Homelessness among Indigenous peoples in Canada: The impacts of child welfare involvement and educational achievement

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ABSTRACT

Existing evidence suggests that child welfare involvement has a deleterious impact on Indigenous peoples in Canada in terms of increasing their risk of becoming a visible or hidden homeless individual. Visible homelessness is generally understood as those individuals found sleeping in parks, cars, shelters, or on the streets and other locales such as in abandoned buildings or under bridges. Whereas the hidden homeless are those who find interim accommodations with friends, family members, and acquaintances. Although in saying this, many of the visible homelessness scenarios can also be considered hidden. Regardless, all situations of homelessness reflect uncertainty, lack of safety, and an increased vulnerability to abuse and exploitation. The pathways to homelessness are rooted in structural deficits in the society, which are multiplicative and intersectional in nature. They include housing affordability, oppression, conditions of physical and mental well-being, employment and employability, as well as family support and community connection. On the other hand, the greater the educational achievement experienced by Indigenous peoples the less the risk of being subjected to homelessness.

The premise of this paper is that Indigenous peoples are multiplicatively oppressed and that these intersecting sites of oppression increase the risk of Indigenous peoples in Canada becoming homelessness. Hypotheses were tested using the 2014 panel of Canada's General Social Survey, including 1081 Indigenous peoples and 23,052 non-Indigenous white participants. Indigenous identity, involvement in the child welfare system, and level of educational achievement were all significantly associated with experiences of hidden and visible homelessness, $p < .001$. As hypothesized, the odds associated with being involved in the child welfare system (odds ratio [OR] = 4.15) were stronger than that associated with identifying as Indigenous (OR = 1.47). As predicted, achieving a university education served as a protection against becoming homelessness (OR = 0.27). The hypothesized relationship between ethnicity and child welfare system involvement interaction was not observed. However, Indigenous participants (7.1%) were nearly four times as likely to have been involved with the child welfare system than were non-Indigenous white people (1.9%). Thus, at the population level, Indigenous peoples are at far greater risk of having been involved in the child welfare system, and consequently experiencing homelessness than non-Indigenous peoples. Of note, the hypothesized ethnicity by educational attainment interaction was observed. Among white people in Canada, a university education likely prevents most (83%) of visible homelessness otherwise experienced by those who did not complete high school (OR = 0.17) and prevents a significant amount (18%) of hidden homelessness. Startlingly, no such prevention was associated with completion of university among Indigenous peoples in Canada. Implications and future research needs are discussed.

1. Introduction

Transnationally, involvement in the child welfare system has been identified as a major contributor to homelessness, especially for Indigenous peoples (Anderson & Collins, 2014). Contributing factors of being subjected to discrimination, racism, assimilation, acculturation, and genocidal practices, policies, and ongoing negative narratives have placed First Nations, Inuit, and Métis peoples, the Indigenous peoples in Canada, at a greater risk than any other group (National Inquiry into Missing and Murdered Indigenous Women and Girls, 2019; Sinclair,

2016; Trocmé, Knoke, & Blackstock, 2004). Consequently, Indigenous peoples across the country are overrepresented among both visible and hidden homeless populations (Anderson & Collins, 2014) and in the child welfare system at all levels, from investigation to out-of-home placement (Blackstock, 2007, 2011; Ma, Fallon, Alaggia, & Richard, 2019; Sinha, Trocmé, Fallon, & MacLaurin, 2013; Truth and Reconciliation Commission of Canada [TRCC], 2015). However, there is a lack of research related to the effect of child welfare system involvement on Indigenous peoples' experiencing homelessness in Canada.

Anderson and Collins (2014) investigation of Indigenous peoples' experiences with homelessness in Canada discovered that, in the 13 cities they looked at, the prevalence of Indigenous peoples in the homeless population was estimated to be at least five times greater than in the general population. Particularly striking was the rate they found in Toronto, Ontario. There, Indigenous peoples accounted for only 0.5 percent of the total population but comprised upwards of 15 to 16 percent of the homeless population. In saying this, it should be noted that determination of both those who were homeless and/or clustered as Indigenous varied according to whether participants self-identified or were considered to be homeless and/or Indigenous by data collectors. Similarly, at a national level it has been estimated that Indigenous peoples are about 10 times as likely to experience homelessness when compared with their non-Indigenous counterparts (Hwang, 2001). Here too, a cautionary note of the aforesaid estimate should be offered as this finding was an uncontrolled synthesis of unstandardized regional homelessness rates. Nevertheless, these two studies do indicate a preponderance of Indigenous peoples being disproportionately represented in those who are homeless in Canada. To clarify the identified data and analysis concerns mentioned related to Indigenous homelessness, the current study will address the shortcomings in the research literature.

According to the 2016 Canadian Census, Indigenous children and youth accounted for 8% of that population nationally. However, 52% of children and youth in foster care were Indigenous (Statistics Canada, 2017a). Current child welfare system practices echo those of the residential school era in Canada where Indigenous children were forcibly removed or parents were coerced, deceived, or persuaded to send their children away from their homes and frequently their communities (Kidd, Thistle, Beaulieu, O'Grady, & Gaetz, 2018). This comparison has a sound basis. Sinclair (2016) notes that as the number of residential schools began to decline, the number of Indigenous children who were apprehended and forcibly taken from their homes by child welfare workers increased. In fact, there are now more Indigenous children under the care of child welfare agencies than were removed from their families at the height of the residential school era (Blackstock & Trocmé, 2005; National Inquiry into Missing and Murdered Indigenous Women and Girls, 2019; TRCC, 2015).

1.1. Background

In keeping with Sider's (1987) formative work, wherein he articulates the key aspects of oppression with respect to the domination of Indigenous peoples, it is not surprising that homelessness in Canada takes a victim-blaming or psychosocial-deficit approach where, generally speaking "an individual, family, or community [is] without stable, safe, permanent, appropriate housing, or the immediate prospect, means and ability of acquiring it" (Gaetz et al., 2012, p. 1). This definition of homelessness suggests that homelessness encompasses a continuum of living situations ranging from unsheltered to at-risk situations of homelessness. Two broad types of homelessness found at either end of this continuum are visible or absolute and hidden or relative homelessness. Visible or absolute homelessness includes people living in public or semi-public spaces such as parks, cars, shelters, or on the streets, in abandoned buildings, or under bridges. These spaces are not typically thought of as places of residence. nor are they intended for long-term habitation (Harvey, 2016; Thurston, Milaney, Turner, &

Coupal, 2013). Hidden or relative homelessness is conceptualized as individuals who have may have some type of shelter, but do not have a home to call their own. Included in this category are people who are provisionally accommodated (Gaetz et al., 2012) or living in spaces, such as emergency shelters, in cars, or at other people's houses (Christensen, 2013; Harvey, 2016; Thurston et al., 2013). These provisional accommodation settings are frequently in the homes of friends, family members, or acquaintances. This being said, the separation of what is considered visible and hidden homelessness is not absolute. What is conclusive is the vulnerability of people who are homeless in terms of their potential to be subjected to or witnesses of exploitation and abuse. As such, visible and hidden homelessness are considered to be face valid indicators of peoples' profound vulnerability. Both were included in the present study and should be thought of as its sub-hypotheses.

The characteristics of Indigenous peoples who experience homeless are regionally diverse and should not be considered to be all the same when it comes to their backgrounds. They also differ vastly from the experiences that non-Indigenous peoples have with homelessness (Brown, Knol, Prevost-Derbecker, & Andrushko, 2007; Christensen, 2011, 2013; Patrick, 2014; Thistle, 2017). Causes of Indigenous peoples' homelessness are especially unique because the narratives of objectified inferiority are entangled in (neo)colonial socio-structural dynamics (Christensen, 2013). Moreover, these causes are compounded by the multiple, intersecting sites of oppression and marginalization experienced by Indigenous peoples who are continually being revictimized through (neo)colonial permeated policies and practices intended to subjugate their resolve and ways of knowing and being (Anderson & Collins, 2014; Klos, 1997; Thistle, 2017). Structural factors that have been found to contribute specifically to Indigenous peoples' experiences of homelessness include discrimination and racism (Belanger, Awosoga, & Weasel Head, 2012; Richter & Chaw-Kant, 2008). Also, involvement in the criminal justice system (Anderson & Collins, 2014; Harvey, 2016; Kishigami, 2015; Thistle, 2017) and child welfare system (Anderson & Collins, 2014; Baskin, 2007; Ruttan, LaBoucane-Benson, & Munro, 2008) play a role in escalating risk. Moreover, lack of educational opportunities and employment also must be factored into the increased potential of someone befalling homelessness (Saskatoon Indian and Métis Friendship Centre, 2009; Peters & Robillard, 2007; Thurston et al., 2013). This then suggests that education might well serve as a protective factor against becoming homelessness. However, the relationship between educational achievement and homelessness does not seem to have yet been tested within this field. While testing central hypotheses, including main and interaction effects, this study aimed to account for the potential confounding influence of as many structural and personal factors as were available.

Although child welfare system involvement has been cited in the literature as contributing to Indigenous peoples' experiences of homelessness (Baskin, 2007; Ruttan et al., 2008), it is an understudied factor. The Indigenous youths in Baskin (2007) study highlighted the structural determinants that they believed caused their homelessness. More specifically, the participants spoke strongly about the negative impacts that the child welfare system had had on their lives, including contributing to their experiences of homelessness. Similarly, all of the nine young Indigenous women exiting homelessness in Ruttan et al. (2008) study discussed being in some way affected by both the residential school and the child welfare system. They typically made specific connections between their child welfare system experiences and their experiences with being homeless. This being said, there remains a lack of population-based, quantitative research on the associations of people's, especially Indigenous peoples', experiences in the child welfare system with their subsequent experiences of homelessness.

Among the general population, transition from foster care into the community as an emerging adult has been identified as contributing to homelessness (Ford Shah et al., 2017; Fowler, Marcal, Zhang, Day, & Landsverk, 2017; Piat et al., 2014). However, youth who are able to

reunify with family members upon aging out of the child welfare system appear to fare better (Fowler et al., 2017). This is difficult for Indigenous children, who often are removed from their homes and placed with non-Indigenous families in communities that are far away from and foreign to the communities and cultures they know (Sinclair, 2007). Placement in foster care at some point has also been identified as being associated with homelessness in the general population. For example, Zugazaga (2004) found a strong association ($x^2 = 7.93$) between having been placed in foster care and subsequent homelessness. However, the size of its predictive effect was not reported. Moreover, most studies with similar findings are qualitative in nature (Lowe & Gibson, 2011) and remain untested in terms of Indigenous peoples' experiences in Canada at a national level.

The relationship between Indigenous peoples' educational achievement and homelessness is also an understudied area and offers conflicting information with respect to its relationship to homelessness. In some cases, it has been suggested that educational achievement serves as a protective factor against homelessness (Phinney, Danziger, Pollack, & Seefeldt, 2007; Rodrigue, 2016). Conversely, others have found that having less than a high school education actually decreased the likelihood of experiencing recurrent or hidden homelessness (McQuistion, Gorroochurn, Hsu, & Caton, 2014; To et al., 2016). There does not appear to be any Canadian studies, at a national level, which address this issue. Nor do there appear to be any studies examining the effect of educational achievement on Indigenous peoples' subsequent experiences of homelessness.

This study aims to fill these knowledge gaps, testing one key risk factor (child welfare system involvement) and one key protective factor (educational achievement) related to visible and hidden homelessness. Theorizing intersecting sites of oppression faced by Indigenous peoples, this large Canadian study tested these hypotheses: (1) Indigenous people are more likely than non-Indigenous people to experience homelessness. (2) People who were the legal responsibility of the government when they were children (i.e., placed in out-of-home care, typically in provincial child welfare systems) are subsequently more likely to experience homelessness. (3) People who have completed university are less likely to have experienced homelessness. (4) Of those having been a legal responsibility of the government, Indigenous children will be more disadvantaged than their white counterparts. (5) Educational achievement will be more advantageous for white people than for Indigenous peoples. A report by Statistics Canada examined the main effects of child welfare system involvement, Indigenous identity, and education achievement on hidden homelessness (Rodrigue, 2016). The current study replicates these main effects and additionally examines the interaction effects. Further, this study advances knowledge related to the main and interaction effects associated with visible homelessness.

2. Theoretical framework

The authors used a critical social theory perspective, with a focus on intersectionality, to frame the understanding of the fundamental aspects of the experiences of being homeless, especially as it relates to Indigenous peoples. As such, experiences and perceptions of homelessness reside in the distinct, structured, and constantly unfolding constructed, oppressive, socially and personally embraced narratives. These constructed narratives are embedded in the intersecting oppressively based deceptive policies, programs, practices, and general relations which unduly impact Indigenous peoples (Angell & Dunlop, 2001; Sider, 1987). The choice of critical social theory is intentional. It provides a focus on the tension and contradictions that permeate social exchanges, dictated by social structures, and impact advances with respect to fairness and justice (Leonard, 1990). For example, Angell and Dunlop (2001) demonstrate, through their comparative analysis, that neocolonial policies and programs have intentionally and coincidentally prevented Indigenous peoples' struggles to become self-

reliant and -determining. Critical theory is a perspective that focuses not only on exposing and challenging oppression and domination but also offers direction on what needs to take place in order to confront privilege and achieve equity (Angell & Dunlop, 2001; Angell, 2019; Leonard, 1990). To better understand how critical social theory will aid in this quest, the authors conjoined this overarching perspective with intersectionality. Intersectionality, according to Crenshaw (1989), considers how the connection between and overlay of aspects of our socially constructed selves allow us to navigate, or not, through our involved and evolving shared environment. Implicit in this is an appreciation for the role that systems of oppression and privilege multiplicatively play out in the way we present ourselves and in how we are perceived and received by those we come into contact with (Angell, 2019).

By using critical theory to deconstruct and reconstruct experiences of homelessness, a critique of oppressive social structures, such as child welfare and education systems, is offered with the ultimate goal of an emancipating counter-narrative being presented. It also, as Honneth (1997) posits, considers how the various voices that lend credence to the social construction of oppression provide, not only a salient argument in support of their analysis, but offer insight into how the possibility of social change can be brought about through action, activism, and a "rewriting" of the narrative upon which oppression and privilege are founded and reinforced. To this, we add intersectionality. By so doing, intersectionality takes critical theory one step further, by asserting that oppressive and privilege ridden social systems and institutions are interconnected and thus their effects should not be assessed independently (Crenshaw, 1989; Smith, 2005). Rather than focusing on individual pathologies, this theoretical framework promotes examination of multiple experiences of marginalization faced by Indigenous peoples. This framework, with its goal of emancipation, also exposes and challenges structural barriers and power differentials that maintain inequalities (Angell & Dunlop, 2001; Angell, 2019; Freire, 1970; Sider, 1987).

3. Method

3.1. Data and sample

Hypotheses were tested using the 28th panel of Canada's General Social Survey (GSS), collected in 2014 (Statistics Canada, 2016). The questionnaire was developed by Statistics Canada in consultation with key stakeholders including representatives from Northern Canada and departments such as Indigenous and Northern Affairs Canada (Statistics Canada, personal communication, March 7, 2018). Furthermore, there was no requirement to receive approval from the institutional ethics review board as these were publicly available data. However, it is accepted best practice in Canada and embraced by the authors that all research involving First Nations, Inuit, and Métis peoples and communities to comply with the framework set out in Research Involving the First Nations, Inuit, and Métis Peoples of Canada, Chapter 9 of the Tri-Council Policy Statement ([TCPS2]; Government of Canada Panel on Research Ethics, 2015). This section of the TCPS2 deals with the demonstrating respect for Indigenous peoples in terms of how research is conducted, findings presented, and implications disseminated. Moreover, the authors adhered to the principles set out in the Ownership, Control, Access and Possession (OCAP) statement created by the First Nations Information Governance Centre, 2014, which sets out Indigenous peoples are to be engaged and how research information is to be gathered and shared. In all aspects of the current research, the principles of OCAP have been respected even though the data used was gleaned secondarily from the GSS. In particular, the research findings, discussion, and implications were vetted with Indigenous colleagues and settler/allies, non-Indigenous people. These colleagues are not only familiar with the research project and its methodology, but also serve in a consultative capacity on Indigenous research for the university's

Research Ethics Board and Office of Research and Innovation Services. As Angell (2019) points out, whether the engagement of Indigenous peoples and communities in research endeavors is explicit or vicarious, from a critical theory perspective, it must at every step be procedurally anti-oppressive and take into account past deeds of personal, systemic and structural indiscretion involving all aspects of engagement by remaining reflexive, showing respect, being conciliatory and acting collaboratively.

Noninstitutionalized residents of Canada 15 years of age or older, living in one of the 10 provinces were included in the sample. Data for the territories were not included because they are restricted by Statistics Canada. Potential participants were selected with a random cell/landline digit-dialing methodology. This methodology was estimated to include 99% of all Canadian provincial residents (Statistics Canada, 2016). The reported overall response rate for the survey was 53%, which is not an unusually low response rate for national surveys (Heffetz & Reeves, 2018). It should be noted that the response rate among Indigenous peoples may be lower than the general population. It is known in contemporary survey research that responding is related to socioeconomic and health statuses. Several studies have substantiated the longstanding, well-known associations of survey nonresponding with relatively lower socioeconomic and health statuses (Gorey & Trevisan, 1998; Heffetz & Reeves, 2018; Langhammer, Krokstad, Romundstad, Heggland, & Holmen, 2012; Smylie & Firestone, 2015) Specifically, those who respond generally have higher socioeconomic and better health statuses. These well-known phenomenon suggest that this sample of Indigenous peoples is likely to be of relatively higher socioeconomic status, be relatively healthier, and thus less vulnerable than the national population. Thus, any findings included in this study are liable to be underestimates.

3.2. Measures

3.2.1. Outcomes

Two separate dichotomous outcome variables were self-reported: visible and hidden homelessness. Visible homelessness was a single-item measure: *"Have you ever been homeless; that is, having to live in a shelter, on the street, or in an abandoned building?"* Response choices were *yes* or *no*. Interviewers were given the instructions that "examples could include individuals living in emergency temporary shelters, in other locations not intended for human habitation (e.g. laneways, sidewalks, etc.)" (Statistics Canada, 2017b, p. 168). They were further instructed to not include individuals living with family or friends, strangers, in hotels, hostels, or rented accommodations and to not include experiences of homelessness outside of Canada (Statistics Canada (2017b), 2017b). Hidden homelessness was also a single-item measure: *"Have you ever had to temporarily live with family or friends, in your car or anywhere else because you had nowhere else to live?"* Response choices were *yes* or *no*. Interviewers were given instructions that "examples could include individuals that are "couch surfing" or without a regular or stable dwelling" (Statistics Canada, 2017b, p. 169). For this question, interviewers were instructed not to include individuals living in hotels, hostels, or rented accommodations. Given the instruction to not include people living in hotels or hostels, which are arguably precarious housing situations, estimates of hidden homelessness from these analyses are probably conservative underestimates. Although there seems to be no evidence in the literature related to the predictive validity of the absolute homelessness measure, the predictive validity of this simple measure of hidden homelessness was demonstrated by Rodrigue (2016).

3.2.2. Predictors

Main predictors were ethnicity and having been in child welfare care. Ethnicity was dichotomized. Those who identified as First Nations, Métis, or Inuit, are referred to as Indigenous peoples throughout this work. The other ethnic category was non-Indigenous

white people, hereafter, referred to as white. Having been in care was a dichotomous variable. Respondents were asked, *"As a child, were you ever under the legal responsibility of the government?"* Interviewers were instructed that, "in this case, the government assumes the rights and responsibilities of a parent for the purpose of the child's care, custody, and control" (Statistics Canada, 2017b, p. 101).

Personal covariates were age and gender. Age was recoded into practically meaningful thirds: older (55 years and older), middle-aged (35–54) or youths and young adults (15–34). Gender was straightforwardly dichotomized. Social-structural covariates were education, experiences of discrimination, contacts with criminal courts and experiences of childhood physical or sexual abuse. Highest level of education was categorized into four groups: less than high school, high school, college or trade school, or university. Respondents were asked if, in the past five years, they felt as though they had been discriminated or treated unfairly by others in Canada on the basis of sex, ethnicity or culture, race or skin colour, physical appearance, religion, sexual orientation, age, physical or mental disability, language, and/or for any other reason. These experiences of discrimination across 10 categories were summed into an ordinal measure: none, one or two or more experiences of discrimination or unfair treatment. The predictive validity of a similar measure of perceived discriminatory experiences was demonstrated by Berry and Hou (2017) in their examination of discrimination among second generation immigrants in Canada. Further, Du Mont and Forte (2016) examined the relationship between perceived discrimination and self-rated health in Canada using the same cumulative measure employed in the current study also demonstrating its predictive validity. Contact with the criminal courts and experiences of childhood physical and sexual were all dichotomous (*yes* or *no*) variables.

3.3. Analysis

First, unadjusted descriptive analyses compared Indigenous and non-Indigenous white participants on sociodemographic and contextual factors used chi square tests. Binary logistic regressions then tested the main predictive and interacting effects of Indigenous identity and child welfare system exposure on visible and hidden homelessness. These models were built based on theoretically important interactions and evidence from previous studies (Anderson & Collins, 2014; Rodrigue, 2016; To et al., 2016). Practical and statistical significance were assessed with odds ratios (OR) and 95% confidence intervals estimated from regression statistics (Begashaw, 2018; Harrell, 2015; Hosmer, Lemeshow, & Sturdivant, 2013; Kleinbaum & Klein, 2010; Vittinghoff, Glidden, Shiboski, & McCulloch, 2012). All ORs greater than one indicated greater odds of having experienced homelessness.

Household income was excluded from the central analysis as it was missing for 21% of the respondents and these nonresponse rates significantly differed between Indigenous (34%) and non-Indigenous white participants (21%), $p < .001$. Otherwise, missing data was miniscule. All variables had < 3% missing data. Three had none and three had < 1% missing. Little (1988) Missing Completely at Random test was conducted ($\chi^2 = 0.97$, $p = .35$). Non-significance of this test affirms that any very modest missing data in this analysis was randomly distributed and so, not confounding. Therefore, missing data was deleted listwise and analyses were accomplished with the 24,133 participants, 1081 Indigenous and 23,052 white, with valid data on all study variables. Finally, the large subsamples of Indigenous and white participants ensured ample power ($1 - \beta = 0.99$) to detect large between-group differences with a great deal of confidence (ORs of 2.00 or larger within 95% CIs [2-tailed α of 0.05]; Faul, Erdfelder, Buchner, & Lang, 2009; Fleiss, Levin, & Paik, 2003).

4. Results

Table 1 displays the descriptive profiles of the Indigenous and non-

Table 1

Descriptive Profiles of Indigenous (n = 1081) and Non-Indigenous White (n = 23,052) Participants.

	Indigenous		Non-Indigenous White	
	Number[a]	Percentage	Number[a]	Percentage
Ever Experienced Visible Homelessness*				
No	1023	94.6	22,694	98.4
Yes	58	5.4	358	1.6
Ever Experienced Hidden Homelessness*				
No	881	81.5	21,054	91.3
Yes	200	18.5	1998	8.7
Child Welfare System Involvement*				
No	1004	92.9	22,619	98.1
Yes	77	7.1	433	1.9
Highest Level of Education*				
Less than high school	290	26.8	3848	16.7
High school	333	30.8	6352	27.6
College or trade school	312	28.9	6896	29.9
University	146	13.5	5956	25.8
Gender				
Female	593	54.9	12,765	55.4
Male	488	45.1	10,287	44.6
Age*				
55 or older	376	34.8	11,168	48.4
35 to 54	377	34.9	7152	31.0
15 to 34	328	30.3	4732	20.5
Physically Abused in Childhood*				
No	664	61.4	16,694	72.4
Yes	417	38.6	6358	27.6
Sexually Abused in Childhood*				
No	904	83.6	20,714	89.9
Yes	177	16.4	2338	10.1
Discrimination Experiences*				
None	847	78.4	20,655	89.6
One	93	8.6	1444	6.3
Two or more	141	13.0	953	4.1
Contact with Criminal Courts*				
No	731	67.6	17,989	78.0
Yes	350	32.4	5063	22.0

[a] Number of participants in each subsample.

* Ethnic group differences were statistically significant, Pearson's χ^2 test, $p < .001$.

Indigenous white respondents included in this analysis. Except for gender, all of the between ethnic group differences were statistically significant (p < .001). Of central interest, Indigenous peoples were substantially more likely to report having experienced visible and hidden homelessness and to have ever been involved in the child welfare system as a child. In fact, Indigenous peoples were more than three times as likely as white people to have experienced visible homelessness (5.4% vs. 1.6%), more than twice as likely to have experienced hidden homelessness (18.5% vs. 8.7%) and nearly four times as likely to have ever been so cared for by a province (7.1% vs. 1.9%). Consistent with Palmater (2014) findings, Indigenous respondents were also much more socio-demographically vulnerable than white respondents. They were younger and much more likely to not have completed high school (26.8% vs. 16.7%). Indigenous participants were also more prevalently victimized, being more likely to have reported childhood physical and sexual abuse (38.6% vs. 27.6% and 16.4% vs. 10.1%). These findings echo the assertions of participants in Baskin (2007) and Ruttan et al. (2008) studies who discussed heightened experiences of victimization and abuse. Finally, Indigenous peoples were more than three times as likely to have experienced two or more types of discrimination (13% vs. 4.1%) as well as more likely to have had contact with the criminal courts (32.4% vs. 22.0%).

Logistic regression-based findings for both outcomes are displayed

in Table 2. Model 1 included only ethnicity as a predictor. It estimated that the odds or chances of an Indigenous person experiencing visible homelessness were much greater, perhaps 259% greater (OR = 3.59) than those of a white person. While the odds of an Indigenous person experiencing hidden homelessness were also substantially, perhaps 139% greater (OR = 2.39). Model 2 similarly included only one predictor, whether or not participants had ever been involved with a provincial child welfare system as a child. Such an experience was observed to be an incredibly strong predictor of homelessness, visible and hidden. People who had such child welfare involvement were to have ever been visibly homeless (OR = 10.50) and more than three times as likely to have ever experienced hidden homelessness (OR = 4.26). Model 3 also included only one predictor; highest level of education attained. University completion was observed to be protective against visible homelessness (OR = 0.27). However, educational attainment does not seem to significantly predict hidden homelessness.

These general patterns of findings were maintained even after all other factors were accounted for in Models 4 and 5. In Model 4, which included all study variables, the strongest predictor of visible homelessness remained child welfare involvement (OR = 4.15). As for hidden homelessness, having experienced two or more forms of discrimination was the strongest predictor (OR = 2.55). Further, and hypothetically supportive, the odds of identifying as Indigenous and experiencing visible or hidden homelessness remained significant and relatively large (respective ORs of 1.47 and 1.56). The final models accounted for nearly one quarter of the variability in the outcome of visible homelessness (Nagelkerke's r^2 = 23.5%) and slightly more than 10% of the variability in the outcome of hidden homelessness (Nagelkerke's r^2 = 12.4%). The hypothesized interaction of Indigenous identity and child welfare involvement, however, was not statistically significant. Thus, the effect of ever being in child welfare system care on experiencing visible or hidden homelessness was similar for Indigenous and white peoples. This, however, ought not be interpreted to mean that Indigenous identity does not matter. Notwithstanding the large main effect of Indigenous identity, Indigenous peoples who represent 4.9% of the Canadian population (Statistics Canada, 2019) were also far more prevalently removed from their families as children (7.1% vs. 1.9%).

Finally, the interactions of education and visible and hidden homelessness with Indigenous identity were examined. The interactions were significant in full regression models that controlled all of the other study variables. The interaction effects are depicted in table 3 ($p = .06$ and $p = 0.00$). The tabular display shows education to be profoundly protective for white people, but not protective at all for Indigenous peoples. For example, among white people in Canada, a university education likely prevents most (83%) of the visible homelessness otherwise experienced by those who did not complete high school (OR = 0.17). Further, university education likely prevents a significant amount (18%) of hidden homelessness for white people. Startlingly, no such prevention was associated with a university education among Indigenous peoples in Canada. First Nations, Inuit and Métis people with a university degree are as likely to have experienced visible and hidden homelessness as are otherwise similar First Nations, Inuit and Métis people without a high school diploma. Such seems another clear indicator of their multiple, intersecting systemic experiences of structural violence and oppression; and thus, supportive of the theoretical framework, with its focus on critical social theory and specifically, intersectionality.

5. Discussion

Overall findings suggest that Indigenous peoples have much more involvement in the child welfare system and consequently, are at greater risk of exposure to visible and hidden homelessness. Indigenous peoples were more likely to experience visible (5.4% vs 1.6%) and hidden homelessness (18.5% vs 8.7%) than non-Indigenous, white

Table 2

Predictors of Homelessness Among Indigenous and Non-Indigenous White People: Logistic Regression Models ($n = 24{,}133$).

Visible Homelessness	Models 1, 2, & 3[a]		Model 4		Model 5	
	OR	95% CI	OR	95% CI	OR	95% CI
Indigenous (White)						
Indigenous	3.59	(2.70, 4.78)	2.41	(1.78, 3.25)	1.47	(1.06, 2.03)
Child Welfare System Involvement (No)						
Yes	10.50	(7.97, 13.82)	8.62	(6.47, 11.48)	4.15	(3.02, 5.68)
Education (Less than high school)						
High School	0.86	(0.67, 1.12)	0.86	(0.66, 1.13)	0.72	(0.54, 0.95)
College or trade school	0.78	(0.60, 1.01)	0.73	(0.56, 0.97)	0.58	(0.43, 0.76)
University	0.27	(0.18, 0.39)	0.28	(0.19, 0.41)	0.20	(0.14, 0.30)
Gender (Female)						
Male			1.63	(1.33, 1.99)	1.75	(1.39, 2.19)
Age (55 or older)						
35 to 54			2.15	(1.71, 2.72)	1.73	(1.36 2.19)
15 to 34			1.48	(1.14, 1.95)	1.64	(1.24, 2.18)
Physically Abused in Childhood (No)						
Yes					3.00	(2.38, 3.78)
Sexually Abused in Childhood (No)						
Yes					2.58	(2.01, 3.31)
Discrimination Experiences (None)						
One					2.05	(1.50, 2.79)
Two or more					3.84	(2.93, 5.02)
Contact with Criminal Courts (No)						
Yes					3.47	(2.80, 4.30)
Hidden Homelessness **Indigenous (White)**						
Indigenous	2.39	(2.04, 2.81)	2.06	(1.74, 2.43)	1.56	(1.31, 1.86)
Ever a Crown Ward (No)						
Yes	4.26	(3.50, 5.19)	3.90	(3.18, 4.77)	2.46	(1.98, 3.05)
Highest Level of Education (Less than high school)						
High school	1.29	(1.12, 1.48)	1.22	(1.06, 1.41)	1.10	(0.95, 1.28)
College or trade school	1.35	(1.18, 1.55)	1.22	(1.06, 1.40)	1.06	(0.91, 1.22)
University	1.02	(0.88, 1.19)	0.97	(0.83, 1.13)	0.82	(0.70, 0.96)
Gender (Female)						
Male			1.14	(1.05, 1.25)	1.10	(1.00, 1.21)
Age (55 or older)						
35 to 54			1.99	(1.79, 2.20)	1.82	(1.63, 2.02)
15 to 34			1.47	(1.31, 1.66)	1.57	(1.38, 1.78)
Physically Abused in Childhood (No)						
Yes					1.99	(1.81, 2.20)
Sexually Abused in Childhood (No)						
Yes					1.67	(1.47, 1.90)
Discrimination Experiences (None)						
One					1.93	(1.67, 2.24)
Two or more					2.55	(2.18, 2.98)
Contact with Criminal Courts (No)						
Yes					2.03	(1.84, 2.23)

Notes. CI, confidence interval; OR, odds ratio. Parenthetic categories are baselines.

[a] Unadjusted, single predictor models.

people. Indigenous identity (ORs ranged 1.50 to 3.50) and having ever been the legal responsibility of the government (ORs ranged 2.50 to 10.50) were both strongly associated with homelessness, visible and hidden. These findings, related to hidden homelessness, systematically converged with Rodrigue (2016) findings. The hypothesized interaction between Indigenous identity and child welfare was not observed. However, educational achievement was strongly protective for non-Indigenous white, but not at all for Indigenous participants. Thus, intersecting sites of oppression, as posited by critical social theory and intersectionality, related to colonialism (Indigenous identity) and education (level of educational attainment) are clear.

As a result of the historic effects arising from colonization and the ongoing impacts of neocolonialism, Indigenous peoples are far more vulnerable and prevalently exposed to structural oppression than non-Indigenous people in Canada. This study added to mounting evidence, including the recent Canadian Human Rights Tribunal finding, of racist and discriminatory practices and policies by all levels of Canadian Government (First Nations Child and Family Caring Society of Canada and Assembly of First Nations v. Attorney General of Canada, 2016; TRCC, 2015) by showing that Indigenous identity and out-of-home child welfare placement both strongly predicted homelessness. Although the hypothesized interaction between Indigenous identity and out-of-home placement was not observed, this does not mean that Indigenous identity does not multiplicatively matter. Indigenous respondents were more than three times as likely as non-Indigenous participants to have been removed from their homes as children,

Table 3
Effects of Education on Homelessness within Ethnic Strata (N = 24,133).

Highest Level of Education	Non-Indigenous White		Indigenous	
	OR	95% CI	OR	95% CI
Visible Homelessness				
Less than high school	1.00	–	1.00	–
High school	**0.67**	0.50, 0.91	1.13	0.52, 2.48
College or trade school	**0.52**	0.39, 0.71	1.09	0.49, 2.46
University	**0.17**	0.11, 0.26	0.70	0.24, 2.05
Hidden Homelessness				
Less than high school	1.00	–	1.00	–
High school	1.07	0.91, 1.25	1.47	0.93, 2.34
College or trade school	1.04	0.89, 1.21	1.27	0.79, 2.05
University	**0.82**	0.69, 0.96	0.73	0.39, 1.37

Notes. Odds ratios and confidence intervals were adjusted for all of the other factors included in full regression models. An odds ratio of one is the baseline. Statistically significant protective associations are bolded.

placing them at much greater population attributable risk.

The GSS, despite being a large, national database presents limitations. First, in the publicly available dataset, Indigenous peoples are aggregated into one group, as opposed to being recognized as distinct ethnic groups and Nations. All visible minorities are also aggregated into one category. These aggregations skew results and create difficulties in assessing specific outcomes related to discrimination, racism, and other types of oppression. Further, due to limitations related to the survey questions, how many homelessness episodes had occurred and how old the respondents were when they experienced homelessness could not be determined. However, the self-report nature of data collected for the GSS helps to overcome typical limitations which rely on enumeration techniques such as Point in Time counts (Baskin, 2007; Schneider, Brisson, & Burnes, 2016) or number of peoples accessing shelters (Berry, 2007). Another limitation of the data was that the nature of the variables did not allow for measurement of the effect of having children in the care of the government on experiencing hidden or visible homelessness. Thus, it is likely that the estimates related to the association between Indigenous peoples' involvement in the child welfare system and experiences of homelessness are conservative. Moreover, the respondents were not asked when the childhood physical and/or sexual abuse occurred. It is unclear whether this abuse occurred while living with their parents or while they were wards of the government and in the custody of the state and under the care of its child welfare system proxies. However, Indigenous children are more likely to be taken from their parents as a result of neglect charges, than for instances of physical and/or sexual abuse (Blackstock, Trocmé, & Bennett, 2004). Thus, it may be inferred that the reported childhood physical and/or sexual abuse were more likely to have occurred while being a ward of the state and in the care of the child welfare system. Finally, the sample was limited in that data were only collected from individuals currently living in households. Thus, the estimates presented here are likely conservative as anyone currently experiencing homelessness was excluded (Rodrigue, 2016).

Even when all other factors are accounted for, Indigenous peoples still face 47% and 56% greater odds of experiencing visible and hidden homelessness, respectively. Further, these findings suggest that higher levels of education serve as a protection from visible homelessness for white people, but this is not the case for Indigenous peoples. Future research should explore the interesting relationship between Indigenous peoples' experiences of education and how they are related to subsequent experiences of homelessness. A greater understanding of how education serves as a protection against homelessness for white people may also point to how the Canadian education system is failing Indigenous peoples in the same vein.

To further demonstrate the importance of using critical social theory and intersectionality as a lens to view the effects of systemic oppression,

future research should examine the effects of intersecting sites of structural violence faced by Indigenous peoples, including child welfare involvement, on experiences of homelessness. Regional differences in rates of Indigenous children in care as well as the effects of child welfare involvement on homelessness should also be examined. With these data, researchers and policy makers will have opportunities to build on strengths of regions with lower rates of children in care and homelessness. Greater efforts should also be made by researchers to engage with First Nations communities in the development of culturally relevant data collection techniques. The status quo depends primarily on data collected by the Canadian Government and often excludes on-reserve populations (Sinha, Delaye, & Orav-Lakaski, 2018). Future research should also qualitatively explore the relationships between Indigenous peoples, their past experiences with child welfare services, and their experiences of homelessness. The role of family as a risk and/ or protective factor should also be explored.

It is apparent that Indigenous peoples disproportionately experience homelessness and one of the most important factors predicting this overrepresentation is having experienced being a legal responsibility of the government as a child. For example, both central models on visible and hidden homelessness that accounted for other factors estimated Indigenous peoples were overrepresented by approximately 50% (ORs = 1.47 and 1.56, respectively). Policies, programs, and practices must change. Discriminatory child welfare policies which result in the underfunding of child welfare services in First Nations communities must be acknowledged and rectified (Sinha et al., 2018; TRCC, 2015). Further, there must be a greater awareness of how government policies have systematically targeted Indigenous peoples and created social conditions which contribute to increased involvement in the child welfare system (Sinha et al., 2018). The Canadian Government, as an act of reconciliation, must begin to redress these harms caused by colonialism. This includes recognizing and addressing poverty, housing, water, and sanitation issues, food security, violence, and health and educational inequities faced by First Nations, Inuit, and Métis peoples (TRCC, 2015).

Finally, the current study demonstrated a complete non-association between Indigenous peoples' level of educational achievement and their experiences of homelessness. This is essentially a systematic replication of the well-known diminished protective influence of education among African Americans (Assari, 2018; Fusaro, Levy, & Shaefer, 2018). Educational achievements significantly protect against homelessness and its correlates among all Americans, but substantially less so among its most historically oppressed group, African Americans. However, such protections among Indigenous Canadians seems not merely diminished, but non-existent. This seems a stunning finding of extraordinary policy significance. The results of this study indicate that completion of university is a very important protective factor against both visible and hidden homelessness. This highlights the need for improved access to education and educational supports for First Nations, Inuit, and Métis children and youth. Like child welfare, education in First Nations communities is underfunded by the federal government (Drummond & Kachuck Rosenbluth, 2013). Since the inception of the residential school system, education and child welfare systems have been interconnected and oppressive mechanisms of control over Indigenous peoples and communities. One is also left wondering if, perhaps, having to leave their home communities to attend high school leads to high school being a risk, as opposed to protection, factor related to homelessness for Indigenous peoples.

In addition to equitable funding of First Nations child and family services, there must be an increase in funding for culturally appropriate and relevant supports for all Indigenous parents and children, both on- and off-reserve so children may remain safely in their family homes (Ma et al., 2019). These supports must be holistic and focus on prevention. If removal from the home is necessary, children must be placed in culturally appropriate homes where they are provided with opportunities to develop strong senses of identity, self-worth, self-respect, and self-

reliance (TRCC, 2015). Overall, there needs to be a greater understanding and acknowledgement by all people, but especially social workers and other helping professionals, of the devastating impacts that the residential school system and other colonial projects have had on the wellbeing of generations of Indigenous peoples (TRCC, 2015). Beginning with training and education, social work academics, educators, and practitioners must enhance understandings of Indigenous cultures and practices as well as awareness of the long-lasting implications of colonization (TRCC, 2015).

Indigenous peoples, families, and communities have continued to thrive despite the incursions on their ways of knowing and being by settlers. On all accounts, it is apparent that Indigenous peoples were better off before the arrival of settlers and this includes the ongoing interventions of social workers, police, and other government agents. Mounting evidence, including the current analysis, suggests that First Nations, Inuit, and Métis peoples must have jurisdiction over child and family services involving their community members (Barker et al., 2014; Baskin, 2007; Blackstock, 2011; Sinclair, 2016). Although this issue becomes more complicated with off-reserve populations where Indigenous leadership is not dominant, sustainable solutions are not impossible. Social workers and other professionals working with Indigenous peoples off-reserve must follow their lead and stop, at once, imposing Eurocentric values, policies, and practices on Indigenous peoples, families, and communities. Overall, First Nations, Inuit, and Métis resiliencies and systems of child and family care must be recognized, supported, and legitimized (Blackstock et al., 2004) not only by all levels of government but also by social institutions and the agents representing these institutions, including social workers.

CRediT authorship contribution statement

Amy M. Alberton: Conceptualization, Methodology, Validation, Formal analysis, Supervision, Project administration. **G. Brent Angell:** Conceptualization, Validation, Supervision. **Kevin M. Gorey:** Conceptualization, Methodology, Validation, Formal analysis, Supervision. **Stéphane Grenier:** Validation, Supervision, Project administration, Funding acquisition.

Declaration of Competing Interest

None.

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Appendix A. Supplementary material

Supplementary data to this article can be found online at https://doi.org/10.1016/j.childyouth.2020.104846.

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