A Secondary Analysis: Paths to Living Well for On-Reserve Youth

A Thesis Submitted to the College of Graduate Studies and Research in Partial Fulfillment of the Requirements for the Degree of Master of Nursing in the College of Nursing University of Saskatchewan Saskatoon

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Abstract

As the population of First Nations peoples ages, the need for health care will increase. First Nations peoples experience health disparities and hospitalization at a rate much greater than non-First Nations people. In Saskatchewan, the portion of First Nations between 0 and 19 years of age makes up approximately half of their population. These youth must make some positive changes in regards to their health in order to change this trend.

The purpose of this secondary analysis was to discover, from the point of view of the First Nations youth in the *Paths to Living Well for On-Reserve Youth Photovoice* (PLWP) project, their meaning of health, what makes and keeps them healthy or unhealthy, as well as common themes, and beliefs about health, and if these beliefs change over time. It also identified elements that influence health and explored the use of photographs as data for secondary analysis. The use of photographs as a source of data for secondary analysis was also investigated. The setting was Standing Buffalo Dakota First Nation where eight Dakota participants were recruited from the participants in the PLWP project. These 3 males and 5 females ranged in age 12 to 21.

Data was collected using the photographs they chose and photoelicitation used the SHOWeD format. Participants identified three themes that related to what makes and keeps them healthy. The first is people: connected across the generations in which they acknowledged the contribution of family, role models and role modeling, and teaching and learning to their health. The second theme involved the contribution that cultural items and activities make to their health, and how culture is pervasive throughout every aspect of their lives. Lastly, they recognized the environment as providing a place for health, as well as representing the health of the people.

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Chapter One

A Secondary Analysis: Paths to Living Well for On-Reserve Youth

Introduction to the Problem

By 2045, it is estimated that First Nations¹ people will make up 33% of the population of Saskatchewan (Government of Saskatchewan, n.d.). It is imperative that First Nations youth make positive choices in regards to their physical and mental health in order to increase their quality of life and lessen the impact on the health care system. Positive choices will lead to decreased health disparities, healthier communities, and decreased costs to the health care system.

The First Nations people of Canada experience health disparities at a rate much higher than the non-First Nations population (Waldram, Herring, & Young, 2007). The Royal Commission on Aboriginal Peoples stated that First Nations people have a lower life expectancy, increased illness and incarceration rates, and lesser access to education and proper housing (Indian and Northern Affairs Canada [INAC], 1996). These disparities continue: First Nations people of Canada have a life expectancy at birth of approximately six and a half years less, and infant mortality rates twice the rate of non First Nations people (Health Canada, 2011). Rates of hospital utilization in Saskatchewan, Manitoba, Alberta, and British Columbia show that First Nations people use health services at a higher rate than non-First Nations (Health Canada, 2009). The rate of hospital utilization for chronic diseases such as ischemic heart disease, diabetes, chronic obstructive pulmonary disease, and cerebrovascular disease are seven times higher in the

¹ The terms First Nation, Aboriginal, and Indigenous will be used interchangeably to represent Indian, Inuit, and Métis of Canada. They will be used as intended in the original documents.

First Nations population, and those over 65 years are hospitalized two to three times more often than their non-First Nations counterparts (Health Canada, 2009).

In Saskatchewan, the percentage of the First Nations population between 0 - 19 years of age is 47.02%, as compared to 24.12% in this age group for non-First Nations people (Saskatchewan Bureau of Statistics, 2006). If trends persist, as these First Nations youth age, they will have a lower life expectancies, increased illness and incarceration rates, and three times the rate of hospitalization than the non-First Nations population (Health Canada, 2009).

There are many factors affecting the health and well-being for First Nations people living on-reserve. Historical factors affect individuals, communities, their collective identity, and thus the overall health of First Nations people. Historical factors include epidemics of infectious diseases, forced Christianity and loss of traditional spirituality, relocation of communities, confinement to reserves, loss of traditional foods and ways of life, disintegration of families and communities, marginalization through bureaucratic controls, residential schools, and the denigration of their culture and identity (Government of Canada, 2010; Waldram et al., 2007). These tools of assimilation have left a legacy of poverty, family violence and dysfunction, alcohol and drug abuse, suicide, and loss of self-identity (Government of Canada, 2006).

First Nations Health Challenges

First Nations people in Canada face many health challenges. Several of these health challenges will be discussed, as well as the findings from the First Nations Regional Longitudinal Health Survey (RHS) that gathered information from and about First Nations youth.

Diabetes. Type 2 diabetes is the leading cause of morbidity and mortality in the Aboriginal population (Barton, Anderson, & Thommasen, 2005). In Saskatchewan, the rate of

Type 2 diabetes has steadily increased from a rare condition in the 1950s to affecting 10% of the First Nations population in the 1980s, and by 2005 the rate of diabetes in First Nations women increased to 20.3% and 16% in First Nations men (Dyck, Osgood, Lin, Gao, & Stang, 2010; Pylypchuk et al., 2007). This trend, along with a younger age at onset has serious health implications for the First Nations population such as cardiovascular disease, cardiovascular accident, neuropathy, dialysis, extremity amputation, and blindness (Public Health Agency of Canada, 2003).

In Saskatchewan, First Nations women of childbearing age have a rate of diabetes four times greater than the general population, as well as higher rates of gestational diabetes mellitus (GDM) (Dyck et al., 2010). GDM has been identified as a risk factor for both the mother and infant in the development of Type 2 diabetes (Dyck, Klomp, & Tan, 2001; Neufeld & Marchessault, 2006; Saskatchewan Health, 2002). This is of importance, considering the rate of teen pregnancy in this population in Saskatchewan is four times higher than the general population, and under age 15 it is as much as 18 times higher (Archibald, 2004).

Several factors have been identified as contributing to the epidemic of diabetes in First Nations people: an interaction between the environment and genetics, the consumption of nontraditional foods, a decreased access to nutritious foods, a decreased level of physical activity, and the legacy of colonization (Assembly of First Nations, 2006; Garro, 1995; National Aboriginal Diabetes Association, 2010; Young, Reading, Elias, & O'Neil, 2000) Diabetes is also associated with an imbalance "leading to the interpretation of diabetes as a Windigo disease – an external overpowering force repaying the misdeeds of the ancestors who sold land and water to the white man." (Hagey, 1984, as cited in Sunday, Eyles, & Upshur, 2001, p. 69). Sunday, Eyles, and Upshur (2001) explored causal stories in the Aboriginal community of Manitoulin Island, Ontario. Health professionals attributed the development of Type 2 diabetes to lifestyle choices, diet, westernization, genetics, and personal irresponsibility. The community identified genetics as a cause. They felt a sense of powerlessness; one will get it no matter what one does, it's inevitable. Other factors they identified were aging, diet changes and western foods, changes in the environment, the socio-political environment, chemicals, pollution, and stress. Community members also identified diabetes as having a purpose. It brings the community together, brings about renewed interest in cultural knowledge, and also highlights disease as a collective problem.

Neufeld and Marchessault (2006) explored perceptions of the cause of GDM with two generations, mothers and grandmothers, of Aboriginal women from a northern Manitoba First Nations community. The participants in this study expressed concerns about the impact of GDM on their health and the health of infants. Both generations linked the cause to consuming foods that are processed or high in sugar. The grandmothers linked decreased activity and increased weight to developing GDM. The mothers linked stress to causing GDM. Both felt that eating more fresh and wild meat would be preventative.

Overweight and obesity. The prevalence of obesity among First Nations youth is three to five times higher than that of the non-First Nations population and even higher for those who live on-reserve (Bruce, Riediger, Zacharias, & Young, 2011). Studies have found the incidence of overweight and obesity for school age children and youth in First Nations communities to be 24 to 32 percent for overweight and 29 to 35 percent for obesity (Willows, 2005). First Nations youth, in the RHS, reported that only 50% participate in 30 minutes of physical activity on a

daily basis, and only one-fifth eat a nutritious and balanced diet (First Nations Centre [FNC], 2005).

The rates for overweight and obesity for on-reserve First Nations youth are concerning, especially when one considers the risks associated with overweight and obesity. They are at risk of developing hypertension, cardiovascular disease, diabetes (Bruce et al., 2011), sleep apnea, breast, colon and endometrial cancer, as well as mental health problems such as low self-esteem, and depression (Government of Canada, 2010). Maternal obesity has also been associated with GDM, Type 2 diabetes for the mother, as well as poor birth outcomes, and higher incidence of developing obesity and diabetes for the child (Bruce et al., 2011).

Several factors have been associated with overweight and obesity in First Nations youth in Canada. One factor is the change from a traditional diet that included wild game and fish, and food from gathering, replaced by a diet that includes fast food, soft drinks, and convenience foods with little nutritional value (Downs et al., 2009). Other factors are a combination of historical, economic, environmental, and social factors (Government of Canada, 2010). Socioeconomic factors that contribute to overweight and obesity include low literacy, low education, and low income (Downs et al., 2009). Environmental factors include the child's school, home, and community which all have an impact on their risk of developing overweight or obesity, as they influence what the children eat, how much and what kind of physical activity they have access to, and what kind of role models they are influenced by (Government of Canada, 2010).

Mental health concerns. In 2000, the suicide rate for First Nations people in Canada was 24 per 100,000; twice the rate for non-First Nations, and the rate peaks between the ages of 15 and 24 (Government of Canada, 2006). This rate has shown no signs of decreasing. In

Saskatchewan, that rate increases to 33 per 100,000 (Health Canada, 2001). For the First Nations youth, the risk of suicide increases for males especially if they have had previous suicide attempts, had a family member who committed suicide, or had a parent who attended residential school (Government of Canada, 2006).

Socioeconomic factors affecting mental health and well-being include poor living conditions, unemployment, low income, and overcrowded housing (Government of Canada, 2006). Violence and addiction are other factors affecting mental health and well-being in some First Nation communities. On average, domestic violence on reserves is five times higher and spousal homicide is between eight and eighteen times higher than in off-reserve communities (Government of Canada, 2006). It is estimated that about 50% of First Nations women have experienced violence; 59% of First Nations adults have experienced physical abuse as a child, and youth report that 25% have also experienced an event where they felt threatened (Government of Canada, 2006). Sexual abuse is estimated to be three times higher in First Nations communities than in non-First Nation communities. These rates of abuse and violence may be linked to historical governmental policies such as those that removed First Nations children from their homes and placed them in residential schools, or placed them with "white" families during the "Sixties Scoop" where many experienced physical, sexual, emotional, and verbal abuse (Government of Canada, 2006).

For First Nations youth, there are positive factors associated with decreasing the risk of suicide, physical abuse, alcohol or substance abuse. These include connecting with Elders, pursuing higher education and, participating in community-based healing initiatives that are culture-based (Government of Canada, 2006). Factors that are associated with an increased risk of suicide, abuse, as well as alcohol and substance abuse include having a parent who attended

residential school, or was disconnected from their culture, the loss of the extended family network, living in a community that is individualistic, experiencing racism and oppression, not having access to cultural services, inadequate housing, or lack of economic and capacity building opportunities (Government of Canada, 2006).

In order to address the issues affecting mental health and well-being, social issues such as housing, education, and poverty must be addressed and protective factors such as living off the land, strong social networks, and culture must be supported (Government of Canada, 2006).

HIV and AIDS. First Nations people are overrepresented in HIV and AIDS statistics. In Canada, they account for only 3.3% of the total population, yet represent 16.5% of AIDS cases and 7.5% of HIV infections, and are diagnosed at a younger age than non-First Nations people (National Aboriginal Health Organization [NAHO], 2007). According to NAHO, First Nations people are vulnerable to AIDS and HIV because of the risk factors such as poor access to health services, increased rates of poverty, substance abuse, and intravenous drug use. First Nations youth accounted for 24.8% of the HIV positive tests in 1999 (Majumdar, Chambers, & Roberts, 2004). First Nations youth self reported higher rates of sexual activity than the general Canadian youth population, especially at ages 13, 14, and 15, with males having a higher number of sexual partners than females (FNC, 2005). Associated with these rates are high rates of teenage pregnancy, low rates of condom use, the perception that HIV happens to "others in other communities", as well as sexually transmitted diseases rates that are approximately ten times higher in the First Nations population (Steenbeck, 2004; Worthington, et al., 2010).

First Nations Youth

First Nations youth between the ages of 12 and 17 were surveyed as part of the RHS. This survey, governed by First Nations organizations, gathered information about physical,

emotional, spiritual, mental, environmental, economic, and social components that affect health (FNC, 2005). Key findings from this report will be presented in order to provide information about the health of First Nations Youth and factors that affect it.

First Nations youth who live on-reserve in general have many connections to their communities, families, and nations (FNC, 2005). They typically live in a household that includes both nuclear and extended family members, and although housing is considered overcrowded by Western standards, this connection to family is important for the sharing of cultural languages and traditions that mostly come from interactions with parents and grandparents (FNC, 2005). Over half of First Nations youth feel that speaking a First Nations language and having cultural events in their lives is important, even though only about 14% speak their traditional language on a daily basis (FNC, 2005). The importance of knowing their language and culture also influences other areas of their lives such as their mental health, and drug and alcohol use.

Educational success for First Nations youth has several positive and negative influences (FNC, 2005). Influences that hamper educational success include alcohol consumption, increased sexual activity, poor overall health, smoking, learning problems, and not eating a balanced diet. Factors that positively influence school attendance are participating in sports and frequent physical activity. Physical activity is also beneficial to the youths' self-esteem, perceived physical competencies, and their ability to cope with mental stress, and makes them more likely to adopt a health lifestyle (FNC, 2005).

Long-term health conditions, those that lasted at least six months after diagnosis, identified in the RHS include asthma, allergies, chronic ear infections, Attention Deficit Hyperactivity Disorder, and chronic bronchitis (FNC, 2005). Disability was defined as a longterm health condition that hampers their ability to participate in activity (FNC, 2005). Those who

had a disability were more likely to have poorer general health, be overweight or obese, use alcohol, marijuana, or hash, have low self-esteem, experience loneliness, stress, depression, or have attempted suicide (FNC, 2005).

The rate of injury for First Nations youth is much greater than other Canadians in this age group (FNC, 2005). Injuries were most likely related to sports, motor vehicles, and bicycle accidents, and seem to be related to personal problems such as depression, low self-esteem, learning deficiencies, suicide of someone who was close to them, and alcohol consumption (FNC, 2005).

Non-traditional use of tobacco by youth increases as they age to a high of 66% for 17 year olds and is more prevalent in female youth (FNC, 2005). Non-traditional use of tobacco is influenced by lifestyle factors such as cannabis and alcohol use, living in an isolated community, or living in a home with smokers. Sixty-five percent of youth reported that they consumed alcohol at least monthly, with older youth consuming more frequently. Cannabis use also increases with age; 17 year old youth reported a usage rate of 47.5% and those aged 12 to 14 reported using at a rate of about 15% (FNC, 2005).

Statement of the Problem

It is important to increase the understanding of First Nations youth perceptions of what makes and keeps them healthy, as well as what they believe makes them unhealthy. There are many factors that affect the health of First Nations youth along with an abundance of literature describing the health concerns, as well as risk and protective factors. There are no studies that present the perspective of the First Nations youth as to what they believe makes and keeps them healthy or unhealthy, or that describe elements that influence their health and wellness.

Purpose and Objectives

The purpose of this secondary analysis is to discover, from the point of view of the First Nations youth in the Paths to Living Well for On-Reserve Youth Photovoice (PLWP) project, their meaning of health, what makes and keeps them healthy, as well as what they believe makes them unhealthy, and to explore the effect of time on their points of view. Objectives for this study are 1) to discover if there are common themes described by the youth, 2) to determine what their beliefs are regarding health, 3) to add to the findings from the PLWP project, and 4) to identify elements that influence the health and wellness for this group of youth. Other objectives are to fill the gaps in the research about the First Nations youth perspective of health and wellness and elements that influence their health. Contributions from this study may increase the knowledge about First Nations perceptions of health, lead to innovative health delivery approaches, and inform future research projects. The use of photographs as source of data for secondary analyses was also explored, and will add to the literature about photographs as a source of data for secondary analysis.

Research Questions

This study answers the central question of: What do the First Nations youth in the study identify as the contributing to or hindering their health, and does this change over time? Subquestions are (a) Are there similarities or differences in the group as to what they identify as contributing to or hindering their health, and (b) What elements would be included in a culturally appropriate representation of influences on the health and wellness of First Nations youth? (c) Will the youth choose the same photographs as they did in the first study? An additional query involved whether or not photographs are considered a data source, or are they simply a product

of the research, with the transcripts from interviews and sharing circles considered the only research data.

Chapter Two

Background

My involvement with the community of Standing Buffalo Dakota First Nation and the group of youth involved with the PLWP began in January of 2009 as part of an undergraduate class practicum. During my practicum, interviews were conducted with key persons in the community such as the health center director, the health center supervisor, the community health representative, the Brighter Futures director, and community members. I also attended several council meetings. From these activities, I learned about some of the strengths, needs, and challenges of the community, as well as built professional relationships with staff at the health centre, Elders, community members, and the youth in the PLWP project.

I worked as part of the PLWP research team during my practicum and continued on as a research assistant after completion of my practicum. This role included activities such as arranging meetings with the youth, organizing Photovoice sessions, assisting the youth in the Photovoice process, continuing to meet with key members of the community, taking part in a study trip, involvement in the summer culture camp, taking part in feasts, and meeting with Elders. I have been involved in all areas of the PLWP project except recruitment and photoelicitation. Other activities I have undertaken related to the PLWP project included presentations about photovoice and the PLWP at university classes and conferences, literature reviews, as well as continuing to learn about the history and culture of the community.

Throughout my involvement with the community I have gained an increased understanding of community-based research approaches and the importance of conducting research within a partnership. I have recognized the critical need for culturally-based approaches to health and wellness and that the "one size fits all" approach of the current health care system

is not meeting appropriately, the needs of this population. I have professionally evolved as a registered nurse in my understanding of First Nations culture and how history has impacted the overall health of First Nations peoples. It has broadened my perceptions of health from one that was consistent with the biomedical model of health to one that encompasses the whole individual and relates to his or her economic and social status, as well as his/her environment, culture and history.

I bring into this current study a strong understanding of the community as a whole, as well as a strong relationship with the youth involved in the PLPW project. Over the past few years I have learned a lot from the youth about their lives (involvement in school activities, dancing, career aspirations, friends, challenges they face, successes they achieve), their families (the nuclear family unit, the extended family unit, their siblings, grandparents), and their hopes for the future. I have also gained an understanding of their community (the buffalo and its significance to the community, individuals who live in the community, community strengths, weaknesses, needs) and the Dakota culture (powwow, prayers, Elders, feasts, history). I also bring with me into the current study a trust relationship with the youth, which I believe increases the richness of the data through authentic participation.

Paths to Living Well Photovoice Project

Photovoice was the second path in the Paths to Living Well for On-Reserve Youth project and was followed by a third path that looked at other visual methods (Table 1). The PLWP project followed protocols typically used in similar photovoice projects. First Nations youth participants were trained on the use of cameras and the ethics of photography. Discussions around the themes for the photographs were held, and with input from the youth, it was decided they would take pictures about their health; specifically what contributes to their health, and

what makes them unhealthy. The youth took pictures over several weeks, and the group met about every two weeks to discuss their progress, send pictures for developing, and share concerns and learnings. Over several months, the youth took approximately 200 pictures. The youth then chose three or four photographs each that they felt represented contributors or barriers to their health. After selection of the photographs, they met as a group to sort their collection of photographs into themes both individually and with the principal investigator. Photoelicitation was done using the SHOWeD process, a structured questioning technique and stands for: 1) What do you See happening here, 2) What is really Happening in this photograph, 3) How does this relate to Our lives, 4) Why do these issues exist, 5) What can we Do to address the issues (Wang, 2006). Three themes relating to health were identified by the youth (Petrucka, et al., 2011). The first theme related to their environment and its intimate relationship with health and holism. The second theme of connectedness across the generations identified the contributions of people and groups across time and place. The third theme encompassed the contributions of culture to their health.

Key dates	September	January	June	March	May
	2008	2009	2009	2010	2011
Path 2					
Photovoice					
Recruitment	******				
Photographing	**	*******	**		
Photoelicitation			******		
Path 3					
Wintercounts					
Other visual				******	*****
methods					
Secondary					*****
Analysis					

Table 1. Paths to Living Well for On-Reserve Youth Timeline

Literature Review

Literature about photovoice will be discussed in order to provide background information about this technique. In particular, its use with youth and First Nations will provide relevant information about the process and uses. Secondary analysis literature will also be explored to provide background on this methodology and situate how this study fits as a secondary analysis.

Photovoice. Photovoice is a community-based participatory research methodology whose goals are to "enable people to record and reflect on their community's strengths and weaknesses", "to promote critical dialogue and knowledge about important community issues" through discussion, and to "reach policy makers" (Wang & Burris, 1997, p. 370). Theoretical underpinnings of photovoice emerged from feminist theory, Friere's theory of critical consciousness, and documentary photography (Wang & Burris, 1997).

Photovoice has been used with youth to gain an understanding of the essence of play (Berinstein & Magalhaes, 2009), to explore physical activity, eating and drinking behaviours (Fitzgerald, Bunde, Birouste, & Webster, 2009), to identify factors that affect physical activity (Hennessey et al., 2010), to explore health and support on a university campus (Goodhart, Hsu, Coleman, Maresca, & Miller, 2006), and to identify key health problems and engage youth in health advocacy projects (Necheles et al., 2007). It has also been used to explore, from the youths' perspective, the meaning of their neighbourhood and community (Nowell, Berkowitz, Deacon, & Foster-Fishman, 2006), the mechanisms that facilitate youth empowerment (Royce, Parra-Medina, & Messias, 2006), the definition of what being healthy means to adolescent parents (Stevens, 2006), and Latino girls' definition of health (Vaughn, Rojas-Guyer, & Howell, 2008).

This methodology has been adapted and evaluated as a culturally relevant research model within a partnership with a First Nations group in Western Canada (Castleden, Garvin, & Huuay-aht First Nation, 2008). Findings from the adult participants in this study were that photovoice balanced power, created a sense of ownership, cultivated trusting relationships, built community capacity, and was responsive to culture. The adaptation to photovoice in this study was the addition of a feedback loop where input from community was sought throughout the study.

Photovoice has also been used with First Nations participants to explore women's experiences with breast cancer (Poudrier & Mac-Lean, 2009). Underpinned by feminist theory, this study was used to explore the perceptions of this vulnerable population and provide them with a voice. Findings from this study showed the importance of addressing cultural needs, as well as the "larger sociological issue of racism, power, and socioeconomic inequality" in the health care system (Poudrier & Mac-Lean, 2009, p. 306).

Foster-Fishman et al. (2005) examined the impact of participation in a photovoice study on the youth participants. Using empowerment theory, they interviewed the participating youth three months after study completion, and found that the youth had increased self-competence, an emerging critical awareness of their environment, and had developed resources for social and political action. Royce, Parra-Medina, and Messias (2006) used photovoice to examine and initiate youth empowerment and found it to be both a creative and flexible tool to empower youth. They also found that younger participants may not have fully grasped the abstract concepts involved in creating the photo essay. One quantitative study explored whether or not photovoice would increase civic engagement, and if the impact would be greater for older youth (Gant et al., 2009). They found that older youth showed a statistically significant higher level of

community engagement, and suggested that photovoice is effective at engaging older youth and increasing their level of civic engagement.

Strack, Magill, and McDonagh (2005) studied the effectiveness of photovoice, using a mixed method approach, as a technique for use with youth, and whether or not it required adaptations to be an effective tool. Survey results showed high levels of satisfaction with taking pictures and participating in the project. The youth also felt that they took photographs that reflected their realities in the neighbourhood, and 100% indicated that they would participate in another photovoice project. This study also found that the youth felt empowered, and for the first time began to think about their community. Drew, Duncan, and Saywer (2010) evaluated the feasibility, benefits, and challenges of using photovoice for health research with young people. They found photovoice to be beneficial for recruiting participants and increasing positive feelings about research. For the participants, it was fun, and promoted self-understanding, expression, and communication. For the researchers, they found that photovoice facilitated rich interviews which provided details that may not have otherwise been discussed. Challenges for the participants in this study were deciding what to photograph as well as the need for more time and effort on the part of the researchers during the study as compared to a standard qualitative interview study.

Secondary analysis. Secondary analysis holds "considerable promise for optimizing health knowledge" (Thome, 1998, p. 547). The amount of qualitative data available for secondary analysis is rapidly expanding, and considering the amount of resources required in collecting qualitative data, secondary analysis is an appropriate strategy to maximize the benefits of the data (Thome, 1998). For the researcher, it presents the possibility of re-examining and reinterpreting data from the past, with knowledge available in the present (Goodwin &

O'Connor, 2006). It is a valid mode of inquiry, particularly suited to educating students in the research process (Szabo & Strang, 1997).

There are several types of secondary analyses: analytic expansion where the researcher uses data that he/she has collected and expands on the analysis or asks new questions: retrospective interpretation where existing data are used to further develop themes from the original study; armchair induction where inductive methods of textual analysis are applied to existing data; amplified sampling where "several distinct and theoretically representative databases" can be completed; and cross-validation where the researchers use the data to "confirm or discount patterns or themes" beyond the original sample (Thome, 1998, p. 548).

Secondary analysis has been used in acute care nursing research to understand patient and family perspectives about bathing during weaning from prolonged mechanical ventilation (Happ, Tate, Swigart, DiVirgilio-Thomas, & Hoffman, 2010), with mental health patients to understand their experience as it relates to the therapeutic relationship (Shattell, Starr, & Thomas, 2007), to explore how well elements that contribute to a sense of self are addressed in the mental health system (Farone & Pickens, 2007), and to explore the social construction of disability with schizophrenia patients (Williams & Collins, 2002).

Several studies have explored nursing practice using secondary analysis. These studies have explored the types and nature of interruptions experienced by nurses who are using a point-of-care medication administration system (Stamp & Willis, 2010; Sturm, 2004), described nurses response to suicidal psychiatric inpatients (Gilje, Talseth, & Norberg, 2005), and explored the concept of busyness in nursing, as well as the relationship between busyness and nurses' research utilization (Thompson, et al., 2008). It has also been used to understand the utilization of policies and procedures that support implementation of clinical guidelines in order to assist in the

understanding of the relationship between organizational support and stability with nurses' perception of the policy changes (St-Pierre, Davies, Edwards, & Griffin, 2007), and to describe leadership behaviors and activities that contribute to the use of clinical practice guidelines for nurses (Gifford, Davies, Edwards, & Graham, 2006).

Secondary analysis has been utilized with ethnically diverse populations to learn about their perception of social barriers of care for eating disorders (Becker, et al., 2010), to explore the effect of ethnicity on menopausal symptoms with four major ethnic groups in the United States (Im, Lee, Chee, Dormire, & Brown, 2010), and to explore vulnerability in cancer and palliative care for black Caribbean patients with advanced cancer (Koffman, Morgan, Edmonds, Speck, & Higginson, 2009).

Several studies that used secondary analysis have focused on patients, families, and caregivers to further the understanding of their experiences within healthcare. Stajduhar, Martin, and Cairns (2010) used secondary analysis to examine caregivers' coping during end-of-life care, and to describe what made grieving difficult from the perspective of the bereaved family caregivers. It has been used to understand what patients with advanced cancer identify as being helpful in their communication with health care providers (Stajduhar, Thorne, McGuinness, & Kim-Sing, 2010), to understand what patients with cancer and their caregivers experience with online health information and resources (Dolce, 2009), and to describe the experience of control, how they manage or cope with caregiving, as perceived by the family caregivers of patients with dementia (Szabo & Strang, 1997).

Women's experiences have been examined using secondary analysis. Leal and Brackley (2004) examined the female survivors' of domestic violence and how they described events within and surrounding their relationships. It has been used to increase the understanding of how

mothers with HIV cope with their diagnosis and its related life circumstances (Pittiglio & Hough, 2009), and to explore the lived experience of becoming pregnant after HIV diagnosis (Sanders, 2009), as well as to learn about the health care experience of women with low vision or blindness (Sharts-Hopko, et al., 2010), and to explore women's health care experiences to understand more about the health literacy of women with visual impairments (Harrison, Mackert, & Watkins, 2010).

Data that have been used for secondary analysis includes observational field notes, interviews, and clinical record review (Happ, et al., 2010), data from interviews (Becker, et al., 2010; Brownlie & Howson, 2006; Gilje, et al., 2005; Harrison, Mackert & Watkins, 2010; Koffman, et al., 2009; Leal & Brackley, 2004; Pittiglio & Hough, 2009; Saunders, 2009; Shattell, et al., 2007; Stajduhar, Thorne, et al., 2010; Stamp & Willis, 2010), data from focus groups (Sharts-Hopko, et al., 2010; Stajduhar, Martin, & Cairns, 2010; Stajduhar, Thorne, et al., 2010; St-Pierre, et al., 2007), online forums (Im, et al., 2010), online support groups (Dolce, 2009), and questionnaires (St-Pierre, et al., 2007).

To date, there have been no studies that have used photographs as a source of data for secondary analysis. Youth have been the population of interest in only one study that used secondary analysis: data was used to identify strengths that protect homeless youth (Rew & Horner, 2003). One secondary analysis has used data from two photovoice studies along with census data to explore community processes that may be applicable to future community change projects (Aloeblata & Navarro, 2010). The authors from this study provided no information about which data from the photovoice projects were utilized. This secondary analysis will add to the literature on secondary analysis, as it is a novel use for this methodology. Existing studies utilizing the photovoice techniques have been cross sectional, and have not explored whether or

not the articulated portion of the data changes over time. This study will add to the literature surrounding photovoice, as well as First Nations youths' perceptions of health, changes in their perceptions over time, as well as what elements may influence their health and wellness.

Chapter Three

Methodology

Design

This qualitative study utilizes interpretive description to seek understandings about the perceptions of First Nations youth and what they believe makes and keeps them healthy or unhealthy, and what elements influence their health and wellness. These understandings are the product of co-construction by the researcher and participants (Hunt, 2009). Philosophically located in interpretive naturalistic traditions, this method assumes that there are "multiple constructed realities", that "the inquirer and the "object" of inquiry interact to influence each other", and that "no *a priori* theory can possibly encompass the multiple realities that are likely to be encountered" (Thorne, Reimer Kirkham, & O'Flynn-Magee, 2004, p. 5).

This type of secondary analysis is an analytic expansion because the data was used to expand on the previous analysis, as well as asks new questions, and also contains elements of retrospective interpretation because data was used to further develop the themes (Thome, 1998). Data, in the form of photographs from the PLPW project, were used to re-interview the youth who agreed to participate in this study. In the PLPW project, the youth took photographs that related to their health, and from amongst all the photographs taken, they chose three or four that best represented what makes and keeps them healthy, and what makes them unhealthy. These photographs were the focus of this secondary analysis that explored questions asked in the original study, as well as looked for similarities and differences in the photographs they had chosen, and their discussions during the photoelicitation. The study also looked for elements that had influenced the youths' health and wellness.

This approach was chosen because it is beneficial for both the researcher and the participants (Szabo & Strang, 1997). For the participants, it reduces their time commitment, and allows them to provide additional thoughts about a particular subject after the original interviews and sharing circle. For the researchers, it also reduces the time commitment and provides research experience without the costs of conducting a study. Most importantly, it fits with the research questions of this study.

Limitations of this method include a lack of control over the data set and how it was generated and recorded (Szabo & Strang, 1997). This was not a limitation in this study as the data being used are photographs, with the participants participating in additional interviews and sharing circles. The researcher from the original study was also available for consultation and clarification, and was also involved, as a supervisor, throughout the process of this secondary analysis. According to Goodwin and O'Connor (2006), secondary analysis requires the researcher to be familiar with the data collection from the previous study. This is the case with this secondary analysis.

The richness of the data has an impact on the outcome of the secondary analysis (Corti, 2007). Photographs are being used as data and can be considered a rich source of data. These photographs, along with interviews, enhanced the richness of the findings for the secondary analysis. The richness of the data was also enhanced through the trust relationship between the participants and myself which had been built during the past several years.

Setting. Standing Buffalo 78 is an "Indian" reserve located approximately eight kilometers northwest of Fort Qu'Appelle, Saskatchewan, Canada. As of June 2011, the registered population of this reserve was 1163 with 430 residing on reserve; approximately half are between 0 and 19 years of age (Indian and Northern Affairs Canada, 2010).

Standing Buffalo Dakota First Nation (SBDFN) is governed by a Chief and six councilors, and is affiliated with File Hills Qu'Appelle Tribal Council Inc. (SBDFN, 2007). Members of this community are Dakota and their native language is the Dakota dialect of Siouan language. The band were not signers of a treaty, but do receive funding for health services from the federal government (SBDFN, 2007).

Infrastructure on the reserve includes a band office, health station, kindergarten to grade nine school, daycare center, personal care home, fire hall, water treatment plant, sewage lagoon, and powwow and rodeo grounds (SBDFN, 2007). Services offered at the health station include health promotion services such as pre and post-natal services, infant and toddler care, immunization, sexual education, chronic care, environmental health support, drug and alcohol counseling, nutrition support, home care nursing and support, water testing, medical transportation, and health education (SBDFN, 2007).

Agriculture is the main source of employment on-reserve and includes both livestock and grain production. Other places of employment include the daycare center, personal care home, school, health station, band office, as well as gas bar and convenience store. Approximately half of the residents have completed at least high school, and 20% have completed some post secondary education (Statistics Canada, 2007). Average income for those who are employed full time is approximately \$27, 000 per year (Statistics Canada, 2007).

A community evaluation that was conducted by Standing Buffalo health services about five years ago, identified several community needs (SBDFN, 2007). It found that additional services were needed in the area of mental health and well-being, promotion of good parenting and positive family practices, information on health topics such as diabetes, obesity, and sexual

health, drug and alcohol abuse, safe water, housing improvement, and better utilization of onreserve health services (SBDFN, 2007).

Approximately 57% of male and 53% of female residents felt that they were in excellent to good health, with students and those with university or college education reporting the best health (SBDFN, 2007). The most common chronic conditions reported by residents were endocrine, metabolic, and nutritional diseases and were followed closely by circulatory diseases (SBDFN, 2007). The 2007 to 2012 community health plan is currently in effect and its goal is to prevent illness and injury through provision of services designed to prioritize health needs of the community in the areas of preventative and protective health services, health promotion, as well as management, personnel and program development.

Sample. The population of interest in this study was all of the Dakota youth who participated in the PLWP project between January 2008 and June of 2010. The population from the PLWP included 13 youth, four males and nine females, who were between 9 and 17 years of age at the beginning of that project. The sample used in the secondary analysis consisted of three male and five female youth between the ages of 12 and 21 during this study.

Procedure

The time frame for this study was approximately four months. Recruitment and data collection began in May 2011, and the study was completed in August 2011. Because of previous involvement with this community and the youth, a longer period of engagement was not required to meet the principles of ownership, control, access, and possession that govern research with First Nations, and call for an appropriate period of time for negotiation, capacity development and empowerment (FNC, 2007).

Recruitment. Youth were recruited from among the participants of the PLWP project, during one of the regular meetings for another path of the Paths to Living Well for On-Reserve Youth project. Information about the study was presented, along with the potential risks and benefits. All of the participants received an information package, which included the consent form, a confidentiality pledge, and a parent/guardian letter.

Data collection. During the first meeting, participants were asked to decide which three or four photographs they felt best represented what makes and keeps them healthy or unhealthy. They were shown their original photographs from the PLWP project and were instructed to decide whether or not they wanted to keep their original choices or to choose other photographs. Each participant was given time to browse all the photographs they had taken as part of the original study and make their choices without any outside influences.

Only one participant chose to replace her photographs with new ones that she had taken more recently because none of her original photographs appealed to her at that time. She did, however, ask to use two of her original photographs during her individual interview. In the end, she used two original photographs and two new photographs. The photographs she discarded were of two male Aboriginal celebrity figures (one singer and one actor). They were replaced with two photographs of her family and another role model. When asked about this decision she stated she was "not sure what to say about them at this time" (personal communication, Ava, May 19, 2011). All of the other participants chose to use their original photograph choices.

Over the next several meetings individual interviews were completed. Each photograph was discussed individually using the SHOWeD format (Appendix A), along with additional clarifying questions. Most interviews took place in the school library, and others were held at locations convenient for the participants. The SHOWeD format questions occasionally proved

difficult to answer for the participants: some had difficulty remembering why they had taken the photograph or what the context was. Several participants stated they were trying to remember what they answered in the previous photoelicitation session, and were instructed that they did not have to have the same answer as their previous interviews but could chose to change their answers as they wished. They were also instructed that if they did not know what to say they could move on and come back at the end of the interviews. All interviews were recorded with permission of the participants and transcribed verbatim by the researcher. Personal memos were also written after the interviews that included thoughts about the interviews such as participants' non-verbal language, group dynamics and interactions, as well as initial interpretations of what I had heard as the researcher.

Member checking was done by presenting my initial thoughts and findings from the interviews to the participants. They were given the opportunity to provide the researcher with feedback, and to make changes if they wished. Data in the form of field notes for the secondary analysis, as part of an audit trail, have been kept during this study and will be kept until five years after completion (Appendix B). They included thoughts about the project and interviews, decision information, and other important facts.

Data analysis. The goal of data analysis in interpretive description is to answer questions important to the discipline of nursing through a process of "comprehending data, synthesizing meanings, theorizing relationships, and recontextualizing data into findings" in order to come to "constructed truths", as opposed to facts about a phenomenon (Thorne et al., 2004, p. 11). This inductive process seeks to answer questions such as a) What is happening, b) What am I learning, and c) What does this mean? in order to capture the overall picture (Thorne, Reimer Kirkham, & MacDonald-Emes, 1997).

Data analysis involved reading and re-reading transcripts, and listening to audio files in order to immerse myself in the data. It was important to intimately know each case and abstract relevant themes from them in order to "produce a species of knowledge that will itself be applied back to individual cases" (Thorne et al., 1997, p. 175). Initially, data was organized into tables using categories to develop themes and organize thoughts about what was happening, as well as what my thoughts were about possible meanings. Transcripts containing memos along with the summary tables were developed into the initial themes. After development of the themes, transcripts and notes were re-read to further develop the themes. Discussion with supervisor also helped to express what was emerging from the data, and delve deeper into the data to further define concepts and thoughts.

Rigour

Trustworthiness of the study was established using several measures to increase the credibility, transferability, dependability, and confirmability (Loiselle & Profetto-McGrath, 2007). Credibility was established through several methods. The use of multiple sources of data was used including previous study data, interview data, along with field notes. Ongoing peer debriefing with my thesis committee, and member checking also enhanced credibility. Preliminary findings were discussed with the participants and their input sought during the data collection phase. Confirmability was enhanced through co-creation of the findings by the youth and researcher, and the use of an audit trail. Field notes were kept and recorded the thoughts and decisions about the study development, data collection, the interview process, and data analysis. Transferability was enhanced through the use of a thorough literature review and deep description of the current study. Dependability evidenced in the findings from this study.

Although the youth had some changes in what they perceived made and kept them healthy, their core beliefs remained consistent.

Ethical Considerations

This study was submitted to the University of Saskatchewan Behavioural Research Ethics Board (BREB) for review and approval prior to commencement of the study. It met the requirements for minimal risk, as defined by the Tri-Council Policy Statement; "subjects can reasonably be expected to regard the probability and magnitude of possible harms implied by participation in research to be no greater than those encountered by the subject in those aspects of his or her everyday life" (Canadian Institutes of Health Research [CIHR], Natural Sciences and Engineering Research Council of Canada [NSERCC], Social Sciences and Humanities Research Council of Canada [SSHRCC], 2005, p. 1.5). Approval was received in May 2011 (Appendix C).

In order to ensure informed consent, the researcher discussed the study and provided written information to the participants in regards to who is conducting the study, why it is being done, who is eligible to participate, what their participation involves, what are the risks and benefits of participating, confidentiality, their right to withdraw at any time, and the voluntary nature of the study. Consent forms (Appendix D) followed guidelines from the University of Saskatchewan BREB and were obtained from all participants.

The population of interest in this study was all of the Dakota youth who participated in the PLWP project between January 2008 and June 2010. In this sample there are eight youth, three males and five females, who are currently between 12 and 21 years of age. In Saskatchewan, the age of majority is 18 years of age (Health Canada, 2010). Some of the participants in the study fell below the age of majority, and therefore required their parents or

guardians to sign the consent forms. Assent was also obtained from those participants as per the Behavioural and Biomedical REB Assent Guidelines (University of Saskatchewan, 2007). A parental letter was sent home with each participant who was less than 18 years of age (Appendix E). The Chief and Council of SBDFN were informed about the study by the community researcher.

De-identifying all data enhanced privacy and confidentiality. All names were removed from the data and replaced with pseudonyms. Names were chosen at random using a list of popular names from 2011. All results will be presented and published using the pseudonyms, and other identifying data such as age, family data, place of residence, or the school they attend will be removed or replaced with fictitious information that will not affect the findings. Participants were also given the opportunity to review their transcripts and quotes, and have the right to review any information that will be presented or published, and to withdraw any of their data prior to release of the findings. Photographs, as part of the original study, are covered under that consent where permission to use the photographs in published work was given.

Potential risks of the proposed study included discomfort in relating the events of their participation in the PLWP project, information they provided may have conflicted with community or cultural values such as the disclosure or knowledge that is to meant to be shared, or data provided may have portrayed the community in a negative light. Other risks might include the community knowing they were participating in a research project. In order to increase confidentiality, all participants were asked to sign a confidentiality pledge (Appendix F) indicating they would not disclose the identity of others in the group.

Chapter Four

Findings

The principal question that was answered in this study is: What do the First Nations youth in the study identify as the contributing to or hindering their health, and does this change over time? Other questions that were answered included (a) Are there similarities or differences in the group as to what they identify as contributing to or hindering their health, and (b) What elements would be included in a culturally appropriate representation of influences on the health and wellness of First Nations youth? (c) Will the youth choose the same photographs as they did in the first study? An additional query involved whether or not photographs are considered a data source, or are they simply a product of the research, with the transcripts from interviews and sharing circles considered the only research data.

Through individual interviews led by the youths' photographs, they identified elements that made both positive and negative contributions to their health. These elements will be discussed using the themes identified by the youth in the PLWP study. Like the youth, no one theme can be singled out, seen individually or be accepted as representative of all of the youth in this study. Instead they must be seen as interrelated, intertwined products of the participants, and their environment at that time and in that place. A chart of the three themes, how many youth spoke about each theme, and examples of quotes is provided (Appendix G).

People: Connected Across the Generations

This was by far the most prevalent theme discussed by the youth in the interviews. Each youth had at least one photograph of a family member, or related their photograph to a family member or other significant person in their lives.

Family as health. A positive contributor to health identified by all of the youth was their nuclear and extended family. Families contributed to the participants' health by providing spiritual and emotional guidance, as well as teaching. The youth also recognized the family as an instrument for learning about culture and their expected roles within family and the community.

Jacob discussed how his father sundanced for his family, and how it made an impact on his health, both spiritually, and emotionally. The youth identified this act as a sacrifice his father made which contributed to the family, thus making a positive contribution to his own health. When discussing his photograph (Figure 1) of his fathers' eagle fan and hand drum he stated:

I see, when I look at them they remind me of when my Dad sundances. When he sundances he does it for, he did it for like my family, so to see him do that it really affected me spiritually and emotionally. [The sundance is] kind of a like prayers and a sacrifice almost, because you fast for almost 4 days. You don't eat or drink anything, you suffer throughout the whole period, and by the end of it you give thanks for, and hope that the creator listened ... To see how strong he is and manage through it makes me stronger to want to do that.

Figure 1. Photograph of Eagle Fan and Hand Drum²

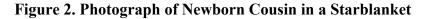


² All photographs published with permission of participants.

Other participants photographed cultural items that signified contributions to their health. Some of these items were passed down to them by family members, and with them came stories of ceremony, as well as about stories about the person who gave them items. When discussing his photograph of a beaded necklace given to him by an Aunty, Jacob related the story of her passing from a heart attack, and how it made him consider his own health and the importance of "looking after himself". Another example of this was how a photograph of a pipe bag made him think about his Aunty who always remind him to be active and live a healthier life (Jacob).

Participants also identified how families contribute to health through teaching about the expected roles for the youth. This can be seen as a way to prepare them for their future as First Nations people, adults, and parents, as well as preparing them for male or female roles in the family and community. Roles learned within the family that the youth participants identified included traditional cultural teachings about survival such as hunting and fishing, child care, role modeling for younger siblings and community members, as well as other cultural specific teachings.

During photoelicitation, three participants identified newborns as contributors to their health, and used words like "miracle" and "happiness" to describe what they saw in the photographs (Emma, Ava, Olivia). Emma saw health in her photograph of a newborn, stating health is "new people coming into the world, more family" (Figure 2). Ava also discussed how a picture of a baby was significant because she has had a large part in raising that child. She related this to her health in that from having a part in parenting, she has learned about parenting and has considered the amount of responsibility it takes to raise a child. This translated to her that she must always live in a positive way.





Several participants related family as the place where they participate in activities that benefit their health (Mason, Liam, Emma, Ava). Mason and Liam discussed how their family members participated in sports and that they also participated so they can spend time together as a family. Emma identified that she goes for long walks with her family and it contributes to her health because it means she is being active and spending time together. Ava saw going to powwows and dancing as a family activity that benefitted her health in a positive way, through contributing to her spiritual and physical health.

Role models and role modelling as health. The importance of role models as a contributor to health was identified by all of the youth participants, both having people who are role models in their lives, as well as their position as a role model for younger family and community members. The youth participants identified several ways in which their position as a role model contributed to their health. It included practicing behaviours that are considered positive, as well as their responsibility to learn from and teach to their family and other community members. They also identified how role models contributed to their health by providing guidance in areas such as career choices, education, use of drugs and alcohol, culture, respect, responsibility to community, and ceremony. Role modeling appears to be accepted as a responsibility, not something that they see as a burden: it appears to be something that is just "what they do".

Role modeling also gave the youth a sense of their responsibility in the development of those who see them as role models. Some of the youth saw themselves as a bridge between those whom they learn from and those whom they role model for. When discussing how a photograph of younger cousin and sibling contributed to her health Olivia stated that they are "keeping me alive and keeping me in school ... [because I have to role model, my actions are] teaching them how to be a better person and stay away from alcohol and drugs". Ava also spoke of how she has learned about the importance of being positive because young children will emulate "what you are doing and how you are, and it is your responsibility to show them how to be a positive person." Part of health described by the youth is contributing to the health of others through teaching them how to live good healthy lives.

Those who have died are still considered role models for the youth. Their position as a role model did not end when they died, but lived on through the youth thoughts and appear to have a continuous influence. When discussing a photograph of a medallion (Figure 3) and a parent and sibling (Figure 4), one participant discussed the role that grandparents played in the way they live their lives today. Ava spoke of the influence of her ancestors on how she lives her life and how it influences her health.

I know he's still with me [her grandfather] because sometimes when I dance, or even my grandma's that passed away, I can see them in the corners of my eyes and stuff and sometimes it scares me but then I know they're just watching over me. Like sometimes it

makes me want to do more I guess or be better than what I am right now and just to make

people proud of me.

Figure 3. Photograph of Medallion



Figure 4. Photograph of a Parent and Sibling



Ava also discussed how the accomplishments of her grandfather, whom she considers a role model, shapes how she lives her life today and contributes to the responsibility she feels to

her family name. She stated she was "really proud to be part of his family I guess. Yeah, he did a lot of things [for the community]... He sat on like so many boards and stuff and everybody knew him, and still today some people come up to me and tell me that they knew him and he was a great person... yeah, that gives me lots to live up to".

Ava really felt the contribution she is making to her community and the health of others. Because of her involvement in powwow dancing, many of the children recognize her and talk to her. This positive feedback from the younger children has given her a sense of accomplishment and pride in herself. She discussed how she considered herself a positive role model and how this makes her feel proud. She acknowledges that she needs to continue to be a role model and model positive behavior because they have placed her in this role.

It appears that role modeling may have gender divisions. Female participants (Ava, Olivia, Emma) discussed situations in which they were considered role models and they all spoke of a parenting type role in relation to younger siblings, as well as other family and community members. All three of these participants discussed being responsible for their younger siblings. This was also evident during photovoice meetings when younger siblings often accompanied the participants. Male participants (Mason, Liam) discussed themselves as role models in what might be considered traditional male roles in hunting, fishing, and sports. They appeared to be quite proud when discussing their accomplishments in these areas and also spoke of the importance of learning these roles and passing the knowledge on to others.

Teaching and learning as health. Within the family and role model functions the youth acknowledged a reciprocal relationship that involves a responsibility to learn and to teach. Part of this learning responsibility is to share what they know and learn because they need to share that knowledge with others. Liam expressed this relationship when discussing how a photograph

of elk antlers contributes to his health. He stated "just being outdoors and learning some of the cultural side, and how to take care of yourself, like how to hunt for your family ... because we have to skin the whole thing [white tailed deer] by ourselves...other people that can help too but you still have to learn...for passing it on."

Culture

All of the youth identified culture as a mechanism that contributed to their health. Culture was interwoven into all of the areas the youth participants recognized as contributors to their health. It should be noted that within this group of Dakota youth different cultural beliefs exist, as well as different levels of beliefs, understandings, and participation in traditional Dakota practices. For example, some of the youth participate in powwow dancing, sweats, and prayers, while others know that drumming is a cultural practice, but do not understand the significance of it or why it is done.

Cultural activities as health. Many cultural activities were acknowledged as having a positive contribution to health. These included participating in activities such as sweat, powwow dancing, hunting game, fishing with snares, beading, drumming, and singing.

Jacob identified participating in a sweat as something that contributed to his mental and emotional health, stating, "when I sweat I actually stay more stable and actually keep away from alcohol". Ava linked beading, as a cultural activity, with improving her mental health. "I like to bead a lot and it's a stress reliever for me". She also identified powwow dancing as an activity to improve her health through connecting with her ancestors during dancing, as well as a way to keep her blood sugars down.

Figure 5. Examples of Photographs Representing Cultural Activities





Cultural items as health. Many of the youth had photographs of cultural items such as beaded medallions, necklaces, drums, drumsticks, pipes, and pipe bags as representations of contributors to their health. Many of the items had belonged to family members and had special

meaning because of where they came from. The youth often considered the items more important when they were given to the recipient, and also represented memories of the person who gave it to them or to whom it belonged. The youth discussed these items and considered them as contributors to health because the items reminded them of their heritage, their ancestors, and their responsibilities to themselves, their family, and community.



Figure 6. Example of a Cultural Item

Environment

Several youth identified the environment as a contributor to their health. Photographs of landscapes and other significant places were taken by several of the youth to represent contributors to their health. The land was identified as a place where they "came from", "their home", and as an important place for their sports and culture (Emma, Sophia, Isabella, Liam). Emma also stated that when she sees the land, she sees her "First Nations people".

Several female participants talked about the beauty and cleanliness of the landscapes in their photographs (Isabella, Sophia). Isabella described her photograph of a sunrise as representing health because "it keeps me going, like there are many more to come" (Figure 7).

Sophia described a photograph of land, furrows, and snow as she had captured "how beautiful the earth is and how it should stay, and all that stuff [the parts of the photograph], how Mother Earth should be, how it like should stay healthy"(Figure 7). Isabella saw a valley as representing health because it was clean and "not like other places, dirty with garbage".



Figure 7. Photographs Representing Beauty and Cleanliness in Landscapes

Sophia photographed a scene that she believed revealed elements that contributed to as well as hindered health. She described what she saw in this photograph (Figure 8) as " garbage at the bottom and nice clean earth on the top. I was trying to say that in this picture that earth

shouldn't be like this, garbage and all this dirty, and it should be like up there, the lake and the hills, on the top of the picture". She saw the top of the photograph as representing health and the bottom of it with the pollution and garbage representative of unhealthy, and felt that "our earth is slowly dying. We need to keep it as healthy as possible".



Figure 8. Photograph Representing Healthy and Unhealthy

In general, the photoelicitation sessions identified mostly contributors to health. Only two participants identified garbage and pollution as an element that negatively influenced their health and the health of "Mother Earth". Isabella described her photograph of a landscape as "plain and clean [a photograph of a valley]. It was like clean and beautiful, and not like other places or like dirty with garbage". Sophia also described unhealthy elements in the previous photograph (Figure 8).

Elements that Influence Health for On-Reserve First Nations Youth

A tree requires several fundamentals in order to flourish and grow: food, water, protection against disease and other harms, as well as a stable environment in which to plant itself (Arbor Day Foundation, n.d.). Youth also require fundamental elements to enable them to achieve health. The following is a discussion of the pictorial representation (Figure 9) co-created by the youth and myself, a combination of what they have described and my interpretation of it.

The tree was chosen to represent elements that influence the health of on-reserve First Nations youth because of the intimate relationship that First Nations have with the land. It is said that the land known as North America was made by the Creator and given to First Nations peoples to use, to share, and to receive its gifts to support their lives (Cardinal & Hildebrandt, 2000). Other gifts from the creator also included the plants, animals, and water (Cardinal & Hildebrandt, 2008). Trees are seen as the providers of shelter and tools, they have a soul and offerings and thanks are always given when the trees sacrificed their existence for the people (Saskatchewan Indian Cultural Center, n.d.). The use of a tree to represent the elements that influences health honours this sacred relationship.

Roots and Earth

Roots and earth represent the community. The roots are where water and minerals that support growth are taken in and transported to the rest of the tree. I believe this is true of the role of the community, without the services and supports available in the community, the families and youth cannot flourish. As the youth described, the land is where they come from, it is where families and youth are, and contains the roots that feed the families and the youth. The earth must support the tree and provide it with a safe place to grow and flourish. In nature, as in the health of First Nations youth, there are also many challenges that impact growth and success. Being able to adapt to theses changes is essential, and is best achieved when other elements that contribute to growth and success are in place, and working in harmony to contribute to it.

Trunk and Branches

The trunk and branches of the tree represent family; they are seen as the supporting structure. Just as the family does, the function of the outer bark of the tree is to protect the tree and is renewed from within; the inner bark is made of living cells and conducts water and nutrients throughout the tree. Ancestors are represented by the heartwood which is deep inside is the tree, and is considered the central supporting pillar of the tree. It is a deceased layer, but does not decay or lose strength, just as the influence of the ancestors does not lose strength. The family is also the connection to the community both in a physical sense as well as in a cultural sense. In a cultural sense, if the family does not connect the youth with their culture they may not be able to have that part of their health provided for. Each branch grows in the direction where the elements for growth are provided. On the other hand, each branch is capable of changing its route.

Leaves

The leaves of the tree represent the youth and the elements they require for health. In order to grow and flourish they need certain elements to be provided by the families and communities. The environment around the leaves also needs to provide the food required to feed the rest of the tree, which in turn supports the growth of the leaves.

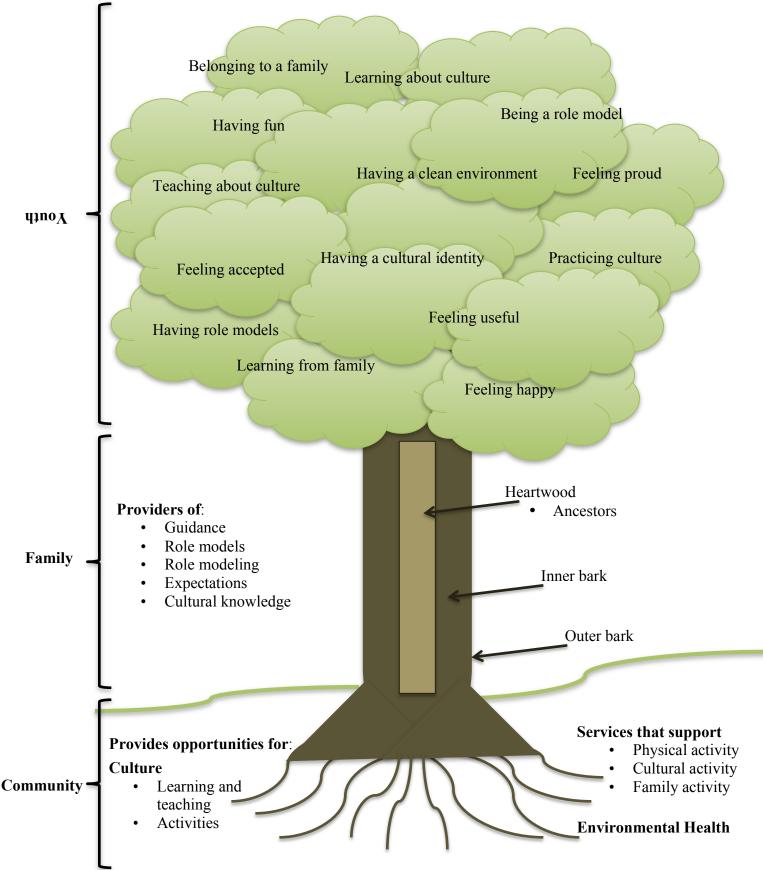


Figure 9. Elements that Influence the Health of On-Reserve First Nations Youth

Chapter Five

Discussion

The purpose of this study was to further the understanding of what on-reserve First Nations youth believe makes and keeps them healthy or unhealthy. Similarities and differences within the group, and between the findings from the two studies will also be described to determine whether or not the participants views of health have changed. Findings from the photoelicitation session will be applied to health concerns described earlier in this thesis, and some ideas surrounding programs for youth will be discussed.

Similarities and Differences

One objective of this study was to identify similarities or differences in what the youth identified as contributing to or hindering their health, both within the group who participated in the secondary analysis, and between the original study and the secondary analysis. The following will be a discussion of these similarities and differences.

Within group. There were many similarities within the group as to what they identified as contributing to their health. Contributors that were described by all participants in the secondary analysis included role models, and role modelling, family, and culture.

All participants identified culture and family as contributors to their health. Although there were different levels of cultural beliefs in the group, it was pervasive in all discussions in all themes. For example, one participant discussed how a photograph of singing and drumming was a cultural activity that contributed to her health, but she could not depict the cultural significance of singing or drumming. On the other hand, some participants had what may be considered a significant level of cultural knowledge, and discussed cultural items and activities with a great amount of confidence and understanding. So it is very important to ascertain the

youths' level of cultural beliefs and not just assume what they may believe. Family, as a contributor to their health, was identified by all participants and defined as including the immediate family, cousins, aunts, uncles, as well as deceased ancestors. Adding to the family was also discussed by one participant as strengthening the family, and in turn, positively contributing to her health.

There were also similarities in what female and male participants identified as gender roles. They discussed how role models and role modelling had a positive impact on their health, but differed in their discussions of what activities were included. Female participants discussed how they were role models to younger siblings or extended family members, and younger members of the community. Male participants identified gender roles such as hunting or fishing as an area where they acknowledged having role models in their lives, and a responsibility to be role models in these areas. This division of roles by gender is consistent with what one Elder discussed about male and female youth needing an Elder of the same sex to guide them and provide them with support (VG, personal communication, January 28, 2011).

Only two of the participants acknowledged hindrances to their health in the environment (Sophia, Isabella). They discussed that when Mother Earth is not clean then it affects their health and implied that it is their responsibility look after the earth. This is consistent with First Nations beliefs about their connection to the land and their role as custodians of the land (Cardinal & Hildebrandt, 2000).

Between studies. In general, there were no differences in the themes identified by the youth in both studies. Similarities included importance of family, culture, and the environment as contributors to their health. There were, however, a few differences in what were described in the three themes. Discussion in the first study identified some additional elements in the areas of

culture and the environment. In the second study, several additional elements were identified by the youth such as the importance of role models and role modelling, more family meaning more health, and the identification genders roles.

The youth identified the importance of family to their health in both studies. They discussed the role that family members played in their health through providing them with a safe environment in which they can grow, as well as family as a source of information about their culture. Youth also consistently identified the significance of new family members and how they felt responsible to the younger children in providing them with a role model and someone to emulate as they grow up.

The environment was of importance to the youth throughout both studies. The unhealthiness of the land and how they need to make sure it is healthy so they can be healthy was identified in interviews for both studies. Other consistencies were that land was recognized as a place for activity, and the place of their people and ancestors, and as a place of beauty. One element that was identified in the original study but not in the secondary analysis was the pollution from smoking cigarettes and how the cigarette butts created garbage. Whether this is due to the fact that several of the youth have started smoking between studies or another reason was not made clear. Another element that was identified in the first study that was not as prevalent in the secondary analysis was the importance of water to their lives. In the first study, water was seen as life giving and when water is not clean then the people cannot have a life on the reserve. The only mention of water in the secondary analysis was about the photograph that showed healthy in the top half, but was not discussed specifically as a contributor to health.

Culture was represented in both studies and prevalent throughout all of the themes as a component of being healthy. Culture was represented in other themes through discussion about

male and female cultural roles, deceased ancestors, and the role their ancestors continue to play in their lives today and influence on their health decisions. It was represented through photographs of traditional items and through discussion of traditional activities such as powwow dancing, drumming, hunting, fishing, and prayer. In the first study, culture was seen by the youth as a part of their life that helps the "keep clean" and stay away from drugs and alcohol.

Holistic Programming for the Health of First Nations Youth

Several health concerns for First Nations youth were identified earlier in this thesis and included diabetes, overweight and obesity, smoking, and HIV/AIDS, as well as mental health issues such as suicide, violence, and substance use. In order to address the prevalent health concerns, findings from this study may be used to guide the development of health and wellness programs for on-reserve First Nations youth. One Elder explained that when he/she teach a child, he/she need to sit down with that child and explain to them what they need to learn. That child then needs to agree to learn it; cannot just say to the child "learn this" (VG, personal communication, June 22, 2011). Can it be as simple as this, or does one need to consider other factors in order to reach the youth through health and wellness initiatives. A few examples of how these findings can be applied to health and wellness programs for youth will be discussed.

Findings from this study suggest that certain elements such as culture, family, and the environment need to be included in health and wellness programming for on-reserve First Nations youth. To begin, the incorporation of a cultural assessment in any intake for programming is essential to ascertain each youths' level and manner of cultural beliefs. According to the youth in the study, culture plays a part in their health, is prevalent in all areas of their lives, is part of their identity, and needs to be considered as a part of who they are and what they believe about what makes and keeps them healthy.

A close connection to the family, community, and nation by the youth was identified in the RHS (FNC, 2005). The importance of this connection was also identified by the youth in this study as predominant contributor to their health, and included ties to their ancestors, as well as to the younger generations in their family and community. This connection can be an asset for programming for First Nations youth. Health and wellness initiatives need to include the family and other significant persons in the youth's life. Some examples of what this might look like and how this may be used in other programming for youth will follow.

It is important to recognize that wellness activities that address one area of concern may also have an impact on other areas of concern. So targeting broad areas may be the most beneficial and cost effective. For example, if diet, for prevention of obesity is addressed, it will also have an impact on the risk of developing diabetes, success in educational environments, as well as increases in self-esteem leading to a reduction in mental health concerns. The following discussion addresses two areas of concern, smoking, overweight and obesity, and presents some ideas on how the findings from this study can be used to guide programs for on-reserve First Nations youth.

Smoking. Tobacco use has been recognized as a risk factor in many health related concerns, yet it was not mentioned by any of the five youth in this study who smoke. During activities and interactions with the youth in this study the harms of tobacco use were discussed. They appear to be well aware of the risks associated with tobacco use, yet continued to use tobacco in a non-traditional manner. Several of the parents I have met also smoke cigarettes. Is there a link? According to what the youths identified about the importance of role models, this should be considered. If this holds true then it is the parents just as much as the youth that need to be the focus of education and smoking cessation programs.

Saskatchewan has the highest incidence of youth between the ages of 15 and 19 that smoke cigarettes, and the highest rate of smoking is among First Nations adults (Saskatchewan Ministry of Health, 2010). In order to address this issue with First Nations youth, their views of what makes and keeps them healthy would suggest that a traditional model of tobacco use would be beneficial to any cessation program. Also, using the family to provide support and role models would increase the opportunity for success in quitting. Several key speakers at the Building a Healthier Saskatchewan: Tobacco Reduction Symposium supported the use of Elders and culture, as well as the need to address the whole family as a way to reach First Nations youth (Saskatchewan Ministry of Health, 2010). A First Nations Elder discussed the difference in tobacco use for commercial or spiritual purposes and stressed the need for all peoples to understand the difference and the significance of tobacco to the First Nations communities. For youth who have strong cultural beliefs this may be the route that wellness programs for smoking cessation need to go. Another key message from this conference was the need to change the behaviors and attitudes of adults in order to impact the behaviors and attitudes of youth. This is consistent with the importance of family, and role models that the youth identified as contributors to their health.

Overweight and obesity. As was previously discussed, the trend towards being overweight or obese in First Nations youth is steadily rising and has been attributed to lack of physical activity and poor nutrition (Bruce et al., 2011; FNC, 2005). This trend, which is even more alarming for on-reserve youth, brings with it risks for developing hypertension, cardiovascular disease, diabetes, gestational diabetes, sleep apnea, breast, colon, and endometrial cancer, in addition to mental health problems such as low self-esteem and depression, and risks to the fetus in pregnant women (Bruce et al., 2011; Government of Canada, 2010). Factors

associated with overweight and obesity include a poor diet, low income, literacy, and income, as well as influence from the child's home, school, and community (Downs et al., 2009; Government of Canada, 2010).

Programs to address overweight and obesity should take into account the influence the child's family and significant others, the community, and the school have on this issue, as well as other factors. Factors such as the child's environment and access to good nutrition could be addressed at the community level utilizing findings from this study and other research based studies.

Physical activities that contributed to health were discussed by the youth in this study. Cultural activities such as powwow dancing, hunting, and fishing, or ones that involved the whole family such as walking together or playing sports were seen as beneficial both as a physical activity as well as a way to spend time together and strengthen the family. The encouragement of physical activities that include the whole family serves a two-fold purpose; while getting the whole family more active, it provides the children and youth with role models to follow. Elders could be utilized to take youth and families for walks to teach them about traditional foods, medicines, and plants that can be gathered in their community. Incorporating culture and family increases the chance of success and promotes wellness at the individual, family, and community level.

To increase the opportunity for success, involvement of the family and community needs to be addressed. To address the nutritional component of obesity, a program that teaches healthy eating can be taught in the school for the children and youth. This teaching can be expanded to include activities for the family as well. For example, a community garden could be established and made into part of the school curriculum while involving families and the community to look

after the garden. This garden is an opportunity to develop healthy eating at the family level while providing access to nutritious foods. Another option is to also include an Elder to teach about traditional foods and eating habits.

Possible Limitations of Photovoice Secondary Analysis

Several possible limitations of this study can be identified. Photographs have not been the focus of previous studies for secondary analysis so there is not any knowledge surrounding their use. Another possible limitation is the youth involved in this study who have been a small and dedicated group and may not be representative of on-reserve First Nations youth.

Time. The passage of time had an effect on the discussion about the photographs. This may be an expected product of the study or a limitation. Several of the youth forgot why they had taken the photograph. The interview technique in photovoice used SHOWeD as the questions and involves the participant remembering why they took the photograph and the situation surrounding the photograph. A few of the participants appeared to be apprehensive and stated they didn't remember what they said before. They had to be reminded that they did not have to have the same answers as they did in the first photoelicitation.

Use of photographs for secondary analysis is dependant on the interview questions surrounding photoelicitation and the amount of time that has passed since they took the photographs. Several of the youth in this study found they were not able to remember the events surrounding the photographs they had taken approximately three years earlier. On several occasions, other questions had to be added in order to begin the discussion about the photographs.

Time also affected their observations and discussion surrounding the photographs. Several new findings came from the photoelicitation, such as the importance of role models and

gender differences in this area. There were also several subjects that were not discussed as they had in the first photoelicitation session. Whether this is because they did not remember why they had taken the photograph, because a different person was doing the photoelicitation, because of the passage of time, or because they had matured is not known.

Participants. There has been a core group of about nine participants throughout both studies, with several other participants that have come and gone several times at different points in the process. This study involved only the youth who have been consistent throughout the study. This was not part of the planning but was who agreed to participate in the secondary analysis. Questions that can be asked are a) are these youth more dedicated or more reliable than those who did not participate and b) does this change the results?

Contributions to Nursing

Nursing research can be defined as a "scientific process that validates and refines existing knowledge and generates new knowledge that directly and indirectly influences nursing practice" (Burns & Grove, 2001, p.4). This study was unique in that it used photographs as data for a secondary analysis, and explored how the youths in PLWP project perception about health changed over time. Knowledge generated from this study can be used in the areas of nursing practice, research, and education.

Findings from this study can contribute to the literature about research that utilizes photovoice and secondary analysis. For secondary analysis, it will fill the gaps about the use of photographs as data and using data to re-interview the participants. Literature about photovoice to date has presented a cross-sectional view, and has not explored the effect of time on the findings as this study did. Findings from this study suggests that the youths' perception about

health did change slightly over time, but not to the extent that their core beliefs are no longer valid.

This study has added another dimension to the previous research in the PLWP project by reinforcing the importance of culture, family, and environment to the health of on-reserve First Nations youth. It allowed for the comparison of findings from the two studies, which has enhanced the understanding of the effects of time on the youths' perspectives, as well as reinforced the role that people, the environment, and their culture play in their health.

In practice, knowledge from this study can be used to guide program planning for health and wellness, as well as contribute to culturally responsive care for First Nations youth. Although these findings do not represent all on-reserve First Nations youth, they do provide awareness of what First Nations youth may see as making and keeping them healthy, as well as elements that influence their health. A recommendation from this study is to conduct a cultural assessment when caring for or developing programming for First Nations youth. This can be seen as a necessary part of providing holistic care for all peoples.

Conclusion

In this thesis, the importance of interrupting the trend towards decreased life expectancies and increased physical and mental illness rates for First Nations people in Canada has been discussed. It is the First Nations youth who are in a unique position to disrupt this trend through positive health choices. As these youth age, they are at higher risk of developing physical and mental health problems such as diabetes, overweight and obesity, depression, substance abuse, or HIV/AIDS. It is of the utmost importance that there are supports or programs in place to assist the youth to make positive choices in order to direct their path towards wellness.

The PLWP project utilized the photovoice technique to work with youth at Standing Buffalo Dakota Nation to discover what they perceive makes and keeps on-reserve First Nations youth healthy. In that study, the youth identified three themes related to their health; the environment, people connected across the generations, and culture. This secondary analysis also explored what makes and keeps on-reserve First nations youth healthy or unhealthy using photographs as a data source for analysis. Other objectives of this secondary analysis included discovering if there were common themes described by the youth, adding to the findings from the previous study, discovering elements of a culturally relevant pictorial representation of the elements that influence health, and exploring the use of photographs as a source of secondary analysis.

Findings from this study indicate that family, culture, and the environment all play a part in what makes and keeps these youth healthy. Family includes the immediate family as well as all of the relationships and those who play a significant part in the youth's life. One youth indicated more family is more health. Youth participants stated the family contributes to their health by providing role models and an environment for the youth to role model in, as well as a place for the youth to learn and pass knowledge on. Culture was identified in all aspects of their health and included cultural items as representative of the family and their heritage, and cultural activities such as sweating or dancing that contribute to holistic wellness. The environment represents the place where the people come from, a place to practice their culture, and as a place to nurture so that Mother Earth will be healthy and in turn contribute to their health.

From these findings, a culturally relevant representation of the elements that influence the health of on-reserve First Nations youth was developed. It is these elements, which are related to

the findings, that need to be included in programming and supports in order to address what onreserve First Nations youth believe contributes to their health

This study left some questions that need to be explored in order to further the understanding in this area. Firstly, is there an adaptation to SHOWeD that would make it more suitable for a secondary analysis, or if time has passed between taking the photographs and the photoelicitation? Next, the reciprocal relationship, or duty that the youth discussed, where they must learn in order to pass the knowledge on to others. This concept should be explored further with the youth. The discussion about learning for passing the knowledge on was in the context of traditional or cultural knowledge but can this be developed into a health or wellness program where youth leaders learn about health and wellness in order to pass it on to others? Another area that needs to be explored further is how to involve the family more in programming for youth health and wellness. The youth in this study identified the importance of involving the family as a source of support and role modeling for health. Is there a way to let them know how important it is to participate and provide positive examples for the youth? Perhaps another piece to the puzzle of how to improve the health of on-reserve First Nations youth lies with the families.

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Appendix A

Interview Guide Using SHOWeD Format

Date:

Participant initials: _____

Participants age:_____

- 1) What do you See happening here?
- 2) What is really Happening in this photo?
- 3) How does this relate to **O**ur lives?
- 4) Why do these issues exist?
- 5) What can we **D**o to address the issues?
- 6) Is there any other information you would like to add about your photographs?

Appendix B

Sample of Field Notes

Interviews with several youth today³.

Interesting stuff -

When discussing photographs with *a participant* about education she was unable to link money and health. She knew that education was important but when asked further questions she just wasn't sure why.....where has she heard this from? Do people in the community talk about the NB of education? This is a good thing...maybe the reasons for it should be discussed too?? Smoking - none of the youth mentioned smoking in their interviews....is this because some of them now smoke??

They seemed excited to talk about the photos today, or maybe just meeting together again....we haven't seen each other for a bit

Several participants became teary or choked up when discussing their photos, especially as they related to family

Mason - joking, teasing, very unsure of himself when talking about his photographs, jokes as a way to make himself more confortable – smiling and proud when talking about *successes Emma* – difficult getting her to talk, one-word answers, shy, timid, wanted to go after *Ava* went first

Three youth working - need to set up times for them

³ These have been edited to protect identities. Edited entries are italicized.

Appendix C

On file

Appendix D

Information and Consent Form



STUDY TITLE:	A Secondary Analysis: Paths to Living Well For On-Reserve Youth Photovoice Project
RESEARCHER:	Deanna Bickford, Master of Nursing student
SPONSOR:	College of Nursing, University of Saskatchewan
CONTACT:	DEANNA BICKFORD

INTRODUCTION

You are invited to take part in this research study because you participated in the Paths to Living Well for On-Reserve Youth Photovoice project. We hope you would help us to better understand what makes and keeps you healthy or what makes and keeps you unhealthy. This information will help in knowing the kinds of programs and policies that might make a difference for the health of First Nations youth, like you.

Your participation is voluntary. It is up to you to be a part of this study or not. If you wish to be a part of the study, you will be asked to sign this consent form. Even if you sign this form and start the study, you can still stop at any time without giving us a reason for your choice and without any penalty for leaving.

If you do not wish to participate, you will not lose the benefit of participation in present or future research projects. It will not affect your relationship with Dr. Pammla Petrucka, Deanna Bickford or other members of the research team.

Please take time to read the following information carefully. You can ask the researcher to explain any words or information that you do not clearly understand. You may ask as many questions as you need. Please feel free to discuss this with your family, friends, or peers before you decide.

WHY IS THIS STUDY BEING DONE?

This study is being done because there is not enough known about what First Nations youth, like you, believe is important to their health or what makes them healthy or unhealthy.

WHO CAN PARTICIPATE IN THE STUDY?

You are eligible to participate in this study if you were part of the Paths to Living Well for On-Reserve Youth Photovoice project.

WHAT DOES THE STUDY INVOLVE?

This study will involve being asked about your photographs from the Paths to Living Well for On-Reserve Youth Photovoice project. It is estimated that you will meet with the researcher once or twice for about one hour each time, and then for about 2 hours as part of a group to go over the photographs. It is estimated that the study will take place over two (2) months.

WHAT ARE THE BENEFITS OF PARTICIPATING IN THIS STUDY?

If you choose to participate in this study, there may or may not be direct benefits to you. It is hoped the information gained from this study can be used in the future to benefit other people. Benefits of participation include: contributing to a better understanding of health from your perspective, and a sense of pride in your contribution.

ARE THERE POSSIBLE RISKS?

If you choose to participate in this study, it is possible that you may feel uncomfortable with sharing your views about health. An elder will be available to you if any issues or concerns come up that you would like to discuss.

WHAT HAPPENS IF I DECIDE TO WITHDRAW?

Your participation in this research is voluntary. You may leave (withdraw) from this study at any time. You do not have to provide a reason. There will be no penalty or loss of benefits if you choose to withdraw.

Your right to withdraw data from the study will apply until data has been pooled. After this it is possible that some form of research dissemination will have already occurred and it may not be possible to withdraw your data.

WILL I BE INFORMED OF THE RESULTS OF THE STUDY?

The results of the study will be available after September 2011 from Deanna Bickford. You may ask for copies of all report or information about this study.

WHAT WILL THE STUDY COST ME?

You will not be charged for any research-related procedures. You will not be paid for participating in this study. You will not receive any compensation, or financial benefits for being in this study, or as a result of data obtained from research conducted under this study.

WILL ANYONE KNOW I WAS PART OF THIS STUDY?

Your confidentiality will be respected. No information that tells anyone who you are will be given without your permission. Your information will be stored safely and locked up so that no one other than the members of the research team will see it. Because you will be part of a group session (a sharing circle), it is not possible to promise you that all information will be confidential to the researcher only. However, each person at the sharing circle will be asked to read and sign the CONFIDENTIALITY PLEDGE which is attached.

The results of this study may be presented in a scientific meeting or published in journals, but your personal identity will not be shared. However, information will be shared that is about the group of participants, so every effort will be taken to be sure that nothing specifically about you can be found.

All of the information collected in this study including any paper, computerized, or digital recordings will be stored in the researcher's locked cabinet. Consent forms and anything with your name on it will be kept separate from the data. After the study this information will be kept for five years and then will be destroyed.

WHO DO I CONTACT IF I HAVE QUESTIONS ABOUT THE STUDY?

If you have any questions or desire further information about this study before or during participation, you can contact Deanna Bickford at (306) 693-6592 or (306) 631-7953 or Dr. Pammla Petrucka (research supervisor) at (306) 535-9597.

If you have any concerns about your rights as a research subject and/or your experiences while participating in this study, contact the Chair of the University of Saskatchewan Behavioral Research Ethics Board, at 306-966-2975. The Behavioral Research Ethics Board is a group of individuals (scientists, ethicists, lawyers and members of the community) that review all research studies with people and make sure that those in a research study are being respected and kept safe. This study has been reviewed and approved on ethical grounds by the University of Saskatchewan Research Ethics Board.



CONSENT TO PARTICIPATE

Study Title: A Secondary Analysis: Paths to Living Well For On-Reserve Youth Photovoice Project

- I have read (or someone has read to me) the information in this consent form.
- I understand the purpose and procedures as well as the possible risks and benefits of the study.
- I was given sufficient time to think about the study and the consent.
- o I had the opportunity to ask questions and have received satisfactory answers.
- I understand that I am free to leave this study at any time for any reason and the decision to stop taking part will not affect my future relationships with the researchers.
- I give permission to the researcher to use the information I provide with the understanding that no one will be able to identify who I am.
- I understand that by signing this document I do not waive any of my legal rights.
- I will be given a signed copy of this consent form.

I agree to participate in this study:

Printed name of participant:

Signature

Printed name of parent or guardian

Signature

Printed name of person obtaining consent:

Signature

Date

Date

Date

Appendix E

Parent/Guardian Letter

Your son or daughter has been invited to participate in a research project.

- Participation is optional and is not related to their schoolwork. They can withdraw at any time for any reason and it will not affect their participation in future activities or harm their relationship with the research team.
- It will involve being interviewed about the photographs they took as part of their participation in the Paths to Living Well for On-reserve Youth Photovoice project and taking part in a sharing circle. It is estimated that these two activities will take up four or five hours in total over a period of two months.
- All information from interviews and the sharing circle will be kept confidential, and their identity will be protected.
- Any questions or concerns can be addressed with Deanna Bickford by phone (306) 693-6592, or email <u>d.bickford@usask.ca</u> or Dr. Pammla Petrucka at (306) 535-9597 or email pammla.petrucka@usask.ca.

Appendix F

Confidentiality Pledge

In order to respect the privacy of others, I promise not to discuss anything that comes from the sharing circles or discussion that I am take part in as part of my participation in "A Secondary Analysis: Paths to Living Well For On-Reserve Youth Photovoice Project". I will also not identify any of the other participants in this research outside this project.

Printed name of participant

Appendix G

Themes	Examples of Quotes	Total number
Themes	Examples of Quotes	of
		participants
		who
		contributed
		to the theme
Paopla: Connected Across		8
People: Connected Across the Generations		0
Family as Health	"New people come into the world. Good. More family" "My mom and my sister keep me healthy because they're family. My mom raised me and I'm really close with my little sister"	8
 Role Models and Role Modeling as Health 	"Keeping me alive and keeping in school and teaching then how to be a better person and stay away from alcohol and do sports and go to school" "[who are your role models]My mom and my brother and my grandma. I learned a lot from them. My grandma was the one that showed me how to cook and everything"	8
	"my role model would be my late grandpa"	
	"it makes me want to do more I guess or be better than what I am right now and just to make people proud of me. Like if my grandpa was still here like if I wasn't going to school like I'm not going to school right now but he would probably get on me about that"	
	"just helping out if anybody needs helpJust if anybody needs help around here and if I'm available then I can help"	
• Teaching and Learning as Health	 "being outdoors and learning some of the cultural side and how to take care of yourself like how to hunt for your family" " other people that can help too but you still have to learn" "So you'll be responsible for passing it on as well [the knowledge]. 	2

Culture		8
• Cultural Items as Health	 "[my] tradition I guess because I like to be a whole lot and it's even a stress reliever for me" "so that how that helped me. And then the rattle is kinda like the same thing, except more spiritually" "the pipe is used for sweat so it is kinda like the same thing as the rattle that its help us be more spiritual, powers" "those [beaded items]were made by my aunty and my aunty has always been kinda like, everytime I go and stay with her she tries to make me healthier and more active" "they [cultural items] relate to my mental and emotional health when I sweat I actually stay more stable and actually keep away from alcohol" "well those were made by my aunty and my aunty has always been kinda like, everytime I go and stay with her she tries to make me healthier and more active [discussing pic of necklaces that aunty made]" 	8 5
• Cultural Activities as Health	 "being outdoors and learning some of the cultural side and how to take care of yourself like how to hunt for your family" "Mostly everything we try to do is outdoors and being active and when were inside were still doing something like for pow wow or cultural stuff or something like that. The best thing we can try to do is try to be active" "Culture and exercise [how they relate to health] like having on all your outfit and everything and it's really hot. Keep in on all day and then when you dance you seat a lot and so it's good exercise and then it helps me keep my sugar levels good and everything" 	5

	"My tradition I guess because I like to bead a whole lot and it's even a stress reliever for me" "Just from watching [how he learned to fish with a snare]"	
Environment	 a snare]" "Seeing my First Nations people [pointing to a picture of the community]" "Our landMy homeWhere I grew up from" "it was like plain and clean [a picture of a valley[, It was like clean and beautiful and not like other place or like dirty with garbage" "how beautiful the earth is and how it should stay and all that stuff [picture of land, furrows, snow], how mother earth should be how it like should stay healthy" "Yea and back here in the hills that's where all the buffalo are [showing on the pic where they 	4
	are]they are important"	