WARDS OF THE STATE: ANALYSING THE WELL-BEING OF CANADIAN INDIVIDUALS WHO WERE PREVIOUSLY IN GOVERNMENT CARE

by

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ABSTRACT

This paper evaluates the relationship between having previously been a ward of the state as a child and the likelihood of having high self-reported well-being as an adult. Using data from the 2014 General Social Survey and a probit model, with basic controls I find that being in government care as a child reduces the likelihood of having high well-being by 10.6 percentage points, or 12.5%. However, once I control for additional variables, many of which may also be influenced by being a ward of the state, this relationship disappears. As well, having previously been a ward of the state is associated with an increased likelihood of being a victim of sexual assault before the age of 15, along with lower income and education. These variables, save for low education, are found to be significantly correlated with high well-being. Also, being a ward of the state as a child is associated with: employment status, sense of belonging, disability status which also have significant impacts on high well-being in my model. Thus, there are indirect consequences on well-being stemming from being a ward of the state as a child. Programs that aid with the mental health burden of those recovering from sexual assault would be beneficial, along with direct income support, and education programs designed to increase income.

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CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW

INTRODUCTION

Children who have been in government care remain an understudied vulnerable population in Canada. Yet, many people have gone through government care and currently there are almost 60 thousand children in out-of-home care in Canada (Girons et al., 2020), with 43,880 of those being in foster care (Statistics Canada 2017).[1]

The purpose of this research is to estimate the impact of having lived as a child in Canadian foster care and/or group homes on individual well-being as an adult. A child might be in this situation due to circumstances such as abusive parents, child neglect; or severe behavioral difficulties, among other reasons. These events are traumatic and may have persisting effects into adulthood. Being in care may also reduce well-being as the child may not want to separate from their caregiver, or may experience abuse while in government care. However, the opposite may be true as a child may escape abusive parents by being put in government care.

To examine this issue, I estimate the effects of being a ward of the state as a child on adult well-being. I use a 2014 Canadian cross sectional data set which contains information on general social issues. This includes data on well-being, whether the respondent was a ward of the state as a child, as well as details on being sexually assaulted, education, and income. The information contained in the data allows me to examine the impact that being a ward of the state has on well-being.

This adds to the previous literature as the relationship between well-being and living in a foster care or group home has never been analyzed. This paper will examine the relationship between the two using probit regressions which includes many predictors of well-being.

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[1] The Canadian Child Welfare Research Portal (2021) defines out-of-home care as care that, "includes voluntary care agreements and placements in residential, foster, and community or kinship care." Moreover, foster care is defined as a private home for individuals in need of care, and a group home is an out-of-home facility for maltreated youth (CCWRP, 2021).

The key findings are that being a ward of the state does not have a direct relationship with well-being once controls are included in the regressions. However, being a ward of the state indirectly reduces the likelihood of having high well-being through its relationship with sexual abuse, education, and income.

I first provide a survey of literature concerning well-being as well as youth care. Next, I discuss the data set and methods that I use in my analysis in Chapter 2. Then, the results from my analysis as well as an interpretation of the results are presented in Chapter 3. And finally, a brief conclusion of my research is provided in Chapter 4.

LITERATURE REVIEW

Having been a child or teenager in foster care and/or group homes has been found to have negative impacts on long term outcomes. For example, Warburton et al. (2014) found that putting 16 to 18 year-old men in foster care has many negative effects including reduced high school graduation, higher criminal convictions and greater income assistance usage. However, much less is known about the impact on overall happiness. As such, I focus on obtaining information concerning the impact of living in foster care and/or group homes on well-being. First, information on measuring well-being and the drivers of well-being is presented. This will enable me to get an understanding of the variables which should be included when analyzing the impact of being a ward of the state on future happiness. Then, research that focuses on living in foster care or group homes in Canada is reviewed to further help determine what specific factors need to be taken into consideration when analyzing living in foster care and/or group homes.

Key Research on Well-being:

In order to properly assess the impact of growing up in foster care and/or group homes, it is critical to accurately measure well-being.

The World Happiness Report (Helliwell et al, 2018) acts as a good building block towards understanding well-being. The report argues that despite happiness being a subjective experience it can be objectively measured. Furthermore, a distinction is made between day-to-day happiness which is known as "affective happiness" and happiness derived from life satisfaction which is defined as "evaluative happiness." For all intents and purposes, well-being will be used interchangeably with the previous definitions of happiness.

Fleche et al. (2012) analyses the correlates of well-being across OECD countries using data from the Gallup World Poll, the Human Development Index, and the OECD. Positive determinants of well-being were found to be: income, health, being in a relationship, being employed, and social contact. These were found using ordered probit and weighted least squares regressions. The perceived corruption level was a significant correlate at the society level. The study also found that there are only small differences in terms of the determinants of well-being between OECD countries. In other words, cultural differences are not main drivers of well-being. Also, the study found that income and health were more important determinants of well-being amongst countries with low levels of income and/or health. Furthermore, some variables that are found to be positively correlated with well-being include: trust in people, and freedom of choice.

Helliwell and Putnam (2004) use data from the World Values Survey and the European Values Study from 1980, 1992, and 1997 to evaluate well-being. The following variables were all found to be positively related with self-reported well-being using ordinary least squares: increases in age, income, education (indirectly through health), being male, social capital (family and marriage), religion, friendship, community involvement, trust in others (coworkers, neighbours, police), and health. Unemployment reduces subjective well-being (more so than the loss of income, likely due to loss of social capital and increases in stress). Moreover, the authors

point out that social capital may have some negative effects (perhaps peer-pressure). Also, it is shown that increases in income have a comparatively greater positive impact on well-being when the individual's income is low which is in line with previous findings. This implies that relative income is far more important than absolute income in terms of well-being. Helliwell (2006) also discussed similar ideas.

Ehsan (2010) attempts to measure unemployment's impact on well-being. The author uses Canadian panel data from the National Population Health Survey from 1994 – 2007. Ehsan regressed well-being on: sex, age, age squared, province, marital status (categories are: single, married, divorced/widowed), education (categories are: less than secondary, secondary graduate, postsecondary diploma, college university), health status (poor, fair, good, very good, excellent), urban location, having own home, unemployed, out of labour force, log household income, and a constant. Results suggest that income must be increased almost 7-fold to offset the negative effect of unemployment on happiness. While this may not be true in the real world, it nonetheless shows a significant non-pecuniary cost due to losing one's job. Helliwell and Putnam (2004) previously discussed social capital's role in well-being. Perhaps losing one's job is the same as losing social capital through relationships, status, motivation, etc. Also, the author ran a pooled OLS regression, an ordered-logit regression, as well as a fixed effects regression with similar results in terms of the signs of the coefficients, but differing magnitudes.

Helliwell and Barrington-Leigh (2008) discuss well-being using the GSS cycle 17 data set. This is particularly useful as many variables from their study appear in the data set used in my analysis. Some variables that are included in the analysis on well-being include: household income, trust in neighbours, confidence in police, seeing friends, sense of belonging – community. The authors use ordered logit regressions and include regional fixed effects in their analysis. The authors also discuss the regional impact on self-reported well-being. In particular,

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they focus on differences between British Columbia and the Atlantic provinces. Lower population density was one explanation for the higher well-being in Atlantic provinces given the income advantages British Columbia has. Social environments and capital are also discussed. Furthermore, an interesting point that was made was that well-being is dependent on material and social aspects of life. Outcomes such as education, employment, and marital status are all very important as they provide both household income as well as a social network.

Foster Care and Group Homes in Canada:

Using summary statistics from the National Survey of Child and Adolescent Well-being (NSCAW), Barth (2002) argues that children placed in foster care and group homes have no significant differences between them in terms of well-being. In other words, the magnitude of issues that the children placed in group homes and foster care have are not very different. This suggests the two types of care can be grouped together in the study under the "Legal Responsibility of the Government" category. The author posited that children in care may have lower well-being due to fewer closer interpersonal relationships. It was also suggested that family involvement is particularly effective at improving well-being when the individual has mental health problems. Similarly, another study in Australia (Stancliffe and Keane, 2000) found no significant differences between the types of children living in group homes or living semi-independently. While foster care is not mentioned, it may be the case that the types of children in foster care and groups homes have no significant differences in terms of their behaviour. Another finding from Stancliffe and Keane (2000) is that family support is associated with well-being amongst those who are intellectually disabled.

It should be noted that the first paper is American while the second is Australian. There could be observed differences in the impact of the aforementioned variables in my model due to

the institutional differences in Canada. These differences include funding, policies, and who administers the care.

Desjardins et al. (2017) found that predictors of medication use in group homes are: PTSD symptoms and favorable opinions of the educators (in the group homes) of medicating their residents. This was done using data they collected from 101 participants who were between the ages of 6 and 12 and lived in either a residential treatment centre or a group home in Québec. The researchers sent questionnaires to educators, and interviewed respondents as a part of the data collection. They used analyses of variance to analyse the data. Furthermore, it was also discussed that those in group homes are much more likely to have ADHD as well as depression compared to those living with foster families. This contradicts previous findings that suggest that there were no significant differences in terms of mental disorders between children in foster care and those living in group homes. Thus, it is worthwhile to condition on medication use to control for any differences amongst those in foster care and other institutional care.

Osei and Gorey (2020) found that being in a group home located in a low-income area is associated with an increased risk of behavioural problems. This analysis was done employing logistic regressions using the Ontario Looking after Children (OnLAC) database which was collected from 2012 to 2016. This association is posited to be due to peer-influences. Furthermore, it was also found that 82% of youth in group homes have special needs, 46% are prescribed psychotropic medications, 19% have signs of depression or anxiety, 19% are at risk of academic failure, and that 10% show aggressive behaviours. Thus, there are many challenges with the children who are in group homes.

Lastly, an article from Ryan et al. (2008) defined group homes as care placements for youths who cannot be placed in foster or other homes due to risky and challenging behaviours.

Thus, while it would be nice to divide foster care and group homes into two separate categories (due to the behavioural differences) it is not possible in the data set used in my analysis. It should be noted that some previous studies mentioned above have not observed any significant differences between the two groups.

To summarize, the current literature on well-being has shown that the following are positively associated with self-reported well-being: income, education, health, social contact, being employed, and age. Furthermore, the current research on foster care and group homes is a little conflicted. Some studies have argued that children placed in foster care and group homes have no significant differences between them, while others have contradicted this. However, more research has shown that mental disorders and other special needs are more prevalent in group homes than in foster care. Group homes act as a placement of last resort for the most challenging children. Thus, while it would be beneficial to have separate categories for foster care and group homes, it is still possible to perform my analysis without it.

Given the current literature, I posit that the following variables will be negatively associated with well-being in my model: being a ward of the state as a child, being unemployed, and having a disability. While I expect the following variables to be positively correlated with well-being in my model: health, education, age, income, and social contact.

CHAPTER 2: DATA AND METHODOLOGY

I am estimating the marginal effect of having been a ward of the state as a child in Canada on well-being as an adult in this paper. The dataset I use in my analysis is the Statistics Canada (2016) 2014 General Social Survey (GSS) Cycle 28. The target population for this GSS data includes all persons 15 years of age and older in Canada excluding: residents of the Yukon, Northwest Territories, and Nunavut; and full-time residents of institutions.

The full data set is comprised of 33,089 respondents. However, I restrict the sample size to those aged 25 to 44 which yields a sample of 8,798 individuals. This is done to properly evaluate the impact of being a ward of the state on later life well-being as many variables such as: education, and income are all dependent on age. (Typically low income and education scores for those in the 18 to 24 year-old age group since many of those individuals will still be in school; I also expect that the impact of living in a group home diminishes with age.) I removed respondents who were not born in Canada as I am interested in the effects of having previously been a ward of the state on well-being for Canadians. The data were then cleaned to remove any cases where the respondent did not answer, did not know, or refused to answer, which reduces my sample from 6,743 to 4,799 individuals. By cleaning the data, the number of respondents who were previously wards of the state is reduced from 172 to 98. The largest reductions are from non-responses in: household income (48), education (7), employment status (6), and being a victim of sexual assault before the age of 15 (5).

The dependent variable is self-reported well-being. It was originally measured on a scale of 0 to 10 and is derived by simply asking respondents the following question, "Using a scale of 0 to 10 where 0 means "Very dissatisfied" and 10 means "Very satisfied", how do you feel about your life as a whole right now?" (Statistics Canada, 2016). The variable is recoded as its

distribution is top-heavy. Those with a score of 7 or less are recoded to 0, and values of 8 to 10 are recoded to equal 1. Thus, respondents with a score of 1 have a high well-being, and those with a score of 0 have a low/mid well-being score.

The key explanatory variable in my analysis is whether or not the respondent was a ward of the state as a child. The variable in the 2014 GSS is derived from the question, "As a child, were you ever under the legal responsibility of the government?" possible answers are yes and no. With the base category being "no." There is further elaboration from the interviewer who says, "In this case, the government assumes the rights and responsibilities of a parent for the purpose of the child's care, custody and control." Only 2.04% of respondents answered yes to this question in my data set. It should be noted that the availability of this kind of information is very unique for a Canadian survey.

Next, information on the age of the respondent is included in my model. I include an indicator variable for 35 to 44 year-old respondent's with 25 to 34 year-old respondent's as the base category. I also include a male indicator variable.

One main point Helliwell and Putnam (2004) discussed is the relationship between social capital and trust on well-being. Thus, I include a categorical variable on the respondent's sense of belonging in their local community as a proxy for social capital. This variable has four categories: very strong, somewhat strong (base category), somewhat weak, and very weak sense of belonging in their local community. I control for trust in my analysis by including a variable on trust in police. Confidence in police has three categories: a great deal of confidence, some confidence (base category), and not confident in police (Statistics Canada, 2016). The latter category was created by merging: not confident in police, and no confidence at all.

Using research from Helliwell and Barrington-Leigh (2008), I include education in my regressions. The variable containing information on the highest level of education completed is

recoded into a low education dummy variable. High school equivalence and less than high school are recoded to equal 1, while trade certificates/diploma, college, CEGEP/other non-university certificate/diploma, university certificate or diploma below the bachelor's level, bachelor's degree, and degree above bachelor's are recoded to equal 0 (base category).

Using information from Fleche et al. (2012), I include: income, health, relationship status, employment status, and disability status in my analysis. Following this research, I expect being divorced, unemployed, and having low income to have very large negative correlations with well-being in my model. Ehsan (2010) also finds health and unemployment to be major drivers of well-being.

The marital status variable is recoded. Widowed, separated, and divorced are merged into one category. This is done as the difference between separated and divorced is likely small, and since the sample size for widowed is small. Married and common-law are also grouped together (and are the base category). The reasoning behind this is that the differences between the two categories seem insignificant given their many similarities.

The household income before tax categories are originally given as: Less than $20,000; $20,000 to $39,999; $40,000 to $59,999; $60,000 to $79,999; $80,000 to $99,999; $100,000 to $119,999; $120,000 to $139,999; and $140,000 or more. A pseudo-continuous household equivalent income variable is created using these data to adjust for household size. Household equivalent income is calculated by taking the mid-point the respondent's income category and dividing by the square root of family size. Respondents who answered "Less than $20,000" had a midpoint of $10,000; while respondents who answered "140,000 or more" are assumed to have a midpoint of $150,000. It is not possible to know the exact midpoint of the latter category in my data set thus, I use $150,000 to keep the pattern of increases by $20,000 (mid-points are:

$10,000; $30,000; $50,000; … $150,000). Moreover, the variable for household size is top coded at "6 or more." Respondents who answered, "6 or more" for their household size are given a value of "6." These issues may limit the effectiveness of the study. However in terms of utility, there are decreasing returns to income (Helliwell and Putnam, 2004), and there is decreasing returns to family size in terms of equivalent income. Therefore, these issues should not significantly influence the model. I take the log of equivalent income to account for the fact that income is log normal.

Next, I create an employment status variable using information on the main activity of the respondent in the last 12 months. Working at a paid job or business is coded as being employed (base category); looking for paid work is coded as unemployed; while volunteering, being in school, household work, retired, illness, etc. are all classified as not being in the labour force. The disability status variable is a dummy variable which is coded as one if the person indicates they have a disability and zero if they respond no to this question (Statistics Canada, 2016). Self-reported health is measured in five categories: excellent, very good (base category), good, and fair/poor.

One control variable that is included in my analysis is mental health problems (from Barth, 2002). This is done to account for differences in mental disorders amongst those living in foster care and group homes. Medication use for depression and to calm down are included in my regression to control for differences in mental disorders, and to separate the relationship between previously being a ward of the state and mental disorders on well-being.

Another variable I use to control for differences in well-being is a dummy variable concerning being a victim of sexual assault before the age of 15 (never been a victim is the base category). This is done as I posit that an extremely stressful childhood event would significantly impact well-being as an adult. Similarly, drinking is also controlled for as I expect that those

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who binge-drink have lower levels of well-being. A binge-drinking dummy variable is created by recoding drinking every day and drinking 4-6 times a week to equal 1, and drinking less than 4 times a week equals 0 (base category).

Next, I include a categorical variable concerning feeling safe at home alone at night as I expect increased feelings of safety to be significantly positively associated with well-being. The categories are: worried, not worried at all (base category), and never alone. With "worried" being created by combining: very worried and somewhat worried. I also include a dummy that asks the respondent if they live in a welcoming community for similar reasons (Yes is the base category).

Furthermore, I also posit that being a victim of discrimination in the last five years would negatively impact well-being. Thus, I include a dummy to control for this in my analysis. A visible minority dummy variable is also included for similar reasons. Not being a victim of discrimination and not being a visible minority are the base categories for the variables. Table 1 shows the summary statistics of all the variables discussed sorted by whether or not the respondent was a ward of the state as a child:

TABLE 1 – SUMMARY STATISTICS

Variable	Not a Ward		Ward of the State	
	mean	sd	mean	sd
High Well-being	0.80	0.40	0.70	0.46
Male	0.50	0.50	0.40	0.49
25 -34 years old	0.51	0.50	0.45	0.50
Married/Common-Law	0.74	0.44	0.73	0.45
Widowed/Separated/Divorced	0.04	0.19	0.04	0.21
Single	0.22	0.42	0.23	0.42
Employed	0.84	0.37	0.77	0.42
Unemployed	0.01	0.12	0.01	0.10
Not in Labour Force	0.14	0.35	0.22	0.42
Low Education[1]	0.22	0.42	0.41	0.49

Self-reported health:				
Excellent	0.34	0.47	0.31	0.47
Very Good	0.38	0.49	0.35	0.48
Good	0.23	0.42	0.29	0.46
Fair/Poor	0.05	0.21	0.05	0.22
Has Disability	0.17	0.37	0.29	0.46
Sense of Belonging - Local Community:				
Very Strong	0.21	0.41	0.18	0.39
Somewhat Strong	0.53	0.50	0.46	0.50
Somewhat Weak	0.21	0.41	0.20	0.41
Very Weak	0.05	0.22	0.15	0.36
Equivalent Household Income[1]	59,226	24,489	44,707	24,145
Victim of sexual assault before the age of 15	0.07	0.26	0.24	0.43
A Great Deal of Confidence in Police	0.41	0.49	0.49	0.50
Some Confidence in Police	0.52	0.50	0.35	0.48
Not Confident in Police	0.08	0.26	0.15	0.36
Victim of Discrimination in the last 5 years	0.12	0.33	0.13	0.34
Binge Drinks	0.12	0.32	0.05	0.23
Takes medication to calm down	0.06	0.24	0.04	0.20
Takes medication for depression	0.06	0.25	0.08	0.28
Alone at home at night:				
Worried	0.12	0.32	0.11	0.31
Not worried at all	0.85	0.36	0.79	0.41
Never Alone	0.04	0.18	0.10	0.30
Does not Live in a Welcoming Community	0.06	0.23	0.15	0.36
Visible Minority	0.05	0.21	0.04	0.20
Observations	4701		98	

Notes: Author's calculation using: Statistics Canada (2016). General Social Survey, Cycle 28, 2014.
[1] Low Education is defined as less than high school equivalence

Only 98 of the 4,799 respondents in my sample have previously been a ward of the state. Unsurprisingly, this means that only a small proportion of the Canadian population were wards of the state as a child. Table 1 shows that the mean likelihood of high well-being is about 10 percentage points lower when the respondent was a ward of the state as a child compared to

respondents who were not wards of the state. I performed a significance test on the likelihood of having a high well-being by being a ward of the state and found that the difference between being/not being to be significant at the 1% level. Thus, this should be analyzed to uncover the relationship between the two.

There is also lower education, health, income, levels of employment, likelihood of living in a welcoming community, and sense of belonging for those who have previously been a ward of the state in my sample. A greater proportion of respondents who were under government care as a child had a disability; and they were also more likely to be a victim of sexual assault before the age of 15. This may be a result of the gender difference as more women were previously wards of the state which may explain the discrepancies in sexual assault and labour force participation. However, the sample size is too small to warrant a separate analysis for men and women. These differences in the means will likely lead to significant differences in terms of well-being. Figures 1 to 4 highlight this:

Figure 1 – SELF-REPORTED HEALTH PREVIOUSLY (MEANS) BY BEING A WARD OF THE STATE

Self Reported Health by Being a Ward of the State

Percent of Respondents by Being a Ward of the State
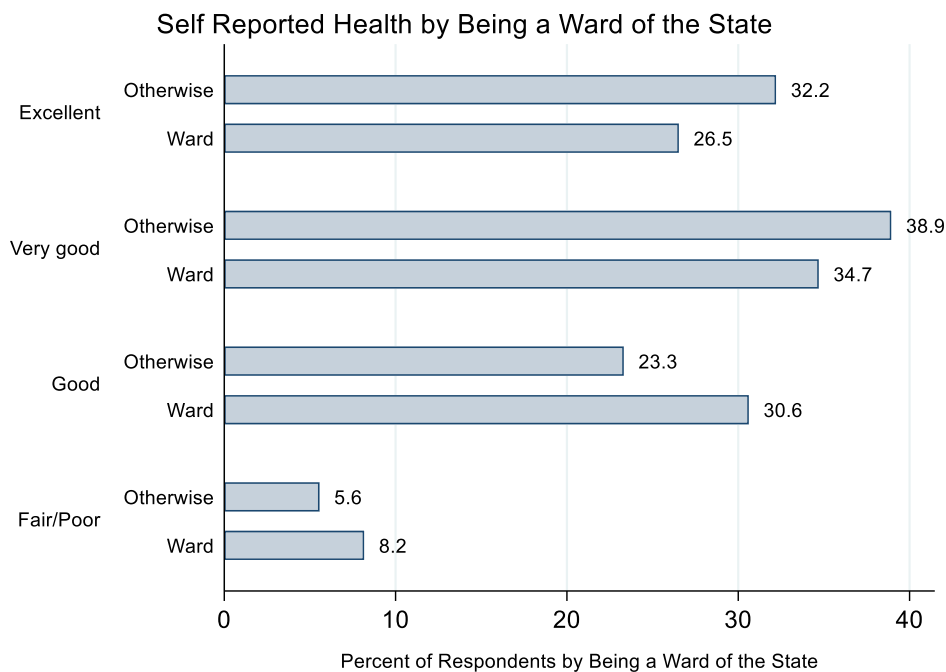
	Excellent	Very Good	Good	Fair/Poor
Statistically different:	No	No	Yes (5% level)	No

Author's calculation using: Statistics Canada (2016). General Social Survey, Cycle 28, 2014.

Figure 2 – NATURAL LOG OF EQUIVALENT HOUSEHOLD INCOME BEFORE TAX BY PREVIOUSLY BEING A WARD OF THE STATE:
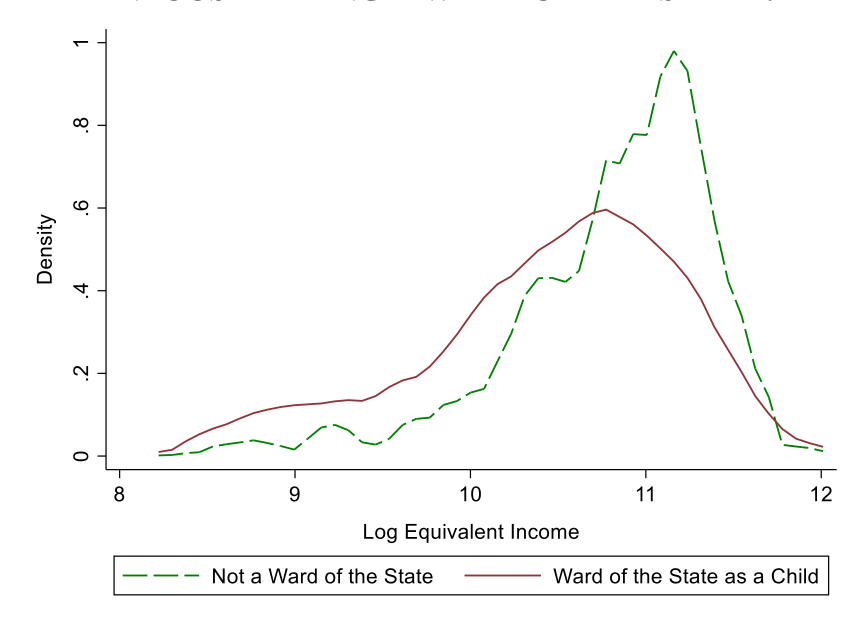
Author's calculation using: Statistics Canada (2016). General Social Survey, Cycle 28, 2014.

Figure 3 – EMPLOYMENT STATUS (MEANS) BY PREVIOUSLY BEING A WARD OF THE STATE:
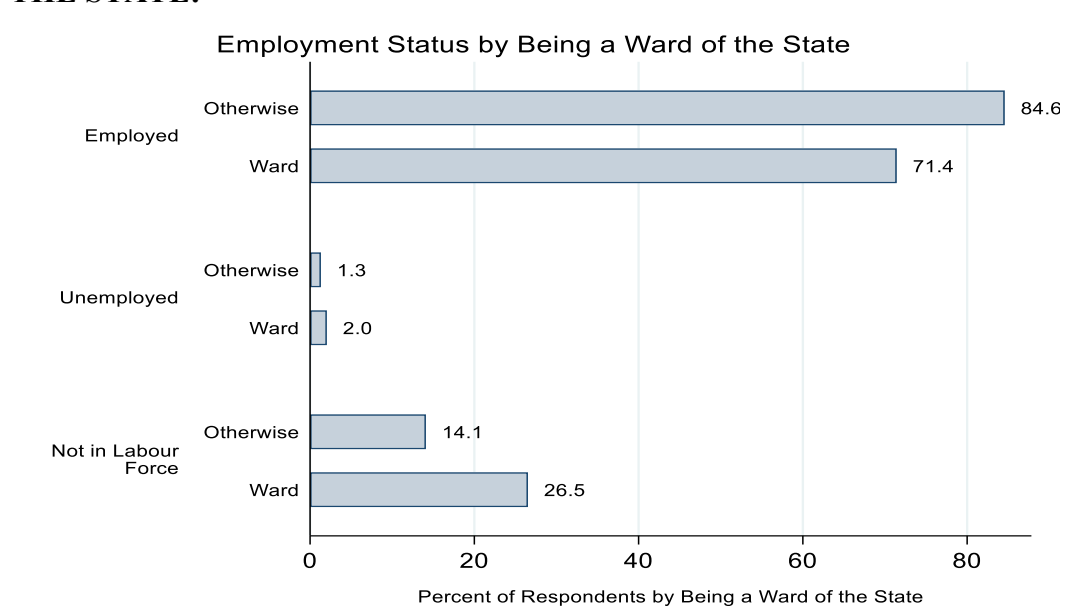
	Employed	Unemployed	Not in LF
Statistically different:	Yes (1% level)	No	Yes (1% level)

Author's calculation using: Statistics Canada (2016). General Social Survey, Cycle 28, 2014

Figure 4 – SENSE OF BELONGING IN LOCAL COMMUNITY (MEANS) BY PREVIOUSLY BEING A WARD OF THE STATE:

Sense of Belonging by Being a Ward of the State
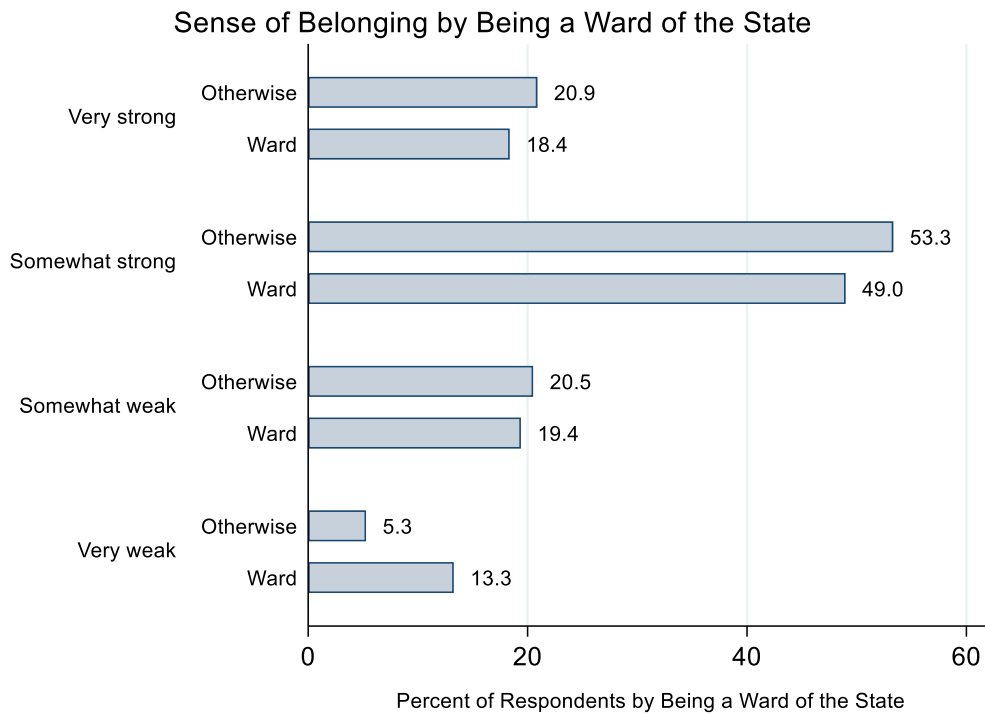
	Very Strong	Somewhat Strong	Somewhat Weak	Very Weak
Statistically different:	No	No	No	Yes (1% level)

Author's calculation using: Statistics Canada (2016). General Social Survey, Cycle 28, 2014

Thus, despite the low sample size for those who were wards of the state as children; there appears to be an association between being a ward of the state on: health, income, employment status, and sense of belonging in the local community.

Four probit regressions are run using different sets of the independent variables (with high well-being as the dependent variable). The first "Basic" model includes: previously being a ward of the state, sex, and age group. Next; marital status, employment status, low education,

income, and visible minority status are added to the Basic model to create the "Socio-economic" model. This is done as all the chosen variables act as controls and are demographic variables that do not directly measure happiness. In the third regression, variables concerning: social capital, low education, marital status, income, employment status, disability status, and health were all added to the Basic regression. Most of these variables come from the findings of Helliwell and Putnam (2004), and Helliwell and Barrington-Leigh (2008), as such it is called the "Helliwell" regression. Lastly, my fourth regression model includes all of the control variables such as: sexual assault under the age of 15 dummy, confidence in police, victim of discrimination, binge-drinking dummy, dummies concerning medication for depression and to calm down, whether the respondent feels safe at home alone at night, a welcoming community dummy, and the minority status of the respondent. Also, I use the person survey weights provided in the 2014 General Social Survey in my regressions.

CHAPTER 3: RESULTS

The marginal effects from the four probit regressions can be found in Table 2. First, the results are presented with only the basic controls. Being a ward of the state as a child is associated with a 10.6 percentage point lower probability of having high well-being and is statistically significant at the 10% level in the Basic model. However, its magnitude and statistical significance decreases when additional controls are added. Thus, in and of itself having been a ward of the state does not appear to be, on average, associated with a lower likelihood of high adult well-being (given the caveat of large standard errors from low sample size). However, to the extent that having been a ward of the state impacts many of the variables that are important for life satisfaction, there is likely an indirect effect. There does not appear to be much difference in terms of well-being between males and females or between the younger and older age group included in the analysis.

TABLE 2 – MARGINAL EFFECTS FROM PROBIT REGRESSIONS ON THE LIKELIHOOD OF HIGH WELL-BEING

	(1) Basic	(2) Socio-economic	(3) Helliwell	(4) Detailed
Respondent was a Ward of the State	-0.106*	-0.068	-.0430	-.0426
	[.062]	[0.061]	[0.055]	[0.056]
Male	0.012	0.018	.007	-.0170
	[0.016]	[0.016]	[0.015]	[0.016]
Age (25 to 34 years old):				
35 to 44 years old	0.020	-0.006	.003	.003
	[0.016]	[0.015]	[0.015]	[0.015]
Marital Status (Married/Common-Law):				
Separated/Divorced/Widowed		-0.126***	-.112***	-.114***
		[0.041]	[0.035]	[0.037]
Single		-.150***	-.121***	-.112***
		[0.023]	[0.020]	[0.020]
Employment Status (Employed):				
Unemployed		-.168*	-.169**	-.166**

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	[0.086]	[0.086]	[0.083]
Not in Labour Force	-0.002	.002	.008
	[0.023]	[0.021]	[0.020]
Low Education	-.053**	-.0194	-.018
	[0.021]	[0.019]	[0.018]
Self-reported Health (Very Good):			
Excellent		.053***	.047***
		[0.016]	[0.016]
Good		-.144***	-.126***
		[0.022]	[0.021]
Fair/Poor		-.217***	-.203***
		[0.043]	[0.042]
Disabled		-.140***	-.093***
		[0.023]	[0.022]
Sense of belonging - local community (Somewhat strong):			
Very strong		.072***	.066***
		[0.016]	[0.016]
Somewhat weak		-.056***	-.049**
		[0.019]	[0.019]
Very weak		-.096***	-.080**
		[0.037]	[0.039]
Log Equivalent Household Income	.058***	.037***	.035***
	[0.013]	[0.013]	[0.013]
Victim of sexual assault before the age of 15 (Never):			
Yes, at least once			-.077***
			[0.029]
Confidence in Police (Some confidence):			
A great deal of confidence			.051***
			[0.015]
Not confident			.027
			[0.025]
Victim of discrimination - last 5 years (No):			
Yes			-.0324
			[0.023]
Binge Drinks (No)			
Yes			-.013
			[0.022]
Respondent takes medication to calm down			
			-.046
			[0.033]

Respondent takes medication for depression				-.116
				[0.037]
Feeling of safety - Alone at home at night (Not worried):				
Worried				-.049**
				[0.024]
Never Alone				-.020
				[0.037]
Respondent lives in a welcoming community (Yes):				
No				-.025
				[0.030]
Visible Minority		-0.025		-.0278
		[0.050]		[0.042]
Observations	4799	4799	4799	4799
Pseudo R-squared	0.0019	0.0477	0.1559	0.1753

Notes: Source: Author's calculation using GSS 2014 cycle 28. * p<0.10, ** p<0.05, *** p<0.01.
Omitted categories are in parenthesis. Robust standard errors are in brackets.

Column 2 includes additional demographic variables. In column 3, I add additional controls used in Helliwell Putnam (2004) along with Helliwell and Barrington-Leigh (2008) and in column 4, we add additional variables. Being separated/divorced/widowed is associated with a 12.6 percentage point decrease in the likelihood of having high well-being in the Socio-economic model, a 11.2 percentage point decrease in the Helliwell regression, and a 11.4 percentage point decrease with all the controls included relative to being married or common-law. Being single relative to being married or common-law is correlated with a 15.0 percentage point decrease in the Socio-economic model, a 12.1 percentage point decline in the Helliwell regression, and an 11.2 percentage point decrease in the detailed regression. Thus, there is a clear negative association between being single and being separated/divorced/widowed and having high self-reported well-being (all at the 1% level). These findings are consistent with Fleche et al. (2012).

Employment status has a very large effect on the likelihood of having high well-being.

Being unemployed is associated with a 16.8 percentage point decrease in the likelihood of having high well-being in the second regression, a 16.9 decline in the third, and a 16.6 percentage point decrease in the fourth regression relative to being employed which is significant at the 5% level. This is consistent with previous research from Fleche et al. (2012); Helliwell and Putnam (2004); and Ehsan (2010). Also, being employed and out of the labour force are not significantly different in my model.

Low education is associated with a 5.3 percentage point decrease in the likelihood of having high well-being in the Socio-economic regression significant at the 5% level. Interestingly, low education is not associated with high well-being at conventional statistically significant levels in the third and fourth regressions. This is consistent with research from Helliwell and Barrington-Leigh (2008). It is likely that education indirectly increases well-being in terms of its relationship with income and health. Table 3 and Appendix F show that education is strongly positively associated with income and self-reported physical health (both are statistically significant). However, reverse causality may be present as those with poor health may miss time at school and fall behind. Both low education and being in government care as a child are included in these regressions to isolate the impact of education. There is also a significant relationship between being a ward of the state as a child and income. Education increasing both health and income is consistent with Marmot (2006) who found that there is a socioeconomic gradient in health, and Mincer (1958) who found that education increases income.

TABLE 3 - OLS REGRESSION OF THE NATURAL LOG OF EQUIVALENT HOUSEHOLD INCOME ON LOW EDUCATION AND HAVING PREVIOUSLY BEEN A WARD OF THE STATE

	Basic (1)	Control (2)
Previously a Ward of the State	-0.293***	-0.286***
Low Education	-0.266***	-0.274***

Male		0.0726***
Age Group (25 - 34) 35 - 44		0.0147
Constant	10.93***	10.89***
Observations	4,799	4799
R-squared	0.0491	0.0537

Notes: Source: Author's calculation using GSS 2014 cycle 28. * p<0.10, ** p<0.05, *** p<0.01. Omitted categories are in parenthesis. Robust standard errors are in brackets.

Self-reported health has a large positive correlation with high well-being in both regressions it is included in. However, there is certainly some overlap between health and well-being in terms of what they are measuring. Another variable that is positively associated with high well-being is sense of belonging in the local community (used as a proxy for social capital). These coefficients are significant at the 1% level. It is found that having a disability is correlated with a 14.0 percentage point lower likelihood of high well-being in the Helliwell regression, and 9.3 percentage point lower likelihood in the detailed regression. These findings are consistent with research from Fleche et al. (2012); Helliwell and Putnam (2004); and Ehsan (2010).

Furthermore, it was found that an increase in equivalent household income of 1% is associated with a 5.8 percentage point higher likelihood of high self-reported well-being in the Socio-economic regression, 3.7 percentage points higher in the Helliwell regression, and a 3.5 percentage point higher likelihood in the regression with the controls; with all results being statistically significant at the 1% level. Being a victim of sexual assault before the age of 15 is associated with a 7.7 percentage point lower likelihood of high well-being at the 1% level.

Table 1 along with Figure 2 highlight that people who have previously been a ward of the state had lower income and increased likelihood of being a victim of sexual abuse before the age of 15.

Appendices A to E confirm correlations between being a ward of the state on the previously mentioned variables. All the variables have very strong correlations except for being employed, and being out of the labour force. This is very significant as the results in Table 2 has shown that sense of belonging, employment status, disability status, income, health, and low education are both drivers of high well-being. The impact of low education on the likelihood of having high well-being is indirect through education's relationship with health and income. The regressions in the appendices use the person survey weights, and use either ordered probit, or probit regression techniques.

Some of the variables that are potentially endogenous were analyzed using regression techniques to gain further insight into the indirect effects of being a ward of the state as a child on adult well-being. Outcome variables in these regressions include: Disability status, whether the respondent was a victim of sexual assault before the age of 15, the medication usage of the respondent (for depression and to calm down), and the respondent's sense of belonging in the local community. Those labelled (1) are "Basic" regressions and those labelled (2) are "Helliwell" regressions.

TABLE 4 – MARGINAL EFFECTS OF PROBIT REGRESSIONS OF ENDOGENOUS VARIABLES

	Disability		Sexual Assault		Medication to Calm Down		Medication for Depression	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Respondent was a ward of the state	0.112**	0.060	0.137***	0.111**	-0.021	-0.031**	0.013	-0.004
	[.057]	[.048]	[.048]	[.044]	[.018]	[.013]	[.031]	[.023]
Male	-0.07***	-0.055***	-0.096***	-0.091***	-0.047***	-0.034***	-0.056***	-0.040***
	[.014]	[.013]	[.009]	[.010]	[.009]	[.009]	[.009]	[.009]
Age (25 to 34 years old):								
35 to 44 years old	0.019	0 .008	0.040***	0.042***	-.0003	-0.004	0.008	0.006
	[.014]	[.013]	[.009]	[.009]	[.009]	[.008]	[.009]	[.008]
Marital Status (Married/Common-Law):								
Separated/Divorced/Widowed		0.065		0.006		0.004		0.025
		[.040]		[.016]		[.017]		[.019]
Single		-.016		0.013		0.026**		0.026**
		[.015]		[.014]		[.012]		[.012]
Employment Status (Employed):								
Unemployed		0.033		0.012		-0.009		-0.017
		[.054]		[.031]		[.021]		[.018]
Not in Labour Force		0.054***		0.008		0.004		0.024*
		[.019]		[.014]		[.012]		[.013]
Low Education		0.043**		0.010		-0.006		-0.004
		[.017]		[.012]		[.009]		[.010]
Self-reported Health (Very Good):								
Excellent		-0.088***		-0.010		-0.010		-0.033***
		[.013]		[.011]		[.009]		[.008]
Good		0.121***		0.009		0.040***		0.041***
		[.020]		[.012]		[.012]		[.013]
Fair/Poor		0.480***		-0.029**		0.054**		0.030
		[.042]		[.015]		[.023]		[.021]
Disabled		N/A		0.073***		0.128***		0.136***
		N/A		[.015]		[.018]		[.017]
Sense of belonging - local community (Somewhat strong):								
Very strong		0.008		0.008		0.001		-0.005
		[.016]		[.011]		[.0111]		[.011]
Somewhat weak		0.025		0.028**		-0.007		-0.012
		[.017]		[.014]		[.011]		[.010]
Very weak		0.086**		0.011		-0.022		-0.014

		[.034]		[.017]		[.015]		[.015]
Log Equivalent		-0.039***		-0.009		-0.00004		0.005
Household Income		[.012]		[.008]		[.007]		[.007]
Observations	4,799	4,799	4,799	4,799	4,799	4,799	4,799	4,799
Pseudo R-squared	0.0117	0.1557	0.0907	0.1255	0.0217	0.1576	0.0286	0.1888

Source: Author's calculation using GSS 2014 cycle 28. * p<0.10, ** p<0.05, *** p<0.01. Omitted Categories are in Brackets. Standard Errors are in Square Brackets

TABLE 5 – MARGINAL EFFECTS OF ORDERED PROBIT REGRESSIONS ON SENSE OF BELONGING

	Basic	Control
Ward of the State		
Very strong	-0.078**	-0.080**
Somewhat Strong	-0.033	-0.034
Somewhat Weak	0.070**	0.071**
Very Weak	0.041	0.043*
Male		
Very strong	-0.032***	-0.029**
Somewhat Strong	-0.005**	-0.004**
Somewhat Weak	0.025***	0.022**
Very Weak	0.012***	0.010**
Age (25 to 34 years old):		
35 to 44 years old		
Very strong	0.067***	0.065***
Somewhat Strong	0.009***	0.009***
Somewhat Weak	-0.053***	-.050***
Very Weak	-0.024***	-.023***
Marital Status (Married/Common-Law):		
Separated/Divorced/Widowed		
Very strong		-0.037
Somewhat Strong		-0.006
Somewhat Weak		0.029
Very Weak		0.014
Single		
Very strong		-0.051***
Somewhat Strong		-0.011**
Somewhat Weak		0.042***
Very Weak		0.021***
Employment Status (Employed):		
Unemployed		
Very strong		0.058
Somewhat Strong		0.0003
Somewhat Weak		-0.041
Very Weak		-0.017
Not in Labour Force		
Very strong		0.010
Somewhat Strong		0.001
Somewhat Weak		-0.007
Very Weak		-0.003

Low Education		
Very strong		0.001
Somewhat Strong		0.0002
Somewhat Weak		-0.001
Very Weak		-0.0005
Self-reported Health (Very Good):		
Excellent		
Very strong		0.039***
Somewhat Strong		0.002
Somewhat Weak		-0.029***
Very Weak		-0.012***
Good		
Very strong		-0.027*
Somewhat Strong		-0.007*
Somewhat Weak		0.023*
Very Weak		0.011*
Fair/Poor		
Very strong		-0.066***
Somewhat Strong		-0.026**
Somewhat Weak		0.059***
Very Weak		0.034**
Disabled		
Very strong		-0.032**
Somewhat Strong		-0.007
Somewhat Weak		0.026*
Very Weak		0.013*
Log Equivalent Household Income		
Very strong		-0.028***
Somewhat Strong		-0.004**
Somewhat Weak		0.021***
Very Weak		0.010**
Observations	4,799	4,799
Pseudo R-squared	0.0068	0.0160

Source: Author's calculation GSS 2014 cycle 28. * p<0.10, ** p<0.05, *** p<0.01. Omitted Categories are in Brackets. Standard Errors are in Square Brackets

The results from Tables 4 and 5 again indicate that being a ward of the state as a child

indirectly impacts adult well-being through its relationship with other key correlates. In

particular, its relationship with being a victim of sexual assault is troubling. This may imply that children are sexually abused while in care.

CHAPTER 4: DISCUSSION

The purpose of this paper was to evaluate the relationship between having lived as a child in Canadian group homes and/or foster care on individual adult well-being. There does appear to be an indirect relationship between previously being a ward of the state and individual adult well-being. Differences in the means for income and being a victim of sexual assault before the age of 15 and income are the main sources of the lower probability of reporting high well-being between adults who were previously a ward of the state as a child and those who were not. Both income and being a victim of sexual abuse are strongly correlated with high well-being in my model. It is worth mentioning that multi-collinearity could be present between being a ward of the state as a child and being a victim of sexual assault before the age of 15. This may occur as a child could be placed in care due being a victim of said abuse, but they may also be sexually assaulted while in care. Increasing access to mental health services and providing protection for those who are victims of sexual abuse before the age of 15 may mitigate the negative effects on well-being.

Also, direct income support for those who have previously been a ward of the state may increase the likelihood of having high well-being. This may occur as being a ward of the state significantly impacts income after controlling for low education. Increased income could also improve health as individuals may be able to "purchase" improved health. However, those who are wards of the state because their parents could not cope with their severe health issues will not benefit from marginal benefits to their health.

In addition to easing the burden on those who were victims of sexual assault and providing direct income support; policies aimed to increase the well-being of those in the care of the government should consider the gains that increased education provides. Higher education levels may provide a higher income and even reduce the likelihood of unemployment. Both

education and employment may also provide an improved sense of belonging through increased motivation and purpose. Investments in scholarships and/or awareness programs for post-secondary education can have long-lasting effects on the well-being of those who have previously been a ward of the state. It should be mentioned that the Child Welfare Political Action Committee has already set up scholarships in 18 post-secondary schools in Canada (Leger, 2021). Moreover, increasing education may also improve the likelihood of being employed, and sense of belonging in the local community. Both variables significantly impact high self-reported well-being in my model.

Thus, children who have previously been in government care have not had an easy life as outlined by the significant differences in means in Table 1. The differences in the lives between those who have and have not been in government care as a child has persisting indirect effects on adult well-being. Mitigating the differences for equivalent household income for those previously being a ward of the state as a child and reducing sexual assaults should be the main consideration for policymakers. There are also benefits for increasing education for those who have previously been a ward of the state as a child through indirect increases in income and employment. There are certainly many barriers to overcome for those in care, however, it is crucial to find ways to overcome these barriers.

BIBLIOGRAPHY

Barth, R. P. (2002). *Institutions vs. foster homes: the empirical base for the second century of debate*. Chapel Hill: Annie E. Casey Foundation, University of North Carolina, School of Social Work, Jordan Institute for Families http://ocfcpacourts.us/wp-content/uploads/2020/06/Institutions_vs_Foster_Homes_000996.pdf

Canadian Child Welfare Research Portal. (2021). *Out-Of-Home Care*. https://cwrp.ca/out-home-care#:~:text=Out%2Dof%2Dhome%20care%20includes,Residential%20Care

Desjardins, Julie; Lafortune, Denis; and Cyr, Francine. (2017). *Psychopharmacotherapy in children placed in group homes and residential centres in Canada: Psychopathological portrait of children receiving psychotropic medications and educators' perception of treatment.* Children and Youth Services Review, 197-206. https://doi.org/10.1016/j.childyouth.2017.08.001

Ehsan, Latif. (2010). *Crisis, unemployment and psychological well-being in Canada.* Journal of Policy Modeling. 520-530. https://doi.org/10.1016/j.jpolmod.2010.05.010.

Fleche, Sarah; Smith, Conal; and Sorsa, Piritta. (Jan. 31, 2012). *Exploring Determinants of Subjective Well-being in OECD Countries: Evidence from the World Value Survey.* OECD. https://doi-org.ezproxy.library.dal.ca/10.1787/5k9ffc6p1rvb-en

Girons, Marie; Trocmé, Nico; Esposito, Tonino and Fallon, Barbara. (November 2020). *Children in Out-of-Home Care in Canada in 2019*. Canadian Child Welfare Research Portal. https://cwrp.ca/sites/default/files/publications/Children%20in%20out-of-home%20care%20in%20Canada%20in%202019_0.pdf

Helliwell, John. (March 2006). *Well-Being, Social Capital and Public Policy: What's New?*. The Economic Journal. 34–45. https://doiorg.ezproxy.library.dal.ca/10.1111/j.1468-0297.2006.01074.x

Helliwell, John and Barrington-Leigh, C.P. (2008). *Empathy and Emulation: Life Satisfaction and the Urban Geography of Comparison Groups*. NBER. 729-753. DOI 10.3386/w14593

Helliwell, John, Layard, Richard and Sachs, Jeffrey. (2018). *World Happiness Report 2012. Chapter 1 and World Happiness Report 2018 Chapter 1.*

Helliwell, John and Putnam, Robert. (2004). *The Social Context of Well-Being*. Philosophical Transactions: Biological Sciences, 1435-1446. http://www.jstor.org/stable/4142146

Leger, Isabelle. (April 7th, 2021). *NBCC offers free tuition for people who spent time in foster care*. CBC. https://www.cbc.ca/news/canada/new-brunswick/nbcc-bursary-program-foster-care-1.5977275

Marmot, Michael. (2006). *Health in an unequal world*. Harveian Oration. The Lancet 2081-2094 https://www.thelancet.com/journals/lancet/article/PIIS0140673606697468/fulltext

Mincer, Jacob (1958). *Investment in Human Capital and Personal Income Distribution*. Journal of Political Economy. 281–302. doi:10.1086/258055

Osei, G.K., Gorey, K.M. (2020). *Preventive Impacts of Group Homes in Higher Income Neighborhoods: Retrospective Cohort of Youths in Ontario Group Home Care, 2012 to 2016*. Child Adolesc Soc Work J (2020). https://doi.org/10.1007/s10560-020-00691-3

Ryan, Joseph; Marshall, Jane Marie; Herz, Denise; and Hernandez, Pedro M. (2008). *Juvenile delinquency in child welfare: Investigating group home effects*. Children and Youth Services Review, 1088-1099. https://doi.org/10.1016/j.childyouth.2008.02.004.

Stancliffe, Roger J; and Keane, Sian. (2000). *Outcomes and costs of community living: A matched comparison of group homes and semi-independent living*. Journal of Intellectual & Developmental Disability, 281-305. DOI: 10.1080/13668250020019584

Statistics Canada. (July 18th, 2017). *Families, Households and Marital Status Highlight Tables:*

Foster children by age groups, both sexes, 2016 counts, Canada, provinces and

   territories, 2016 Census – 100% Data. https://www12.statcan.gc.ca/census-

   recensement/2016/dp-pd/hlt-   fst/fam/Table.cfm?Lang=E&T=51&Geo=00

Statistics Canada (September 14, 2016) *Statistics Canada General Social Survey, Cycle 28,*

   2014 [Canada]: Victimization. [data set]. Accessed from: https://sda-artsci-utoronto-

   ca.ezproxy.library.dal.ca/cgi-bin/sda/hsda?harcsda4+gss28_EM

van der Heide, Iris: Wang, Jen; Droomers, Mariël; Spreeuwenberg, Peter; Rademakers, Jany;

   and Uiters, Ellen . (Oct. 4, 2013). *The Relationship Between Health, Education, and*

   Health Literacy: Results from the Dutch Adult Literacy and Life Skills Survey. Journal of

   Health Communication. doi: 10.1080/10810730.2013.825668

Warburton, W., Warburton, R., Sweetman, A., and Hertzman, C. (2014*). The Impact of Placing*

   Adolescent Males into Foster Care on Education, Income Assistance, and Convictions.

   The Canadian Journal of Economics, 35-69. http://www.jstor.org/stable/42705938

APPENDICES

Appendix A – Education Regression

MARGINAL EFFECTS OF PROBIT REGRESSION OF LOW EDUCATION ON HAVING PREVIOUSLY BEEN A WARD OF THE STATE:

Previously a Ward of the State	.234***
	[0.051]
Observations	4,799
Pseudo R-squared	0.0049

Source: Author's calculation GSS 2014 cycle 28. * p<0.10, ** p<0.05, *** p<0.01. Omitted Categories are in Brackets. Standard Errors are in Square Brackets

Appendix B - Employment Status Regression

MARGINAL EFFECTS OF ORDERED PROBIT REGRESSION OF EMPLOYMENT
STATUS ON HAVING PREVIOUSLY BEEN A WARD OF THE STATE:

Respondent was a ward of the state	
Employed	-.075
	[.047]
Unemployed	.004*
	[.002]
Not in Labour Force	.071
	[.044]
Observations	4,799
Pseudo R-squared	0.9990

Source: Author's calculation GSS 2014 cycle 28. * p<0.10, ** p<0.05, *** p<0.01. Omitted Categories are in Brackets. Standard Errors are in Square Brackets

Appendix C – Sense of Belonging Regression

MARGINAL EFFECTS OF ORDERED PROBIT REGRESSION OF SENSE OF BELONGING ON HAVING PREVIOUSLY BEEN A WARD OF THE STATE:

Previously a Ward of the State	
Very strong	-.073***
	[.026]
Somewhat Strong	-.029
	[.019]
Somewhat Weak	.064**
	[.026]
Very Weak	.037**
	[.019]
Observations	4,799
Pseudo R-squared	0.9990

Source: Author's calculation GSS 2014 cycle 28. * p<0.10, ** p<0.05, *** p<0.01. Omitted Categories are in Brackets. Standard Errors are in Square Brackets

Appendix D – Disability Status Regression

MARGINAL EFFECTS OF PROBIT REGRESSION OF DISABILITY STATUS ON HAVING PREVIOUSLY BEEN A WARD OF THE STATE:

Previously a Ward of the State	
Has Disability (Does not Have Disability)	.146***
	[.048]
Observations	4,799
Pseudo R-squared	0.0026

Source: Author's calculation GSS 2014 cycle 28. * p<0.10, ** p<0.05, *** p<0.01. Omitted Categories are in Brackets. Standard Errors are in Square Brackets

Appendix E – Sexual Assault Before 15 Probit Regression

MARGINAL EFFECTS OF PROBIT REGRESSION OF SEXUAL ASSAULT BEFORE AGE

OF 15 ON HAVING PREVIOUSLY BEEN A WARD OF THE STATE:

Previously a Ward of the State	
Victim of Sexual Assault	.181***
(Not a Victim)	[.044]
Observations	4,799
Pseudo R-squared	0.0110

Source: Author's calculation GSS 2014 cycle 28. * p<0.10, ** p<0.05, *** p<0.01. Omitted Categories are in Brackets. Standard Errors are in Square Brackets

Appendix F – Self-Reported Health Regression

MARGINAL EFFECTS OF ORDERED PROBIT REGRESSION OF SELF-REPORTED HEALTH ON LOW EDUCATION AND HAVING PREVIOUSLY BEEN A WARD OF THE STATE

Low Education	
Excellent	-.109***
	[.012]
Very Good	.0001
	[.002]
Good	.074***
	[.009]
Fair/Poor	.034***
	[.005]
Previously a Ward of the State	
Excellent	-.020
	[.043]
Very Good	.001
	[.001]
Good	.013
	[.028]
Fair/Poor	.006
	[.013]
Observations	4,799
Pseudo R-squared	0.9990

Source: Author's calculation GSS 2014 cycle 28. * p<0.10, ** p<0.05, *** p<0.01. Omitted Categories are in Brackets. Standard Errors are in Square Brackets

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