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Item Type	Article
Authors	Johner, Randy;Gingrich, Paul;Jeffery, Bonnie;Maslany, George
Publisher	Native Counselling Services of Alberta and the ACADRE Network
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Download date	2026-11-11 07:51:17
Link to Item	http://hdl.handle.net/20.500.12424/172118

Does Aboriginal Identity Make a Difference? Single Mothers and Exclusion in Health[1]

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Abstract

Single motherhood, Aboriginal identity, and receiving social assistance are negatively linked to health outcomes, and recognized as precursors to social exclusion. Drawing from a holistic perspective of health, this paper examines the relationships between health, social exclusion, and receiving social assistance in Saskatchewan Aboriginal (those living in off-reserve areas) and non-Aboriginal single mothers. This paper utilized data from a mail survey with a randomly selected sample which was conducted in Saskatchewan (Canada) in the summer of 2007. The sample consisted of 372 single mother respond-

1. Acknowledgements: Research for this paper was supported by the Community Population Health Research graduate fellowship program, Universities of Regina and Saskatchewan (Canada). We wish to thank all of the Mothers for their contributions and collective wisdom. Special thanks to Marie Johner and Natalie Owl for their timely reviews of this paper.

ents: 157 Aboriginal mothers and 215 non-Aboriginal mothers. Multivariate analysis was used to examine the relationships of education, social supports and networks, and a personal sense of control (confidence or self-esteem) with self-rated health, taking into account sociodemographic characteristics. Qualitative (written knowledge) data provided the experience of single mother's exclusion in health. Cross-sectional findings from this study presented an opportunity to consider upstream (social assistance policies that prioritize education), mid-stream (educate mothers to be peer supports), and downstream (offer life skills to build self-confidence) interventions for single mothers in Saskatchewan.

Introduction

As authors, it is not "our place, as uninvited guests to attempt" (Chandler and Lalonde, 2004, p. 112) to make decisions about what single mothers need in order to enjoy good health. Rather, the purpose of this paper is twofold: to present some quantitative (i.e., statistical information) and some qualitative (i.e., written knowledge) data which "speaks" to the link between social exclusion and self-rated health in Saskatchewan Aboriginal (those living in off-reserve areas) and non-Aboriginal single mothers, as well as to offer some "talking points" (Chandler and Lalonde, 2004, p. 112) that may be useful for single mothers, as well as for policymakers, practitioners, and communities.

The first section of this paper discusses single mothers, health, social exclusion, and Aboriginal peoples' exclusion in health. Following this descriptive discussion, we present an exploratory conceptual model (Figure 1) to represent the experience (written knowledge) of single mother's exclusion in health, followed by the research hypotheses, methods, and multivariate analysis sections. Our final discussion in this paper incorporates statistical information and written knowledge derived from the study respondents, as well as beliefs that are intrinsic to the "medicine wheel" concept.

Single Mothers

Single mothers are a vulnerable population (Phipps, 2003): a population which Canadian research has linked to poor health outcomes (Curtis, 2001; Perez and Beaudet, 1999) to a reliance on social assistance benefits (Kapsalis and Tourigny, 2002), to social exclusion (Stewart et al., 2008; Toronto and Community Neighbourhood Services, 2003) and to Aboriginal identity (Hull, 2004; Kapsalis and Tourigny, 2002). Globally, research has linked single

mothers to poor health outcomes (Lahelma et al., 2002), to social exclusion (Levitas et al., 2006; Tsakloglou and Papadopoulos, 2002) and to receiving social assistance (Kaplan et al., 2005; Press et al., 2005). It is increasingly evident that policymakers, practitioners, and community members must renew their efforts toward understanding what aspects, unique and universal, are linked to the health of all single mothers within and across nations (Moss, 2002).

Health

A Holistic Perspective

Most women perceive the idea of good health from a holistic perspective (Segall and Chappell, 2000). In this paper, the idea of good health is understood from a holistic perspective which focuses on how social, psychological, physical, economic, and environmental factors influence health outcomes (Singer, 2003). Good health is highly valued across cultures (Segall and Chappell, 2000). Various aspects such as education, positive relationships, a lack of disease or disability, spirituality and traditional healing practices, or a connection to land and resources all contribute to good health (Segall and Chappell, 2000).

An Aboriginal Perspective

A traditional Aboriginal idea of health is based on holistic and ecological foundations (First Nations Centre, 2002). Utilizing a Medicine Wheel, often referred to as a "teaching circle" (McLeod, 2004, p. 14) or a "healing tool" (Borchert, 2004, p. 48), the idea of health for many Aboriginal peoples is a balance between the physical, mental, emotional, spiritual, and social factors of life (National Aboriginal Health Organization [NAHO], 2007). The relationships between all of these factors must be positively balanced to maintain good health. Maintaining a positive balance between these factors is ongoing, not only within individuals, but also in the context of communities, nature, and the Creator's laws (First Nations Centre, 2002; NAHO, 2007).

Social Exclusion

Social exclusion focuses on participation (or lack of) which is associated with structural inequalities in which individuals, families, and communities have limited access to social, economic, political, and cultural resources (Bohnke, 2002; Burstein, 2005; Gordon et al., 2000; Galabuzi, 2004; Pierson, 2002; Raphael, 2007). Social exclusion is often associated with "exclusion from eco-

nomic production" (i.e., limited education, poverty-level income), and "exclusion from social relationships" (i.e., few social supports and networks, lack of confidence, or low self-esteem) (Bohnke, 2002) which can limit an individual's participation in society. Marmot's (2004) and Wilkinson's (2005) findings indicate that factors such as having little or no support in times of need or lacking in confidence (low self-esteem) may be more important to health outcomes than the factor of income levels.

Some authors (Bryne, 2005; Raphael, 2007) consider poverty to be an integral aspect of social exclusion. Households which are "below a given proportion" of the average Canadian income are usually deemed to be in relative poverty (Sachs, 2005, p. 20). For example, in 2005, Canadian single-mother households with one child who had an income below $22,276.00 (before taxes) per year were deemed to be living in poverty (National Council of Welfare, 2006). Poverty-level income may limit access to resources such as quality education, jobs, and social supports which are considered necessary prerequisites for full participation in Canadian society (Sachs, 2005).

For Saskatchewan single mothers, there are potentially four main sources for income: social assistance benefits, job income, maintenance from fathers, and financial support from family (Pedersen et al., 2000). In Saskatchewan, if a single mother relies on the support of social assistance (Transitional Employment Allowance-TEA) as her major source of income, the amount received will not be sufficient to prevent poverty. For example, in 2005, a Saskatchewan single mother with one child in receipt of social assistance (TEA) could receive up to $13,235.00 per year.

Aboriginal Identity (Self-identified Aboriginal Ethnicity)

Social Exclusion

In North America, Indigenous peoples are a very diverse group with their own languages, spiritual beliefs, practices, and unique histories (Hodgkenson, 1990). In Canada, indigenous peoples include people of First Nations, Metis, and Inuit descent (Anderson et al., 2006). In determining ethnic identification, Statistics Canada (Census) includes the opportunity to self-identify Aboriginal ethnicity. Aboriginal ethnicity is classified as "status or non-status Indian, Metis, Inuit or multiple" (Anderson et al., 2006, p. 13).

Aboriginal identity has been negatively linked to social exclusion. Raphael (2007, p. 215) states that the negative link between Aboriginal identity and

social exclusion is a reflection of "poor quality" factors or determinants of health, such as not having enough money to purchase basic needs or having few social supports in times of need. In addition to these types of "poor quality" determinants of health, Shah (2004, p. 267) states that the exclusion of Aboriginal peoples is also a reflection of their "subjugation" which has led to economic, social, and political disempowerment. The loss of healing methods, lands, economies, cultural norms, and beliefs isolated Aboriginal peoples from each other, and pushed them out of, or excluded them from others, in Canadian society (Shah, 2004).

For example, the key word to understanding the Aboriginal worldview and Aboriginal spirituality is "interrelationships." All aspects of nature, humanity, and the Creator are interrelated and deeply respected. For many Aboriginal people, a material way of life can not exist without maintaining harmony and reciprocity within nature: in other words, because all material and spiritual aspects of life are interconnected, they can not be isolated from one another (Mindiola, 2007). The respect for all material and spiritual aspects of life are also related to other Aboriginal values: "stewardship (care) for the environment, the importance of community, the notion of generosity and sharing, respect for the teaching of our elders, and humility" (McKenna, 1993). A material way of life is politically, economically, and socially endorsed in Canada in which natural resources (i.e., water, trees), are primarily seen as a source of potential income (i.e., jobs). The Canadian endorsement of a material way of life represents a disconnection from the spiritual aspects of creation, and does not respect the Aboriginal worldview or Aboriginal spirituality. This lack of respect contributes to feelings of devaluation among Aboriginal peoples, and further erodes their participation or inclusion in society.

Health

Globally, Indigenous peoples have lower life expectancies than their national averages (Commission on the Social Determinants of Health [CSDH], 2007). In Canada, Aboriginal peoples have lower life expectancies than other Canadians; in 2001, the life expectancy for Aboriginal women was 76 years compared to 82 years for non-Aboriginal women (2001 Census). In general, Canadian Aboriginal peoples face low levels of educational attainment and high unemployment rates which have been linked to their health outcomes (NAHO, 2007). In Canada, the Aboriginal (off reserve) population is not as healthy as the non-Aboriginal population (Canadian Community Health Survey, 2001; Tjepkema, 2002): for example, 55% of Aboriginal women living

in off-reserve areas rate their health as excellent or very good compared to 59% for all Canadian women (2001 Census).

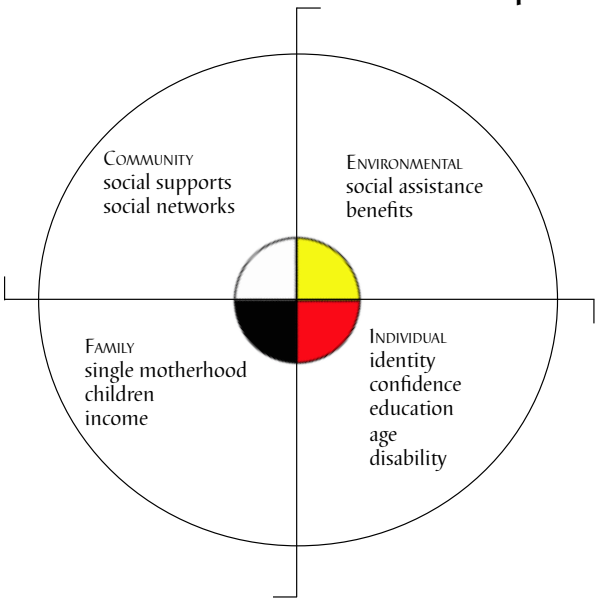
Exploratory Model, Utilizing the Medicine Wheel Concept

The purpose of the exploratory model (Figure 1) is to represent the experience (written knowledge) of single mother's exclusion in health for this paper, and not to illustrate a comprehensive theoretical model. The model is divided into four parts (individual, family, community, and environmental) with each part connecting at the centre (self-rated health) of the circle; thus serving as a reminder that all factors within these four parts are interrelated. The factors within these four parts include sociodemographic characteristics (single motherhood, age, income, disability, identity, having children 5 years and under, education, and receiving social assistance [TEA]); social exclusion factors (education, social supports and networks, confidence or self-esteem); and self-rated health (see Figure 1). These factors are universally applicable to all women's health outcomes (Moss, 2004), and to the understanding of social exclusion (Burchardt et al., 2002).

Our model drew from a population health (determinants of health) approach, and used the medicine wheel concept. A population health approach recognizes that a wide diversity of interrelated social, economic, physical, and environmental determinants or factors contribute to everyone's health (Taking Action on Population Health, 1998). This approach considers how a combination of interventions upstream (i.e., increasing access to education), midstream (i.e., training community peer supports), and downstream (i.e., sharing life-skills with mothers) can improve health outcomes for everyone. Consistent with a population health approach, the medicine wheel concept also recognizes that emotional, spiritual, mental, and physical aspects influence health (McLeod, 2004).

The Medicine Wheel helps to illustrate the interconnectedness of factors that influence poor health outcomes or "exclusion in health." Statistical information alone cannot determine how the relationships between life's factors are balanced in ways that promote positive health outcomes for families and communities. Knowledge (experience) can "speak" to how relationships between life's factors are balanced. In addition, using the Medicine Wheel as a "helping" tool (Borchert, 2004) to understand the experience of social exclusion and its link to health reinforces the belief that we are all part of a

Figure 1. An Exploratory Model of Social Exclusion, Using the Medicine Wheel Concept



The four winds or directions teach us about HEALTH which is at the centre of the wheel, surrounded by the colours of each person: red, yellow, white, and black, all working together in harmony with one another.

Adapted from Borchert (2004) and McLeod (2004)

family and a community: decisions made today will affect everyone's health outcomes in the future (Borchert, 2004; McLeod, 2004).

Research Hypotheses

Research (Berkman and Melchior, 2006; Bryne, 2005) suggests that the processes of exclusion negatively influence population health: therefore we anticipate that a reduction in social exclusion will result in better health. In this paper we explore whether or not Aboriginal identity was negatively linked to social exclusion and perceived health in Saskatchewan single mothers, and whether or not receiving social assistance (TEA) was negatively linked to health in Saskatchewan single mothers.[2]

Hypothesis 1: Aboriginal mothers will have lower educational levels, a lower sense of personal control (confidence), fewer social supports, fewer networks (numbers of people one talks to or sees every 2 weeks), and poorer health than non-Aboriginal mothers.

2. Some readers may ask (based on Hypothesis 1) why a regression model of the whole sample, with Aboriginal/non-Aboriginal ethnicity as an independent variable was not included in this paper. A regression model of the whole sample from an earlier paper indicated that Aboriginal ethnicity was not significant. Please contact the primary author if you wish to have a copy of these results.

Hypothesis 2: Receiving social assistance (TEA) will be negatively related to health in both groups of Aboriginal and non-Aboriginal single mothers.

Hypothesis 3: Educational levels, perceived supports and networks, and a sense of personal control (confidence) will be positively related to health in both groups of Aboriginal and non-Aboriginal single mothers (after taking into account before-tax monthly income, age in years, receiving social assistance (TEA), disability, and having children 5 years and under).

Methods

Sample

The cross-sectional data for this paper were taken from a mail survey conducted in the summer of 2007 using randomly selected single-mother respondents in Saskatchewan (Canada). According to the 2001 Census, there were 978,933 residents in the province of Saskatchewan; 538,413 were women (20–64 years), of which 34,155 or 6.3% were single mothers. Within the female population of Saskatchewan, there were 36,435 women (15–64 years) who identified themselves as Aboriginal of which 10,540 or 29% were single mothers (Aboriginal Peoples Survey [APS], 2001). The APS does include "non-reserve Aboriginal Peoples," and some "reserve-Aboriginal Peoples" in Saskatchewan, but does not include all Aboriginal reserves in Canada, those who may not identify as Aboriginal, and those Aboriginal peoples who are homeless (Anderson et al., 2006). According to the 2001 Census, 72% of Aboriginal women live in off-reserve areas, with the largest concentrations found in Saskatoon (10%), Regina (9%), Winnipeg (10%), and Thunder Bay (7%) (Statistics Canada, 2006).

For this study, selection criteria included single mothers, 18–59 years, who had at least one dependent child under the age of 18 years living with them. In order to ensure adequate representation of single mothers who were social assistance (TEA) recipients (population 5,064) and those who were not social assistance (non-TEA) recipients (population 25,782), the sample (2,500) was divided in half: 1,250 questionnaires were sent to TEA respondents, and 1,250 questionnaires were sent to non-TEA respondents.

Each group (1,250 TEA/1,250 non-TEA) of the sample was further divided between three major cities and the rest of the province: 15% or 190 questionnaires from each sample group (TEA/non-TEA) were sent to Prince Albert, 20% or 250 questionnaires from each sample group (TEA/non-TEA) were

sent to Regina, 25% or 310 questionnaires from each sample group (TEA/non-TEA) were sent to Saskatoon, and 40% or 500 questionnaires from each sample group (TEA/non-TEA) were sent to the rest of the province. Each of the percentages represented the percentage of single mothers who were TEA recipients in those cities (15%, 20%, 25%) and the rest of the province (40%) during the study time frame (May 2005 to February 2007). Department of Community Resources personnel randomly selected the TEA single mothers while Department of Health personnel randomly selected the non-TEA single mothers.

Research ethics approval was received for this study, as well as for the pretest of the survey questionnaire (Johner et al., 2007) from the University of Regina, Research Ethics Board. The final questionnaire consisted of 68 questions: 12 of those questions concerned personal information such as Aboriginal identity, education, income levels, and self-rated health. The questionnaire also included the following instruments which assessed relationship participation: the Instrumental Support Evaluation List, Short Form (ISEL-SF) (Cohen and Hoberman, 1983), the Spheres of Control, Third Version (SOC-3) (Paulhus and Christie, 1981), and the Social Network Index (SNI) (Cohen, 1991).

At this stage of the study, the Aboriginal (those living in off-reserve areas) and non-Aboriginal groups shared the broad conditions of single motherhood status, and had at least one dependent child under 18 years of age living with them. We anticipated that there would be differences between the Aboriginal and non-Aboriginal groups. Our statistical analysis and control measures (age, before-tax monthly income, disability, receiving social assistance (TEA), and having children 5 years and under) were put in place to test whether our anticipated differences between these groups exist.

Questionnaires were mailed in the summer of 2007: the first mail-out was in June and a second mail-out was in July. There were over 400 returned questionnaires. The number of questionnaires with incorrect addresses that were simply not returned was unknown. Because we mailed the questionnaires in the summer, some people may have gone on summer vacation, some Aboriginal People move to the reserve in the summer, and back to urban areas in the fall (Hull, 2004), while still others may have chosen the warmer months to change residences. Department of Community Resources personnel indicated that single mothers move on the average of twice a year. One respondent wrote that she had been "on holiday." In addition, over 40 women telephoned or e-mailed to share that they were no longer single mothers. Department of

Health personnel indicated that single motherhood status in the total population of single mothers can change hourly (i.e., living with a partner to not living with a partner). In this study, we received a 19% response rate. Although this very low response rate creates statistical power problems because of small numbers (i.e., could affect subgroup analyses, including some of the categories of self-rated health, income, and education), we felt that the final sample of 372 individuals was certainly passable for our intended analysis.

Due to limited comparable statistical data with regard to Saskatchewan Aboriginal and non-Aboriginal single mothers, we could not adequately substantiate how representative our study sample was of the Saskatchewan Aboriginal/non-Aboriginal single mother population. Utilizing 2001 Census data, we were able to compare the socioeconomic characteristics (mean monthly income, educational attainment) of the Aboriginal and non-Aboriginal study respondents with the socioeconomic characteristics of Saskatchewan Aboriginal women and Saskatchewan women respectively (see Table 1). We found that the Aboriginal and non-Aboriginal single mothers in the sample had similar mean monthly incomes to the mean monthly incomes of Saskatchewan Aboriginal women and Saskatchewan women but that there were major differences in education[3] (Table 1). For example, in the Aboriginal adult female population in Saskatchewan (ages 25 and over), 23% have secondary education and/or some postsecondary education, compared to 76% (ages 18–59) in our sample. However, in addition to secondary education and some postsecondary ("a few university classes"), our sample also included postsecondary technical and/or university completion ("secretarial course"; "Masters in Social Work"; "B.A. Indian Studies"). We compared the percentage of disability in our sample groups with the percentage of disability in Canadian Aboriginal women and in Canadian single mothers. In Canada, 12% of single mothers had a disability compared to 33% for non-Aboriginal single mothers in our sample, while 45% of Aboriginal women had a disability compared to 34% for Aboriginal single mothers in our sample.

Measures

The outcome variable of self-rated health, the social exclusion factors of education, social supports and networks, and personal sense of control, and the

3. For this analysis, we drew from our income and education groups. We used the following monthly income levels: $600.00, $900.00, $1100.00, $1350.00, $1750.00, and $2500.00. We used the percentage of single mothers who did not have secondary education with those who had secondary and postsecondary education.

Table 1. Sociodemographic Characteristics of the Aboriginal/non-Aboriginal Study Samples Compared to the Saskatchewan Aboriginal Single Mother Population and the Saskatchewan Adult Female Population Respectively

	Aboriginal Study Sample (18–59 yrs)	*Saskatchewan Aboriginal Women*	*Non-Aboriginal Study Sample (18–59 yrs)*	*Saskatchewan Women*
Secondary education/ Some post-secondary	76% includes university diplomas	23% APS (2001) secondary + some postsecondary only, 25 yrs.+	91% includes university diplomas	55% Census (2001), 20–64 yrs
Mean monthly income	$1388.00	$1343.00 Census (2001), 15–64 yrs.	$1836.00	$1925.00 Census (2001), 15–64 yrs.
Disability	34%	45% APS (2001), Canadian Aboriginal women 15 yrs.+	33%	12% Participation and Activity Limitation Survey (PALS) (2001), Canadian single mothers 15 yrs.+

sociodemographic characteristics of disability, age, having children 5 years and under, (before-tax) monthly income, and receiving social assistance (TEA) are presented in Box 1. In addition, respondents were asked to identify whether or not they were an Aboriginal person (No=0, Yes=1). Many respondents, who identified as Aboriginal, also wrote whether they were "Status," "non-Status," "Metis," or "First Nations" on their questionnaire.

The variables in Box 1 were chosen because of their universal applicability to health outcomes for all women (Moss, 2004), as well as their relevance to social exclusion (Burchardt et al., 2002). The outcome variable of self-rated health and the sociodemographic variable of disability/long-standing limiting illness are both considered valid health measures (Bowling, 2005). Self-rated health has demonstrated success in discriminating between people of Indigenous and non-Indigenous identity in Australia and New Zealand (Bowling, 2005). Empirical findings suggest that self-rated health has a negative relationship with age, disability (Jamoom et al., 2008), low income, less than secondary education, and receiving social assistance (Curtis, 2001). The literature suggests that having children 5 years and under, social support measures (Curtis, 2001) and confidence or self-esteem (Bobak et al., 1998) have positive associations with self-rated health status.

The ISEL-SF, which assessed perceived support, the SOC-3, which assessed one's personal sense of control (confidence or self-esteem), and the SNI

Box 1. Definition of Variables Collected via Mail Survey

Variable name	*Measure*
Outcome variable	
Self-rated health	Poor, Fair, Good, Very Good, Excellent
Social Exclusion Variables	
Education	10 years and under, 11 years, 12 years (secondary), 13 years or more
Social supports (ISEL-SF)	Availability of instrumental, emotional, and belonging supports (definitely false, probably false, probably true, definitely true)
Social network density (SNI)	Continuous, number of people one sees or talks to every two weeks
Sense of control (SOC-3)	Perceived personal control over life's events, 7 point Likert Scale, Disagree, Neutral, Agree
Sociodemographic Variables	
Age in years	Continuous, age in years
Disability	No=0, Yes=1
Have children 5 years and under	No=0, Yes=1
Before tax monthly income	$800, $800–$1000, $1000–$1200, $1200–$1500, $1500–$2000, over $2000
Received TEA	No=0, Yes=1

which assessed network density (numbers of people one sees or talks to every 2 weeks), reported adequate internal consistency: the ISEL-SF (Cronbach's α = 0.89), the SOC-3 (Cronbach's α = 0.82) and the SNI (Cronbach's α = 0.77). According to Cohen and Hoberman (1983), a measure with reliability of .70 to .80 is adequate for assessing differences between groups of 100 to 200 individuals.

Results

Analysis for this study was conducted in SPSS (version 15.0). Demographic characteristics of study respondents are presented in Table 2. Bivariate analyses were used to explore the sociodemographics (control variables) and social exclusion variables of the study respondents. For hypothesis 1, Chi-square tests and t-tests were used to assess whether or not Aboriginal mothers had poorer perceived health, lower educational levels, a lower sense of personal control, and fewer perceived social supports and networks than non-Aboriginal mothers (Table 2). Chi-square tests were conducted for Aboriginal/non-Aboriginal differences in socioeconomic factors, the SNI score and self-rated health. The t-test (differences in means) was used to test for Aboriginal/non-Aboriginal age in years, and SOC-3 and ISEL-SF scores.

Results in Table 2 indicated that there were significant differences in self-rated health for Aboriginal and non-Aboriginal mothers. Differences in self-

rated health were significant at the 10% level. There were significant differences for educational levels and social supports, but not for social networks and personal control (confidence or self-esteem). Hypothesis 1 was partially supported. Aboriginal mothers had significantly lower educational levels and fewer perceived supports than non-Aboriginal mothers. Differences for social networks and personal control (confidence or self-esteem) were in the expected direction. There were also significant sociodemographic differences between Aboriginal and non-Aboriginal mothers. Aboriginal identity was significantly associated with before-tax monthly income, having children 5 and under, receiving social assistance (TEA), and age. There were no significant differences in disabilities between Aboriginal and non-Aboriginal mothers.[4]

For hypothesis 2, bivariate correlational analyses were used to test whether or not there was a negative relationship between receiving social assistance (TEA) and self-rated health in Aboriginal and non-Aboriginal mothers (analysis not shown). Hypothesis 2 was partially supported. For non-Aboriginal mothers, receiving social assistance (TEA) (r= -.216) was significant and negatively associated with self-rated health, while for Aboriginal mothers, receiving social assistance (TEA) (r=.007) was neither significant nor in the hypothesized direction.

For hypothesis 3, multiple regression analysis was used to assess whether or not education, social supports and networks, and sense of personal control contributed to positive self-rated health in Aboriginal and non-Aboriginal mothers (after controlling for before-tax monthly income, age, receiving social assistance (TEA), having children 5 years and under, and disability). Multiple regression analysis results are presented in Table 3. In Model 1, the control variables of before-tax monthly income, age, receiving social assistance (TEA), having children 5 years and under, and disability were entered. For both Aboriginal and non-Aboriginal mothers, disability was significantly and negatively associated with self-rated health. For non-Aboriginal mothers, receiving social assistance (TEA) was significantly and negatively associated with self-rated health. For Aboriginal mothers, having children 5 years and under was significantly and positively associated with self-rated health. Other variables were not significant with self-rated health. Model 1 explained approximately

4. In tabulating various measures of association (i.e., Phi, Cramer's V, Contingency Coefficient, Kendall's tau-b and tau-c, Gamma, Spearman Correlation, Pearson's R), we found that for the associations between our dichotomous variables (i.e., disability), and between our dichotomous variables and ordinal or interval level variables (i.e., self-rated health), the significance levels across the different measures were identical or fairly similar to one another, even though the actual values differed slightly.

Table 2. Sociodemographic Characteristics of Aboriginal/non-Aboriginal Single Mothers Reported as Means (Standard Deviations) and Percentages.[1]

Outcome Variable	*Aboriginal* (n=157) *Percentages*	*Non-Aboriginal* (n=215) *Percentages*	*p-value (one-tailed)*
Self-rated health			
Poor/Fair	20.8	16.7	p= 0.08
Good	39.0	41.4	
Very Good	30.5	25.1	
Excellent	9.7	16.7	
	100.0	100.0	
Control Variables			
Before-Tax Monthly Income			
Under $800	17.6	4.3	p< 0.001
$800-$1000	20.3	8.5	
Over $1000-$1200	11.8	11.8	
Over $1200-$1500	13.1	13.3	
Over $1500-$2000	18.3	17.1	
Over $2000	19.0	45.0	
	100.0	100.0	
Child 5 and under			
No	47.7	59.2	p< 0.05
Yes	52.3	40.8	
	100.0	100.0	
Disability			
No	65.8	67.3	p= 0.38
Yes	34.2	32.7	
	100.0	100.0	
Received TEA			
No	43.4	64.2	p< 0.001
Yes	56.6	35.8	
	100.0	100.0	
Age-Mean Age in Years (SD)	33.97 (8.29)	36.65 (10.03)	p< 0.01
Social Exclusion Variables			
Educational Attainment			
10 years and under	17.2	4.7	p< 0.001
11 years	7.0	4.2	
12 years (secondary)	35.0	34.1	
13+ years	40.8	57.0	
	100.0	100.0	
SNI Measure-Total numbers of people see or talk to every 2 weeks			
Low (1-9)	19.1	14.4	p= 0.39
Low-Moderate (10-19)	39.5	40.9	
Moderate (20-29)	28.0	28.4	
High Moderate (30-39)	8.3	10.2	
High(40+)	5.1	6.0	
	100.0	100.0	
Sense of Personal Control-Mean SOC-3 score (SD)	53.12 (8.80)	53.30 (10.03)	p= 0.42
Social Supports- Mean ISEL-SF score (SD)	34.55 (7.21)	36.53 (8.12)	p< 0.01

1. Chi-square tests were conducted for Aboriginal/Non-Aboriginal differences in socioeconomic factors, SNI measure, and self-rated health. The t-test was used to test for Aboriginal/Non-Aboriginal age in years, SOC-3, and ISEL-SF scores.

Note: Sample sizes vary for individual measures because of missing values.

Table 3. Multiple Linear Regression Models Showing the Relationship of Social Exclusion to the Outcome of Self-rated Health among Saskatchewan non-Aboriginal/Aboriginal Single Mothers

	B	*Std. Error*	*Beta*	*P value*
Non-Aboriginal				
Model 1				
Monthly income (before taxes)	- .061	.048	.096	.204
Age in years	-.004	.009	-.038	.682
Received TEA	-.374	.143	-.151**	.010
Child 5 and under	.129	.160	.067	.420
Disability	-.820	.134	-.406***	.000
Model 2				
Monthly income (before taxes)	.004	.046	.006	.931
Age in years	-.009	.008	.097	.263
Received TEA	-.324	.128	-.165 **	.012
Child 5 and under	.162	.142	.084	.256
Disability	-.729	.120	-.361***	.000
Secondary education	-.068	.077	-.069	.266
Sense of personal control	.032	.007	.286***	.000
Network density (#'s of people)	.036	.061	.040	.551
Social support	.028	.008	.231***	.000
Aboriginal				
Model 1				
Monthly income before taxes	.110	.044	.222	.607
Age in years	.005	.010	.050	.900
Received TEA	.234	.155	.138	.118
Child 5 and under	.348	.166	.198 **	.038
Disability	-.607	.156	-.329***	.000
Model 2				
Monthly income before taxes	.039	.046	.079	.398
Age in years	.005	.010	.042	.652
Received TEA	.276	.145	.157*	.059
Child 5 and under	.306	.155	.175*	.051
Disability	-.570	.148	-.309 ***	.000
Secondary education	.046	.077	.055	.552
Sense of personal control	.021	.009	.211 **	.025
Network size (#'s of people)	.087	.079	.101	.274
Social support	.018	.011	.150	.104

Aboriginal (n=129) — *Non-Aboriginal (n=198)*

Model 1 R^2 = .188, p<0.001 — Model 1 R^2 = .238, p<0.001

Model 2 R^2 = .315, p<0.001 — Model 2 R^2 = .417, p<0.001

* p<0.10 (one-tailed); ** p< 0.05 (one-tailed); *** p< 0.001 (one-tailed)

19% of the variation in self-rated health for Aboriginal mothers (R^2 = .19) and approximately 24% of the variation in self-rated health for non-Aboriginal mothers (R^2 = .24).

Hypothesis 3 was partially supported (see results in Model 2, Table 3). For non-Aboriginal mothers, social supports and personal sense of control (confidence or self-esteem) were significantly and positively associated with self-rated health while social networks and education were not significant-

ly related. For Aboriginal mothers, sense of personal control (confidence or self-esteem) was significantly and positively associated with self-rated health while education, social supports, and networks were not significantly related. The control variables and the social exclusion variables (educational attainment, sense of control, social supports, and networks) were entered in the second model. In model 2 for both Aboriginal and non-Aboriginal mothers with an increase in disability, there was a decrease in health rating. For non-Aboriginal mothers only, with an increase in receiving social assistance (TEA), there was a decrease in health rating. For Aboriginal mothers only, with an increase in having children 5 years and under, and receiving social assistance (TEA), there was an increase in health rating, significant at the 10% level. Other variables in Model 2 were nonsignificant. Model 2 explained approximately 32% of the variation in self-rated health in Aboriginal mothers (R^2 =.32), and approximately 42% of the variation in self-rated health for non-Aboriginal mothers (R^2 =.42).

Limitations

Due to the cross-sectional nature of this study, the very small response rate, and the high possibility of sample selection bias (i.e., high educational attainment of respondents), our findings should be treated with extreme caution. Cross-sectional surveys cannot determine causality nor examine contextual effects. Financial constraints limited the data collection for this study to a mail survey. The inclusion of many written comments on the questionnaires shows that the topic of social exclusion and health resonated with study respondents. In future studies, we suggest that personal or group interviews would allow respondents to tell their stories (experience/knowledge) of exclusion and to ask questions if they did not understand what was being asked. Personal or group interviews could also help to minimize the formality of a mailed questionnaire which may have intimidated some potential respondents. Interactive knowledge would not only inform questions that arose from this study's quantitative analysis, but would also minimize the percentage of missing values (loss of data), which were particularly evident in the SOC-3 (confidence or self-esteem) and the SNI (social networks) measures. Low educational levels (grade 6; grade 7) of some study respondents, as well as language difficulties ("My English is not good but whatever I understand I wrote") may have contributed to missing values. High educational levels in our sample may also mean that mothers with low educational levels did not respond and their experience was not adequately represented in this study.

In addition, the study did not look at the factors of addiction and violence. In Canada, in 2004, the rate for spousal and/or common-law abuse was three times higher for Aboriginal women than for non-Aboriginal women (Statistics Canada, 2006). The factors of "alcohol and substance abuse have been linked to family violence in Saskatchewan Aboriginal families" (Saskatchewan Women's Secretariat, 1999, p. 43). Violence and addiction issues were critical factors for many respondents. Study respondents shared the following: "

> I have been a single parent for 20 years. My health is not good because of the stress of living with and leaving an abusive husband. Being a single parent is a very difficult job.
>
> I am newly divorced, coming out of a controlling, mentally and emotionally abusive (for 2 decades) relationship, I am finding friends.
>
> I have been extremely isolated due to the activities of the other parent a drug addict (coke/crack) which caused a relocation of my family and energy to hide our whereabouts, heal, seek counseling for the children and regain confidence in social interaction.

As well, study respondents indicated that the factor of time (lack of) contributed to a decrease in relationship participation. "I feel excluded from having time for regular friends because of work, family, and other commitments." Aspects such as lack of child care and transportation also influenced exclusion, "There's many obstacles that face single parents (i.e., babysitting, transportation)." Lastly, the study did not ask respondents about loss of culture/lands and the residential school experience. Almost 66% of First Nations people believe that their lack of good health is linked to a loss of traditional culture and lands and/or to the residential school experience (NAHO, 2007). Despite these limitations, we suggest that our data still enabled some generalizations about understanding social exclusion and its link to self-rated health in single mothers.

Discussion/Opportunity

This paper looked at health and social exclusion in the population of Aboriginal (those living in off-reserve areas) and non-Aboriginal single mothers in Saskatchewan. Overall, our study found a significant and negative relationship with social exclusion and perceived health which supports Stewart et al.'s (2008) finding that an increase in economic and social participation will improve health outcomes among Canadian vulnerable population groups. In

2005, 52% of Saskatchewan women rated their health as very good or excellent (Health Indicators, 2005) compared to our finding of 40% for Aboriginal single mothers and 42% for non-Aboriginal single mothers. This finding indicates that both groups of Aboriginal and non-Aboriginal single mothers had lower perceived health compared to the population of Saskatchewan women. Our finding that 34% of Aboriginal single mothers and 33% of non-Aboriginal single mothers had a disability or limiting, long-standing illness, compared to the Saskatchewan adult female population (15–64 years olds) of 14% is consistent with literature which indicates that single mothers are more likely to suffer from disability or limiting long-standing illnesses than mothers with partners (Levitas et al., 2006).

In our study, we found that receiving social assistance (TEA) was negatively linked to perceived health for non-Aboriginal single mothers, but was not negatively associated with perceived health for Aboriginal single mothers. Our findings were inconsistent (for Aboriginal mothers only) with Canadian literature which has shown a negative relationship between receiving social assistance and health outcomes (Curtis, 2001; Savarese and Morton, 2005; Williamson and Fast, 1998). For non-Aboriginal single mothers, the stigma of receiving social assistance (after controlling for income levels) may indeed, as Curtis (2001, p. 350) suggests, "be bad for their health"; however, we suggest that testing Curtis's hypothesis could pose empirical and ethical challenges. From our analysis, the link between social assistance income and health for Aboriginal mothers is not clear, and may reflect less (negative) significance is placed on income source.

Perhaps many of these mothers did not have a choice with regard to income source — Job income? — Social assistance benefits? — Maintenance from fathers? — Financial support from families? A lack of choice reinforces the facts of inequality and lack of respect which are both intrinsic to exclusion. Limited choices or not having a choice with regard to income sources should also remind us that income is only one aspect that influences health outcomes. The medicine wheel concept teaches us that good health is about being able to maintain harmony and balance within all aspects of nature, humanity, and the Creator, including the factor of income.

For Aboriginal mothers only, having children 5 years and under was positively linked with their perceived health which suggests that having young children (having a family, being a mother) was important to their health. For example, an Aboriginal mother wrote, "When I had my baby four months ago, my friends … moved on. We still talk but never about anything *im-*

portant" [italics ours]. For Aboriginal mothers only, education was positively linked to their perceived health (analysis not shown). In our sample, we found that 76% of the Aboriginal single mothers (ages 18–59) had secondary education or higher. One of the strengths of Aboriginal women is evident in their pursuit of secondary and postsecondary education well into their elder years (Hull, 2004). According to the 2001 Census, 23% of Aboriginal women (ages 15 and over) are attending school on either a part-time or full-time basis compared to 17% of non-Aboriginal women. Education is considered an important human resource (Sachs, 2005) which can accumulate over a lifetime, and can influence health outcomes (Burchardt et al., 2002).

Our finding that confidence or self-esteem was positively associated with both Aboriginal and non-Aboriginal mother's perceived health parallels the literature that income levels and employment are weakly associated with social relations or isolation (Gordon et al., 2000; Hills et al., 2002; Silver and Miller, 2005). For these Saskatchewan single mothers, the factor of confidence or self-esteem was important to their perceived health. Aboriginal respondents sought out community connections to build and sustain confidence through culture, "First Nation Tradition Cultural Song and Dance," and "Pow-wow committee," positive thinking, "I am a very positive person and love children and helping others. Lots of Laughter. Also love to talk and also I can listen," through support groups, "Women's Talking Circle," "Healing Within women's group," and through activity, "Through writing I feel comfortable telling my feelings." Non-Aboriginal respondents sought out community connections to build and sustain confidence through support groups, "Narcotics Anonymous," "Food for Thought," "Divorce Care," "Mental Health" "Alanon" "China Adoption Group" "Moms and Tots", and "Bible study Flipino group." Others improved their confidence through activity: "Thought I would add that my isolation levels have been tapered by my interest in playing music and organizing festivals," and "self-study courses."

In summation, we suggest that although Aboriginal identity influenced social exclusion and its link to health differently for single mothers, the universality of exclusion in health for all single mothers was evident regardless of identity. Single mother respondents offered the following talking points (Chandler and Lalonde, 2004, p. 112) concerning education, social supports, and confidence or self-esteem which they felt were important factors in addressing exclusion in health and which may also present a useful opportunity for all single mothers, policymakers, practitioners, and communities: "I have furthered my education twice. In your study you never had any questions

about education (in more depth) — this will clear up single parent social exclusion." "Many obstacles face single parents (i.e., social support) this is something our gov't needs to recognize and take action upon." "I have become accustomed to being alone and relying on myself. I now try to help younger single parents, to not feel so *alone* in their parenting." These talking points could become an opportunity for upstream (social assistance policies that prioritize education and increase allotted training allowance), midstream (educate mothers to be peer supports), and downstream (offer life skills to build self-confidence) interventions. The medicine wheel concept reminds us of the belief that we are all part of a family and a community, and that an opportunity which we make use of today will affect generations to come.

References

Aboriginal Peoples Survey. (2001). Retrieved February 2, 2008 from http://www.12.statcan.ca/english/profil01/AP01/Index.cfm?Lang=E

Anderson, M., Smylie, J., Anderson, I., Sinclair, R., and Crengle, S. (2006). *First Nations, Metis, and Inuit Health Indicators in Canada.* Saskatoon, SK: University of Saskatchewan.

Berkman, L.F. and Melchior, M. (2006). The shape of things to come: How social policy impacts social integration and family structure to produce population health. In J. Siegrist and M. Marmot (Eds.), *Social Inequalities in Health: New Evidence and Policy Implications* (pp. 55–72). Oxford: Oxford University Press.

Bobak, M., Pikhart, H., Hertzman, C., Rose, R., and Marmot, M. (1998). Socioeconomic factors, perceived control and self-reported health in Russia. A cross-sectional survey. *Social Science and Medicine 47*:269–279.

Bohnke, P. (2002). Reporting on social exclusion: Standard of living and social participation in Hungary, Spain, and Germany. Working paper series. Berlin: Social Science Research Centre.

Borchert, E. (2004). Teachings of the butterfly using the medicine wheel: Honouring our nations, our people and our ancestors. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health 2*:47–50.

Bowling, A. (2005). Just one question: If one question works, why ask several? *Journal of Epidemiology and Community Health 59*:342–345.

Bryne, D. (2005). *Social Exclusion.* Berkshire, UK: Open University Press.

Burchardt, T., LeGrand, J., and Piachaud, D. (2002). Introduction. In J. Hills, J. LeGrand, and D. Piachaud (Eds.), *Understanding Social Exclusion*, (pp. 1–28). Oxford: Oxford University Press.

Burstein, M. (2005). Combating the social exclusion of at-risk groups. Canada: Policy Research Initiative Project. New Approaches for Addressing Poverty and Exclusion.

Canadian Community Health Survey. (2001). Retrieved on January 10, 2008 from http://www.statcan.ca/english/freepub/82-576-XIE/82-576-XIE2005001.htm

Census. (2001). Retrieved on January 10, 2008 from http://www.statcan.ca/english/freepub/89-589-XIE/health.htm

Chandler, M.A. and Lalonde, C.E. (2004). Transferring whose knowledge? Exchanging whose best practices? On knowing about indigenous knowledge and Aboriginal suicide. In J.P. White, P. Maxim, and D. Beavon (Eds.), *Aboriginal Policy Research* (Vol. 2, pp. 111-123).Toronto: Thompson Educational Publishing, Inc.

Cohen, S. (1991). Social supports and physical health: Symptoms, health behaviors, and infectious disease. In E.M. Cummings, A.L. Greene, and K.H. Karraker (Eds.), *Life-span Developmental Psychology: Perspectives on Stress and Coping.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Cohen, S. and Hoberman, H.M. (1983). Positive events and social supports as buffers of life change stress. *Journal of Applied Social Psychology 13*:99–125.

Commission on the Social Determinants of Health (2007). Social determinants and indigenous health: The international experience and its policy implications. Report on specially prepared documents, presentations and discussion at the International Symposium on the Social Determinants of Indigenous Health, Adelaide: Geneva World Health Organization.

Curtis, L. (2001). Lone motherhood and health status. *Canadian Public Policy 27*: 335–356.

First Nations Centre (2002). *First Nations and Inuit Regional Health Surveys, 1997: A Synthesis of the National and Regional Reports.* Ottawa: First Nations Centre. Retrieved on December 1, 2007 from http://www.naho.ca/firstnations/english/pdf/RHS synthesis report.pdf

Galabuzi, G.-E. (2004). *Canada's Economic Apartheid: The Social Exclusion of Racialized Groups in the New Century.* Toronto: Canadian Scholars Press.

Gordon, D.L., Adelman, K., Ashworth, L., Bradshaw, L., Levitas, R., and Middleton, R. (2000). *Poverty and Social Exclusion in Britain.* York, UK: Joseph Rowntree Foundation.

Health Indicators. (2005). *Data Tables and Maps* Retrieved on December 8, 2007 from http://www.statcan.ca/english/freepub/82-221-XIE/2007001/frame.htm

Hills, J., LeGrand, J., and Piachaud, D. (2002). *Understanding Social Exclusion.* Oxford: Oxford University Press.

Hodgkenson, H.L. (1990). *The Demographics of American Indians: One Percent of the People: Fifty Percent of the Diversity.* Washington, DC: Institute for Educational Leadership, Inc., Center for Demographic Policy.

Hull, J. (2004). Aboriginal single mothers in Canada, 1996: A statistical profile. In J.P. White, P. Maxim, and D. Beavon (Eds.), *Aboriginal Policy Research* (Vol. 2, pp. 184–200). Toronto: Thompson Educational Publishing, Inc.

Jamoom, E.W., Horner-Jackson, W., Suzuki, R., Andresen, E.M., and Campbell, V.A. (2008). Age at disability onset and self-reported health status. *BioMed Central Public Health 8*:10.

Johner, R.L., Maslany, G., and Jeffery, B. (2007). A pilot study: Health, social exclusion and single parents. *International Journal of Interdisciplinary Social Sciences 2*: 455–463.

Kaplan, G.A., Siefert, K., Ranjit, N., Raghunathan, T., Young, E., Tran, D., and Danziger, S. (2005). The health of poor women under welfare reform. *American Journal of Public Health 95*:1251–1258.

Kapsalis, C. and Tourigny, P. (2002). *Profiles and Transitions of Groups at Risk of Social Exclusion.* Canada: Human Resources Development.

Lahelma, E., Arber, S., Kivela, D., and Roos, E. (2002). Multiple roles and health among British and Finnish women: The influence of socioeconomic circumstances. *Social Science and Medicine 54*:727–740.

Levitas, R., Head, E., and Finch, N. (2006). Lone mothers, poverty and social exclusion. In C. Pantazis, D. Gordon, and R. Levitas (Eds.), *Poverty and Social Exclusion in Britain* (pp. 405–431). Bristol: University of Bristol Policy Press.

Marmot, M. (2004). *The Status Syndrome: How Social Standing Affects Our Health and Longevity.* New York: Henry Holt and Company.

McKenna, P. (1993). Aboriginal spirituality: An interview with Reverend Lavern Jacobs. *Scarboro Missions Magazine.*

McLeod, A. (2004). As the wheel turns: The HIV/AIDS medicine wheel. *The Positive Side* Spring/Summer:14–16.

Mindiola, O. (2007). Indigenous peoples' difficult road to the millennium goals. *Focal Point 6*:1-3.

Moss, N.E. (2002). Gender equity and socioeconomic inequality: a framework for the patterning of women's health. *Social Science and Medicine 54*:649–661.

National Aboriginal Health Organization (NAHO). (2007). Broader determinants of health in an Aboriginal context. Retrieved on February 6, 2008 from http://www.naho.ca/english/pub_determinants.php

National Council of Welfare. (2006). *Welfare Incomes 2005.* Ottawa: Minister of Public Works and Government Services Canada.

Participation and Activity Limitation Survey. (2001). Retrieved on January 15, 2008 from http://www.statcan.ca/english/freepub/89-577-XIE/canada.htm

Paulhus, D.L. and Christie, R. (1981). Spheres of control: An interactionist approach to assessment of perceived control. In H.M. Lefcourt (Ed.), *Research with the Locus of Control Construct* (Vol.1): *Assessment Methods* (pp. 161–188). New York: Academic Press.

Pedersen, L., Weise, H., Jacobs S., and White, M. (2000). Lone mothers' poverty and employment. In D. Gallie and S. Paugam (Eds.), *Welfare Regimes and the Experiences of Unemployment in Europe* (pp. 175–199). Oxford: Oxford University Press.

Perez, C. and Beaudet, M. (1999). The health of lone mothers. *Health Representative 11*:21–32.

Phipps, S. (2003). *The Impact of Poverty on Health: A Scan of the Research Literature.* Ottawa: Canadian Institute for Health Information.

Pierson, J. (2002). *Tackling Social Exclusion.* London and New York: Routledge Taylor and Francis Group.

Press, J., Johnson-Dias J., and Fagan, J. (2005). Welfare status and child care to obstacles to full-time work for low-income mothers. *Journal of Women, Politics and Policy 27*:55–79.

Raphael, D. (2007). *Poverty and Policy in Canada: Implications for Health and Quality of Life.* Toronto: Canadian Scholars' Press, Inc.

Sachs, J.D. (2005). *The End of Poverty.* New York: Penguin Books.

Saskatchewan Women's Secretariat. (1999). *Profile of Aboriginal Saskatchewan Women.* Regina: Saskatchewan Women's Secretariat.

Savarese, J. and Morton, B. (2005). *Women and Social Assistance Policy in Saskatchewan and Manitoba.* Winnipeg: The Prairie Women's Health Centre of Excellence.

Segall, A. and Chappell, N.L. (2000). *Health and Health Care in Canada.* Toronto: Prentice Hall.

Shah, C. (2004). Aboriginal health. In D. Raphael (Ed.), *Social Determinants of Health: Canadian Perspectives* (pp. 267–280). Toronto: Canadian Scholars' Press, Inc.

Silver, H. and Miller, S.M. (2005). From poverty to social exclusion: Lessons from Europe. In C. Hartman (Ed.), *Poverty and Race in America: The Emerging Agendas.* New York: Lexington Books.

Singer, R. (2003). *The Impact of Poverty on the Health of Children and Youth.* Toronto: University of Toronto, Faculty of Social Work.

Statistics Canada (2006). Women in Canada: A gender-based statistical report. Retrieved on March 25, 2008 from http://www.statcan.ca/english/freepub/89-503-XIE/0010589-503-XIE.pdf

Stewart, M., Makwarimba, E., Barnfarther, A., Letourneau, N., and Neufeld, A. (2008). Researching health disparities: Mixed-methods approaches. *Social Science and Medicine 66:*1406–1417.

Taking Action on Population Health. (1998). A position paper for health promotion and programs branch. Ottawa: Population Health Development Division.

Tjepkema, M. (2002). The health of the off-reserve Aboriginal population. *Health Reports Supplement 13*:1–17.

Toronto and Community Neighbourhood Services. (2003). Social assistance and social exclusion. Toronto: Findings from Toronto Social Services' 2003 survey of single parents on Ontario Works.

Tsakloglou, P. and Papadopoulos, F. (2002). Aggregate level and determining factors of social exclusion in twelve European countries. *Journal of European Social Policy 12*: 211-225.

Wilkinson, R. (2005). *The Impact of Inequality: How to Make Sick Societies Healthier.* New York: The New Press.

Williamson, D. and Fast, J. (1998). Poverty status, health behaviours and health: implications for social assistance and health care policy. *Canadian Policy Review 24:*1–25.