In Redpath, L. & Nielsen, M. (1997). A comparison of Native culture, non-Native culture and new management ideology. *Canadian Journal of Administrative Sciences, 14*(3), 327-339.

Dell, C. & Lyons, T. (2007). Harm reduction policies and programs for persons of Aboriginal descent. In *Canadian centre on substance abuse; Harm reduction for special populations in Canada*. Retrieved from http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011515-2007.pdf

Drake, J. (2002). First Nations develop alcohol harm reduction policies. In Dell, C. & Lyons, T. (2007). Harm reduction policies and programs for persons of Aboriginal descent. In *Canadian centre on substance abuse; Harm reduction for special populations in Canada*. Retrieved from http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011515-2007.pdf

Duran, E. & Duran, B. (1995). Native American postcolonial psychology. In Nuttgens, S. & Campbell, A. (2010). Multicultural considerations for counselling First Nations clients. *Canadian Journal of Counselling, 44*(2), 115-129.

Erikson, P. (1992). Implications of harm reduction for substance abuse problems of native people. In *Canadian centre on substance abuse; Harm reduction for special populations in Canada*. Retrieved from http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011515-2007.pdf

First Nations Centre. (2002/03). *First Nations regional longitudinal health survey: Results for adults, youth, and children living in First Nations communities*. Retreived from http://www.rhs-ers.ca/sites/default/files/ENpdf/RHS_2002/rhs2002-03-technical_report.pdf

First Nations Information Governance Centre. (2008/10). *First Nations regional health survey: Phase II adult survey*. Retrieved from http://www.rhs-ers.ca/sites/default/files/ENpdf/RHS_2008/RHS-A2.pdf

First Nations Information Governance Centre. (2011). *First Nations regional health survey: RHS phase 2 (2008/10) preliminary results.* Retrieved from http://www.rhs-ers.ca/sites/default/files/RHSPreliminaryReport.pdf

First Nations Information Governance Committee. (2002/03). First Nations regional longitudinal health survey: People's report. Retrieved from http://www.rhs-ers.ca/sites/default/files/ENpdf/RHS_2002/rhs2002-03-the_peoples_report_afn.pdf

Fraser, M. W. (1997). The ecology of childhood: A multisystems perspectives. In M. W. Fraser (Ed.), *Risk and resilience in childhood: An ecological perspective* (pp. 1-9). Washington, DC: NASW Press.

Fullilove, M.T., Fullilove, R.E., Smith, M., & Winkler, K. (1993). Violence, trauma and posttraumatic stress disorder among women drug users. *Journal of Traumatic Stress, 6*(4), 533-543.

Hazel, K. L. & Mohatt, G. V. (2001). Cultural and spiritual coping in sobriety: Informing substance abuse prevention for Alaska native communities. *Journal of Community Psychology, 29*, 541-562.

Herman, J. (1992). *Trauma and recovery: The aftermath of violence- from domestic abuse to political terror.* New York: Basic Books.

Indian Affairs and Northern Development. (2003). In Wesley-Esquimaux, C. & Smolewski, M. (2004). *Historic trauma and Aboriginal healing*. Ottawa: The Aboriginal Healing Foundation.

Inuit Tapiriit Kanatami. (2005). Proposed althernatives to address alcohol related issues and Canadian Inuit communities. In *Canadian centre on substance abuse; Harm reduction for special populations in Canada*. Retrieved from http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011515-2007.pdf

Kessler, R.C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior, 40*, 208-230.

Krieger, N. & Sidney, S. (1996). Racial discrimination and blood pressure: The CARDIA study of young black and white adults. *American Journal of Public Health, 86*, 1370-1378.

Mail, P.D. & Johnson, S. (1993). Boozing, sniffing, and toking: an overview of the past, present and future of substance use by American Indians. *Am Indian Alsak Native Ment Health Res, 5*(2), 1-33.

Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments; Lessons from research on successful children. *American Psychologist, 53*(2), 205-220.

May, P. (1996). *Overview of alcohol abuse epidemiology for American Indian populations*. In Sandefur GD, Rundfuss RR, Cohen B: Changing numbers, changing needs: American Indian demography and public health. Washington DC: National Academy Press.

Meara, E. & Greenfield, S. (2008). The relationship between substance use patterns and economic and health outcomes among low-income caregivers and children. *Psychiatric Services, 59*, 974-981.

Morrissette, P. J. & Gadbois, S. (2006). Alliance skill development within Canadian First Nations and Aboriginal counsellor education. In Nuttgens, S. & Campbell, A. (2010). Multicultural considerations for counselling First Nations clients. *Canadian Journal of Counselling, 44*(2), 115-129.

Najavits, L., Weiss, R., & Shaw, S. (1997). The link between substance abuse and posttraumatic stress disorder in women: A research review. *American Journal on Addictions, 6*(4), 273-283.

Najavits, L., Weiss, R., & Shaw, S. (1999). A clinical profile of women with posttraumatic stress disorder and substance dependence. *Psychology of Addictive Behaviours, 13(2)*, 98-104.

National Association of Friendship Centres. (1999). In Wesley-Esquimaux, C. & Smolewski, M. (2004). *Historic trauma and Aboriginal healing*. Ottawa: The Aboriginal Healing Foundation.

Newbold, N. (1998). Problems in search of solutions: Health and Canadian aboriginals. *Journal of Community Health, 23*(1), 59-72.

Nuttgens, S. (2004). Life stories of Aboriginal adults raised in non-Aboriginal families. In Nuttgens, S. & Campbell, A. (2010). Multicultural considerations for counselling First Nations clients. *Canadian Journal of Counselling, 44*(2), 115-129.

Nuttgens, S. & Campbell, A. (2010). Multicultural considerations for counselling First Nations clients. *Canadian Journal of Counselling, 44*(2), 115-129.

Oetting, E.R. & Beauvais, F. (1989). *Epidemiology and correlates of alcohol use among Indian adolescents living on reservations*. In Alcohol use among U.S. ethnic minorities, NIAAA research monograph no. 18. Rockville, MD: Public Health Service (US)

Ouimette, P. & Brown, P. (2003). *Trauma and substance abuse: Causes, consequences, and treatment of comorbid disorders*. Washington, DC: American Psychological Association.

Pearce, M., Christian, W., Patterson, W., Norris, K., Moniruzzaman, A., Craib. K., Schechter, M., & Spittal, P. (2008). The cedar project: Historical Trauma, sexual abuse and HIV risk among young aboriginal people who use injection and non-injection drugs in two Canadian cities. *Social Science and Medicine, 66*, 2185-2194.

Poole, N. (2006). *Connections: Working with women on substance use and violence issues*. In Dell, C. & Lyons, T. (2007). Harm reduction policies and programs for persons of Aboriginal descent. In *Canadian centre on substance abuse; Harm reduction for special populations in Canada*. Retrieved from http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011515-2007.pdf

Public Health Agency of Canada. (2004). HIV/AIDS among injection drug users in

Canada. In *Canadian centre on substance abuse; Harm reduction for special

populations in Canada*. Retrieved from

http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011515-2007.pdf

Public Health Agency of Canada. (2006). In Wesley-Esquimaux, C. & Smolewski, M.

(2004). *Historic trauma and Aboriginal healing*. Ottawa: The Aboriginal Healing

Foundation.

Poulin, C., Hand, D., Boudreau, B., & Santor, D. (2005). Gender differences in the

association between substance use and elevated depressive symptoms in a general

adolescent population. *Addiction, 100*, 525-535.

Redpath, L. & Nielsen, M. (1997). A comparison of Native culture, non-Native culture

and new management ideology. *Canadian Journal of Administrative Sciences,

14*(3), 327-339.

Robin, R.W., Chester, B., Rasmussen, J.K., Jaranson, J.M., & Goldman, D. (1997).

Factors influencing utilization of mental health and substance abuse services by

American Indian men and women. *Psychiatric Services, 48*(6), 826-834.

Shepard, B., O'Neill, L., & Guenette, F. (2006). Counselling with First Nations women:

Considerations of oppression and renewal. *International Journal of for the

Advancement of Counselling, 28*(3), 227-240.

Sobell, L. C., Sobell, M. B., Toneatto, T., & Leo, G. I. (1993). What triggers the

resolution of alcohol problems without treatment? *Alcoholism, Clinical and

Experimental Research, 17*(2), 217-224.

Sonne, S., Back, S., Zuniga, C., Randall, C., & Brady, K. (2003). Gender differences in individuals with comorbid alcohol dependence and post-traumatic stress disorder. *The American Journal on Addictions, 12*, 412-423.

Spicer, P. (2001). Culture and the restoration of self among former American Indian drinkers. *Social Science and Medicine, 53*, 227-240.

Thomas, G. (2005). Harm reduction policies and programs for persons involved in the criminal justice system. In *Canadian centre on substance abuse; Harm reduction for special populations in Canada*. Retrieved from http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011515-2007.pdf

Torres-Stone, R., Whitbeck, L., Chen, X.,Johnson, K., & Olson, D. (2006). Traditional practices, traditional spirituality, and alcohol cessation among American Indians. *Journal of Studies on Alcohol, 67*, 236-244.

Torikka, A., Kaltiala-Heino, R., Rimpela, A., Rimpela, M., & Rantanen, P. (2001). Depression, drinking and substance use among 14- to 16-year-old Finnish adolescents. *Nordic Journal of Psychiatry, 55*, 351-357.

Uchelen, C. P., Davidson, S. F., Quressette, S., Brasfield, C. R. & Demerais, L. H. (1997). What makes us strong: Urban First Nations perspectives on wellness and strength. In Nuttgens, S. & Campbell, A. (2010). Multicultural considerations for counselling First Nations clients. *Canadian Journal of Counselling, 44*(2), 115-129.

UNESCO, Atlas of the World's Languages in Danger of Disappearing (1996). Ed. Stephen A. Wurm, Paris, UNESCO, p.23.

Ungar, M., Brown, M., Liebenberg, L., Cheung, M., & Levine, K. (2008). Distinguishing

differences in pathways to resilience among Canadian youth. *Canadian Journal of*

Community Mental Health, 27(1), 1-13.

Waller, M. A. (2001). Resilience in ecosystemic context: Evolution of the concept.

American Journal of Orthopsychiatry, 71(3), 290-297.

Waller, M. A., Okamoto, S., Miles, B., & Hurdle, D. (2003). Resiliency factors related to

substance use/resistance: Perceptions of Native adolescents of the Southwest.

Journal of Sociology and Social Welfare, 30(4), 79-94.

Walters, K., Simoni, J., & Evans-Campell, T. (2002). Substance use among American

Indians and Alaska Natives: Incorporating culture in an "Indigenist" stress-coping

paradigm. *Public Health Reports, 117*, 104-117.

Wardman, D. & Khan, N. (2004). Tobacco cessation pharmacotherapy use among First

Nations persons residing within British Columbia. In *Canadian centre on*

substance abuse; Harm reduction for special populations in Canada. Retrieved

from http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011515-2007.pdf

Wardman, D. & Quantz, D. (2006). Harm reduction services for British Columbia's First

Nations population. In *Canadian centre on substance abuse; Harm reduction for*

special populations in Canada. Retrieved from

http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011515-2007.pdf

Werner, E. E., & Smith, R. S. (1992). *Overcoming the odds: High risk children from birth*

to adulthood. Ithaca, New York: Cornell University Press.

Wesley-Esquimaux, C. & Smolewski, M. (2004). *Historic trauma and Aboriginal*

healing. Ottawa: The Aboriginal Healing Foundation.

Whitbeck, L., Adams, G., Hoyt, D., & Chen, X. (2004). Conceptualizing and measuring historical trauma among American Indian people. *American Journal of Community Psychology, 33*, 119-130.

Whitbeck, L. B., Chen, X., Hoyt, D. R., & Adams, G. W. (2004). Discrimination, historical loss and enculturation: Culturally specific risk and resiliency factors for alcohol abuse among American Indians. *Journal of Studies on Alcohol and Drugs, 65*, 409-418.

Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health: Socioeconomic status, stress and discrimination. *Journal of Health Psychology, 2*, 335-351.

Wilson, K. & Rosenburg, M. (2002). Exploring the determinants of health for First Nations peoples in Canada: can existing frameworks accommodate traditional activities? *Social Science and Medicine, 55*, 2017-2031.

Wyrostok, N., & Paulson, B. (2000). Traditional healing practices among first nations students. *Canadian Journal of Counselling, 34*(1), 14-24.

Zimmerman, M., Ramirez-Valles, J., Washienko, K. M., Walter, B., & Dyer, D. (1994). *The enculturation hypothesis: Exploring direct and positive effects among Native American youth*. In McCubbin, H.I., Thompson, E.A., Thompson, A. I., and Fromer, J. E. (Eds.) Resiliency in Ethnic Minority Families: Native and Immigrant American Families, Vol. 1, Madison, WI: Center for Excellence in Family Studies, University of Wisconsin-Madison, pp. 199-220.

Appendix A: RHS Resilience Questions and Participant Response Options

RHS Question	Participants' Response Options
Cultural Participation: "Do you take part in your local community's cultural events?"	• Always/Almost always • Sometimes • Rarely • Never • Don't Know* • Refused *
Traditional Spirituality "How important is traditional spirituality in your life?"	• Very important • Somewhat important • Not very important • Not important • Don't Know* • Refused*
Religion "How important is religion in your life?" (eg. Christianity, Buddhism, Islam)	• Very important • Somewhat important • Not very important • Not important • Don't Know* • Refused*
Access to Supportive Relationships "Could you tell me how often each of the following kinds of support is available to you when you need them: Someone to confide in or talk about yourself or your problems?"	• All of the time • Most of the time • Some of the time • Almost none of the time • Refused*
Experiences of Power and Control "Please indicate how strongly you agree or disagree with each statement: I have control over the things that happen to me."	• Strongly agree • Agree • Neither agree or disagree • Disagree • Strongly Disagree
Language "Can you understand or speak a First Nations language?"	• Yes • No • Don't know* • Refused*

* Indicates responses excluded from the analyses

LAUREL PICKEL

CURRICULUM VITAE

Education

University of Western Ontario   September 2010-Present

Master of Education
Counselling Psychology
Thesis: The aftermath of intergenerational trauma: Substance use risk and resiliency

McMaster University   September 2005-April 2010

Bachelor of Science
Psychology, Neuroscience, and Behaviour
Thesis: Mapping the temporal and intensity dimensions of attentional biases in social anxiety

Academic Awards

Ontario Graduate Scholarship (2011/2012)

Administered by Ontario Ministry of Training, Colleges and Universities

Western Graduate Research Scholarship (2010/2011)

Administered by the School of Graduate and Postdoctoral Studies, The University of Western Ontario

McMaster University Entrance Scholarship (2005/2007)

Administered by McMaster University

Presentations & Workshops

Emotion Regulation Skills
Workshop delivered at Student Development Centre, University of Western Ontario (February, 2012)
Yadegari, S. & Pickel, L.

Mindfulness Skills
Workshop delivered at Student Development Centre, University of Western Ontario (November, 2011)
Chandler, L. & Pickel, L.

Assertiveness Training
Workshop delivered at Student Development Centre, University of Western Ontario (September, 2011)
Pickel, L.

Mapping the temporal and intensity dimensions of attentional biases in social anxiety.
Poster presentation at McMaster Psychology Poster Session (March 2010)
Pickel, L., Miskovic, V., & Schmidt, L.

Research Experience

Research Assistant with CURA Project: Mamow ki-ken-da-ma-win
The University of Western Ontario (2010-2012)
- Research current literature pertaining to intergenerational trauma in Canada's First Nations People
- Create and present a Master's thesis on the effects of historical trauma in this group
- Communicate with Northern Partners to strengthen relationships and learn more about their communities, values and traditions with respect to healing and health
- Meet with Chiefs and representatives of the Band Councils to tailor research and responses to their needs

Honours Thesis Student: Child Emotion Laboratory
McMaster University (2009-2010)
- Design, run, and analyze thesis experiment
- Prepare completed thesis document with literature review
- Present poster of findings

Independent Research Study: Cognitive Science Laboratory
McMaster University (2007-2008)
- Run psychology experiments/collect participant data
- Enter and analyze data
- Attend and present at literature reading groups

Teaching Experience

Biology Peer Mentor
McMaster University (September 2007-December 2008)
- Prepare and deliver weekly tutorials for approximately 70 first year students
- Communicate and monitor online help forum
- Hold test review sessions in preparation for exams

Biology Teaching Assistant
McMaster University (January 2008-April 2008)
- Assist first year biology students with year one projects
- Hold weekly progress meetings with students
- Monitor online help forum
- Evaluate final projects and presentations
- Invigilate exams

Clinical Experience

UWO Psychological Services
London, ON (September 2011 – April 2012)
Clinical Intern
- Provide diverse individual counselling services to university students at UWO
- Provide various assessment and conceptualization measures for each client
- Attend weekly individual and group supervision meetings
- Prepare and deliver psycho-educational workshops
- Become well oriented with community resources and partners in London and surrounding area

Children's Aid Society
London, ON (September 2011 – April 2012)
Volunteer: Community Group Co-Facilitator
- Co-facilitator of mothers' groups for women survivors of domestic violence
- Co-facilitator of children's groups for teen girls who have witnessed domestic violence
- Create a safe and supportive environment for witnessing and processing experiences of abuse
- Prepare psycho-educational resources for assisting clients with journey to healing

Rotholme Women's and Family Shelter
London, ON (June 2010 - September 2010)
Children's Program Facilitator
- Provide support in helping children cope and adjust to transition to shelter
- Organize and coordinate children's activities for families at the shelter
- Supervised up to 30 children for various events
- Created summer program curriculum for children ages 3-18 years

McMaster University Centre for Student Development
Hamilton, ON (September 2009 - April 2010)
Peer Mentor
- Worked with clients to assist with transition from high school to university
- Provided education around learning skills and study strategies
- Helped research and design on-line program for 'Learn 2 Learn' study skills

Canadian Mental Health Association
Sarnia, ON (April 2008- April 2009)
Case Management & Crisis Intern
- CBT treatment for clients affected by anxiety and depression
- Crisis Response over a 24-Hour crisis line as well as community mobile response
- Completed crisis and suicide intervention training
- Created and delivered psycho-education surrounding mental health within the community