

THE EDUCATIONAL OUTCOMES OF CHILDREN IN CARE IN MANITOBA



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EXECUTIVE SUMMARY

Objectives of this Report

This report presents descriptive and statistical analyses regarding children placed in the care of Manitoba Child and Family Services (CFS). Referred to as “children in care” in this report, these children have been removed from the care of their original families because of a situation where authorities have deemed their family unable or unfit to look after them properly. Children can come into care for a variety of reasons including abuse, neglect, illness, death of a parent, addiction issues or conflict in their family, disability, or emotional problems.

This report was conducted by the Manitoba Centre for Health Policy (MCHP) at the request of Manitoba Health, Healthy Living and Seniors and the Healthy Child Committee of Cabinet (HCCC). MCHP was asked to “identify factors that contribute to the educational success of children in care in Manitoba” and to make recommendations regarding what schools, school divisions, and the provincial Department of Education and Advanced Learning could do to contribute further to the educational success of children in care.

In order to fulfill this request, MCHP identified five main objectives for this report:

1. Describe the characteristics of children in care in Manitoba.
2. Describe the educational outcomes of children in care in Manitoba.
3. Identify factors that are associated with positive (and negative) educational outcomes for children in care in Manitoba.
4. Provide information on programs that improve educational outcomes for children in care.
5. Provide recommendations on how educational outcomes for children in care can be improved in Manitoba.

Objectives 1 to 3 were addressed using information in the Population Health Research Data Repository (the Repository), housed at MCHP. Because the data at MCHP do not include information about specific programs operating in classrooms, schools, or school divisions, to address objective 4 we searched the literature to find information on programs that have been successful at improving the educational outcomes for children in care.

Background on Children in Care

Compared to other countries, Canada has a very high rate of children in care. Among Canadian provinces and territories, Manitoba has among the highest rates of children in care—over 3% in 2011 (Brownell, 2013). The number of children in care in Manitoba increased substantially over the past decade; according to the Manitoba Family Services Annual Report, there were 10,293 Manitoba children in care on March 31, 2014 (Manitoba Family Services, 2014a). There is an over-representation of Indigenous children in care (First Nations, Metis, Inuit); they compose approximately 26% of the child population in Manitoba, yet they accounted for close to 90% of children in care on March 31, 2014 (Manitoba Family Services, 2014a). This over-representation reflects historical social and health inequities and injustices experienced by Indigenous communities.

The over-representation of Indigenous children in care has its roots in the historical disadvantages experienced by Indigenous peoples, including the negative effects of colonization and the inter-generational impact of the residential school system which separated children from their families and subjected many children to maltreatment. The long-term impact of these historical experiences are also at the root of many of the difficulties experienced by First Nations and Metis families today, including suicide, family violence, substance abuse, mental health issues, and parenting challenges (Ball, 2008; Blackstock, Trocmé, & Bennett, 2004; Sinha, Trocmé, Blackstock, MacLaurin, & Fallon, 2011; Tilbury & Thoburn, 2011; Wright, 2013); these are the very challenges that contribute to children going into care.

CHAPTER 1

Objectives of this Report

This report was conducted by the Manitoba Centre for Health Policy (MCHP) on behalf of Manitoba Health, Healthy Living and Seniors, at the request of the Healthy Child Committee of Cabinet (HCCC). The HCCC asked MCHP to identify factors that contribute to the educational success of students in the care of Child and Family Services in Manitoba (e.g., children in foster care or other forms of “out-of-home” care). MCHP was also asked to make recommendations regarding what schools, school divisions, and Manitoba Education and Advanced Learning could do to contribute further to the educational success of children in care.

In order to fulfill this request, MCHP identified five main objectives for this report:

1. Describe the characteristics of children in care in Manitoba.
2. Describe the educational outcomes of children in care in Manitoba.
3. Identify factors that are associated with positive (and negative) educational outcomes for children in care in Manitoba.
4. Provide information on programs that improve educational outcomes for children in care.
5. Provide recommendations on how educational outcomes for children in care can be improved in Manitoba.

Objectives 1 to 3 were addressed using information in the Population Health Research Data Repository (the Repository) housed at MCHP. The Repository is a comprehensive collection of population-based data developed and maintained by MCHP on behalf of the province of Manitoba. Several datasets from the Repository were brought together for the analyses in this report which are described in Chapter 2. The two key datasets used for this report were the Child and Family Services Information System (CFSIS), which contains information about involvement with child welfare services, and the Education Enrolment and Assessment dataset, which provided the main outcomes for this report. Data about programs operating within classrooms, schools, or school divisions are not available in the enrolment and assessment data, so an evaluation of specific programs with respect to their success at improving outcomes for children in care was not possible using the data in the Repository. Thus, to address objective 4, we searched the literature to find information on programs that have been successful at improving the educational outcomes for children in care.

Structure of this Report

The remainder of this chapter provides background information on children in care and their educational outcomes. Chapter 2 describes the methods used in this report. Chapter 3 describes some of the key characteristics of children in care in Manitoba. Chapter 4 examines a number of educational outcomes for children in care in Manitoba. In Chapter 5, the results of statistical models used to identify factors associated with educational outcomes of children in care in Manitoba are described. Chapter 6 provides key findings from the literature on programs aimed at improving outcomes for children in care. Chapter 7 provides a summary of the report findings, and conclusions based on the findings.

Background on Children in Care

Compared to other countries, Canada has a high rate of children who are in the care of child welfare services (“children in care”). In 2001, the percentage of children in care under 18 years of age in Canada was 1.1%, compared to 0.07% in Germany (in 2004), 0.17% in Japan (in 2005), 0.55% in England (in 2005), 0.66% in the United States (in 2005), and 1.2% in France (in 2003) (Thoburn, 2007). Among Canadian provinces and territories, Manitoba has among the highest rates of children in care. In 2007, the rate of children in care in Manitoba was 2.4%.

CHAPTER 2: METHODS

General Methods

This report presents descriptive and multivariate statistical analyses regarding children removed from their homes and placed in the care of Child and Family Services (CFS). Referred to as “children in care” in this report, these are children who have been removed from the care of their original families because of a situation where authorities have deemed their family unable or unfit to look after them properly. In some cases, children are voluntarily placed into care by their parents or guardians. Children can come into care for a variety of reasons including abuse and neglect, illness, death of a parent, addiction issues or conflict in their family, disability, or emotional problems. Some children are placed in care for very short time periods before being returned to their families, whereas others may spend many years in care. Children in care do not include children who remain with or are returned to a parent or guardian under an order of supervision. Survey and qualitative analyses were not performed for this report; however, the authors recommend these types of analyses as follow-up to provide context to the findings reported here.

This chapter describes the databases and general methods used in this report. Specific methods used for descriptions of children in care and their educational outcomes are outlined in Chapter 3 and Chapter 4, and those used for the analysis of factors associated with educational outcomes for children in care are outlined in Chapter 5. Key terms used in this report are provided in Table 3.1 in Chapter 3.

Datasets Used in Report

This report used existing data contained in the Population Health Research Data Repository (Repository), which is housed at the Manitoba Centre for Health Policy (MCHP) at the University of Manitoba. All management, programming, and analyses of these data were performed using SAS[®] statistical analysis software, version 9.3.

The Repository is a comprehensive collection of administrative, registry, survey, and other data primarily relating to residents of Manitoba. It was developed to describe and explain patterns of healthcare use and profiles of health and illness, facilitating inter-sectoral research in areas such as healthcare, education, and social services. All data are anonymized before being transferred to MCHP. All datasets contain an encrypted version of the Personal Health Identification Number (PHIN) which allows for person-level, anonymous linkage across datasets and over time.

Within the Repository, several datasets from different sources were used:

1. Family Services: for information on children in care and children living in families receiving protection or support services. All information on children in care and children in families receiving services from Child and Family Services (CFS) comes from the Child and Family Services Information System (CFSIS). Information on Indigenous groups used in this study was taken from CFSIS.⁴
2. Education and Advanced Learning: for information on school enrolment, academic performance (e.g., grade 12 Language Arts standards test results), high school completion, and school location (for school-level socioeconomic status (SES), urban vs. rural schools).
3. Healthy Child Manitoba Office: for Families First screening data, and Early Development Instrument (EDI) data. The Families First screening database was used to develop indicators of risk status (e.g., drug and alcohol use by mother during pregnancy). The EDI database was used to develop measures of early childhood outcomes (developmental health in each of five domains: physical well-being, social competence, emotional maturity, language and cognitive development, and general knowledge and communication skills), and school attendance for kindergarten.

4 This information is largely self-reported from parents or directly from the children. Categories within CFSIS include First Nations (“Status” and “non-Status”), Metis, Inuit, non-Indigenous and “not determined”. Both on- and off-reserve First Nations children are included in this study.

CHAPTER 3: DESCRIPTIVE INFORMATION

This report’s first objective was to describe the characteristics of children in care in Manitoba. To do this, we took the cohort of children who were in care in Manitoba for at least one day between April 1, 2009 and March 31, 2012, and examined all the information we had available on these children for this time period and historically. There were 15,035 children⁷ who were in care for at least one day in Manitoba at some point during this time period.

Many of the terms used to describe children in care in this report come from the Child and Family Services Information System (CFSIS). Table 3.1 lists terms and definitions to help the reader better understand the characteristics of children in care described in this chapter.

⁷ These represent unique children rather than cases.

Characteristics of Children in Care in Manitoba

Reasons for Being Taken into Care

Children can be taken into care for a variety of reasons, including abuse (which includes physical, sexual and emotional abuse), neglect, death or conflict in the family (including witnessing intimate partner violence), or if the child has a disability or emotional or behavioural difficulties. CFSIS categorizes these reasons into the groupings shown in Table 3.2. A child may have more than one episode of care during the time period examined. In such cases, each episode was counted separately. Thus, children with more than one episode of care during the time period were counted more than once in the table.

Table 3.2: Frequency and Percentage of Care Episodes by Reason for Entry into Care, by Year

Reason for Entry into Care	2009/10		2010/11		2011/12	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Conduct of parent or other	6,306	57.38	6,229	56.62	6,856	58.75
Conditions of parent	1,936	17.62	2,085	18.95	2,161	18.52
Conduct of child	628	5.71	634	5.76	644	5.52
Abandonment and Desertion	543	4.94	526	4.78	520	4.46
Other	463	4.21	429	3.90	421	3.61
Conditions of child	313	2.85	325	2.95	308	2.64
Transfer in (from MB agency)	299	2.72	296	2.69	273	2.34
Voluntary relinquishment	209	1.90	186	1.69	206	1.77
Missing open reason*	134	1.22	114	1.04	84	0.72
Conduct of parent or medical refusal	92	0.84	91	0.83	115	0.99
Transfer in (from out of province)	62	0.56	81	0.74	78	0.67

* Likely records where cases are pending and not open yet.

Across the three most recent years of data, the most frequent reasons for going into care are consistent. Most children go into care due to the conduct or conditions of their parent(s). More specific reasons for why children went into care are not included in the data system. Such categories might include things like parental addictions, parental intimate-partner violence, abuse, neglect, or parental illness. Table 3.2 shows that conduct of parent or other accounts for over half of the reasons for children being taken into care (56%–59% over the three years), followed by conditions of parent(s), which account for about 18% of the reasons for care (18%–19% over the three years). Conduct of the child, which may include things like behaviour disorders or aggressive behaviour, accounts for over 5% of the reasons for being taken into care, and abandonment and desertion accounts for over 4% in each of the years examined.

Age

At any given time, the age distribution of children in care is fairly equal across age groups. That is, there is not an over-representation of one particular age group over others (see Figure 3.1).

Figure 3.1: Percentage of Children in Care between 2009/10 and 2011/12, by Age

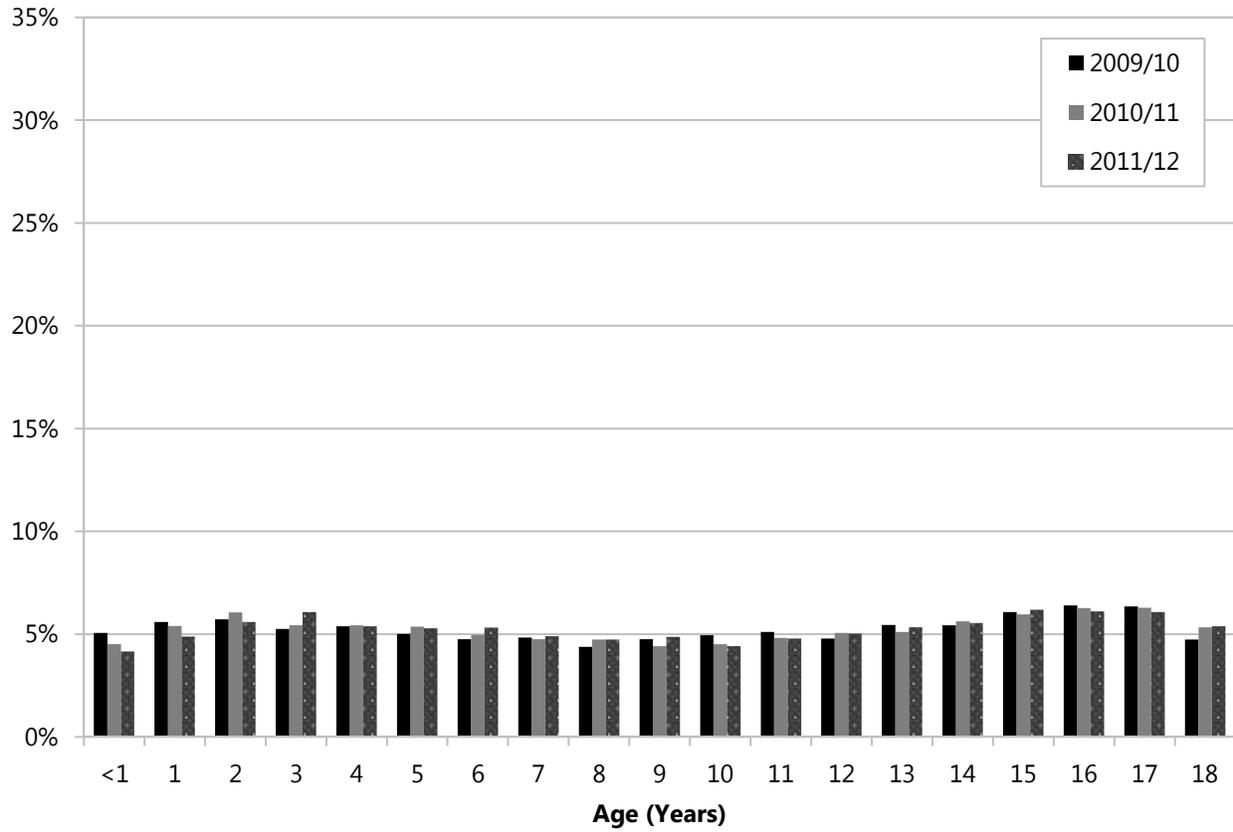


Table 3.3: Perpetrator for Abuse Allegations and Substantiations

Children in Care, 2009/10 – 2011/12, with Case Opened on or after April 1, 2007

Perpetrator	Allegations		Substantiations	
	Count*	% of Total	Count*	% of Total
Mother	416	20.6%	45	24.5%
Unknown	353	17.5%	14	7.6%
Father	302	15.0%	32	17.4%
Step-father	126	6.2%	16	8.7%
Foster mother	116	5.8%	s	s
Foster father	87	4.3%	0	0.0%
No relationship	85	4.2%	10	5.4%
Friend or family	69	3.4%	8	4.3%
Brother	65	3.2%	13	7.1%
Grandmother	57	2.8%	0	0.0%
Mother's common-law partner	55	2.7%	s	s
All other	352	17.5%	48	26.1%

* An alleged or substantiated case may have more than one perpetrator, thus column totals may add to greater than the total cases involved and percent totals may be more than 100%.

s = suppressed due to counts less than six

Table 3.4: Type of Abuse for Allegations and Substantiations

Children in Care, 2009/10 – 2011/12 with Case Opened on or after April 1, 2007

Abuse Type	Allegations		Substantiations	
	Count*	% of Total	Count*	% of Total
Physical	1399	69.4%	112	60.9%
Sexual	658	32.6%	75	40.8%
Emotional**	s	s	s	s

* An alleged or substantiated case may have more than one abuse type, thus column totals may add to greater than the total cases involved and percent totals may be more than 100%.

**Due to counts less than 6 for substantiations for emotional abuse, the count of allegations are also suppressed in order to preserve confidentiality

s = suppressed due to counts less than six

Indigenous Group

A high proportion of Manitoba children in care are from an Indigenous group (First Nations, Metis, or Inuit). Information about Indigenous group is recorded in CFSIS.¹⁹ Of the children in care at any point between 2009/10 and 2011/12, CFSIS recorded that 62.3% were First Nations, 11.8% were Metis, and 0.3% were Inuit. Given that children from these Indigenous groups compose about 26% of the child population in Manitoba (Manitoba Aboriginal and Northern Affairs, 2012), they are greatly over-represented in the population of children in care. Of the remainder of children in care, 17.5% were non-Indigenous, and 8.1% were “not determined” (Figure 3.13).²⁰

19 This information is largely self-reported from parents or directly from the children. CFSIS further sub-divides First Nations into “Status” and “non-Status” (again, largely according to self-report); for these analyses the two sub-categories were combined and displayed as “First Nations”.

20 Note that the total Indigenous children calculated from CFSIS (74.4%) is lower than what is reported in the Family Services Annual Reports shown in Table 1.1 (over 85% for the same time period). This discrepancy may suggest not all Indigenous children are being identified in the CFSIS data.

Figure 3.14: Percentage of Children in Care between 2009/10 and 2011/12 Whose First In-Care Episode Occurred Before Age One, by Indigenous Group

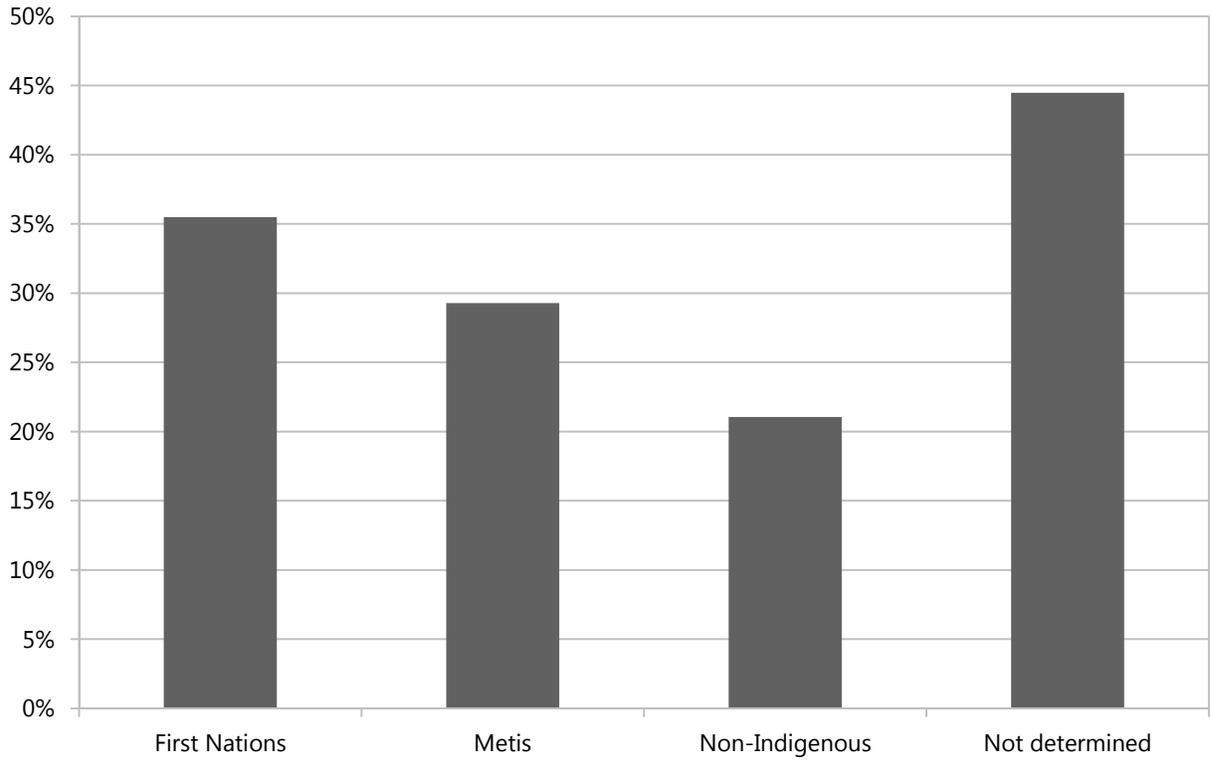
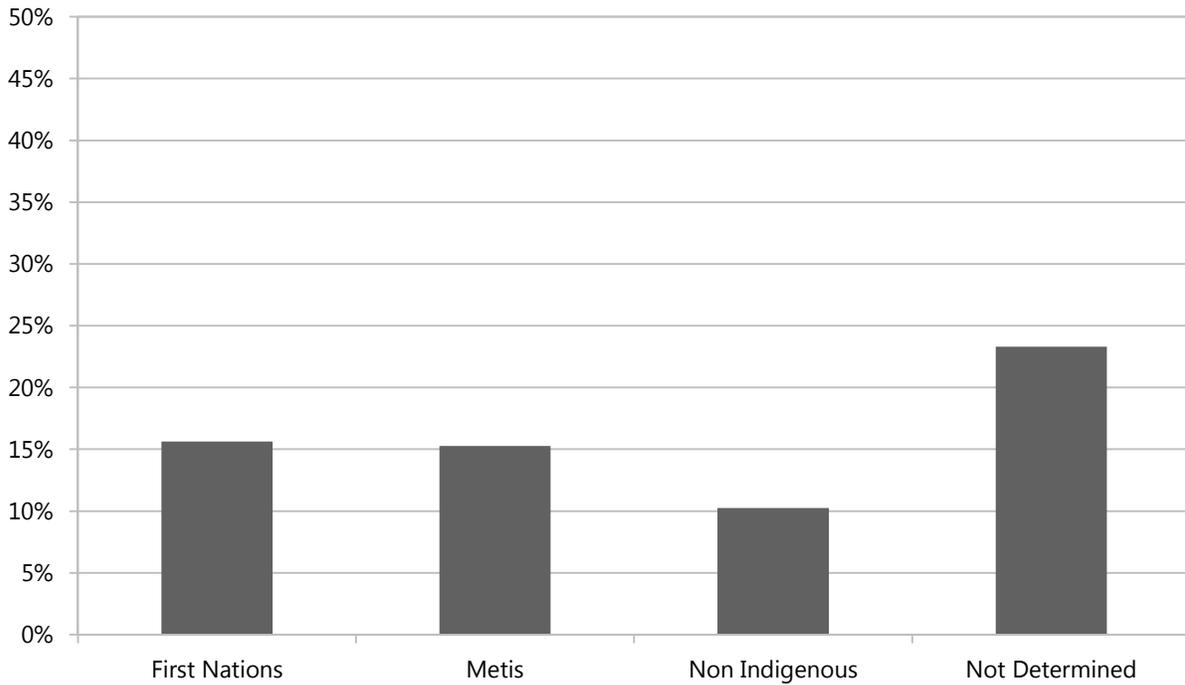
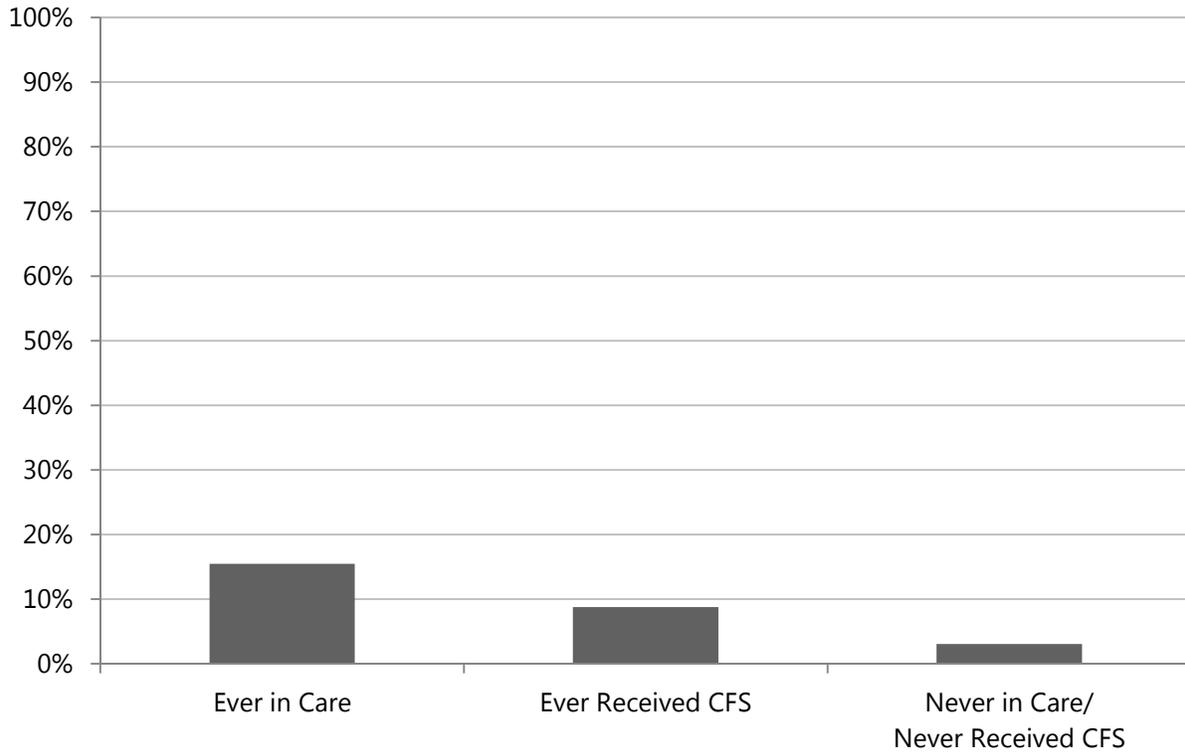


Figure 3.15: Percentage of Children in Care between 2009/10 and 2011/12 who were Apprehended at Birth*, by Indigenous Group



*Apprehension at birth defined as children apprehended within 7 days after birth

Figure 4.4: Percentage of Students Repeating a Grade, by In-Care Category
 Kindergarten to Grade 8, 1997/98 – 2011/12



Grade 3 Assessment in Reading

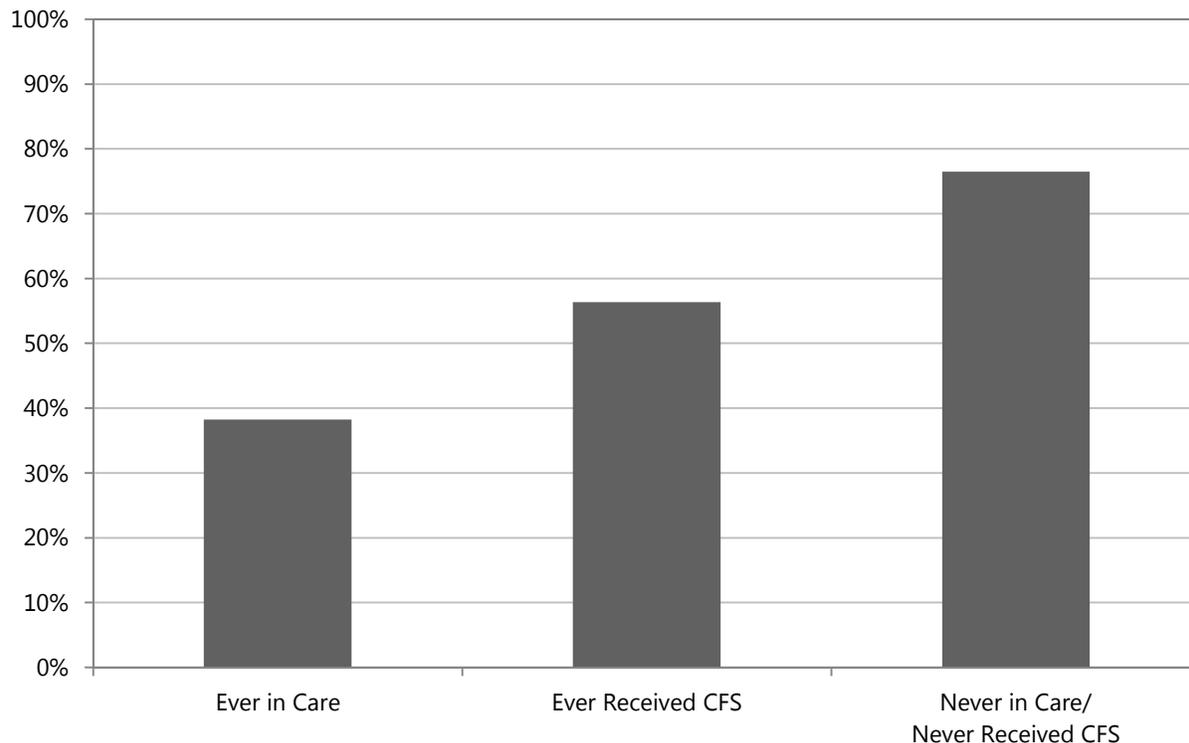
Early in the school year, teachers in Manitoba assess grade 3 students on three reading competencies: 1) reflects on and sets reading goals; 2) uses strategies during reading to make sense of texts; and 3) demonstrates comprehension. Students are categorized into one of the four following levels of achievement for each competency: 1) meeting expectations; 2) approaching expectations; 3) needs ongoing help; and 4) out of range.³¹ For this analysis, we combined all three competencies and looked at the percent of students who were meeting or approaching expectations in all three competencies. Grade 3 assessment data from 2009/10 through 2011/12 were examined. There were 32,906 children enrolled in grade 3 during these years. Of these, 31,404 (95.4%) had grade 3 assessment information.

For this measure, higher percentages represent better outcomes (i.e., more students meeting or approaching expectations for grade 3). Figure 4.5 shows that the children ever in care had the lowest proportion of students meeting or approaching expectations on all three competencies, at 57.3%. For children who received services from CFS (but never in care) the proportion was 65.4%, whereas 85.5% of children who were never in care or received services from CFS were meeting or approaching expectations for grade 3 reading.

³¹ Out of range is used to describe students working well below their grade due to learning disabilities or their need for new language learning.

Figure 4.7: Percentage of Students Competent in Grade 7 Math, by In-Care Category

Students with Math Assessments who were Meeting or Approaching Expectations in all 5 Competencies, 2007/08 – 2011/12



Grade 7 Student Engagement

Halfway through the school year, teachers in Manitoba assess grade 7 students on five measures of engagement:³⁴

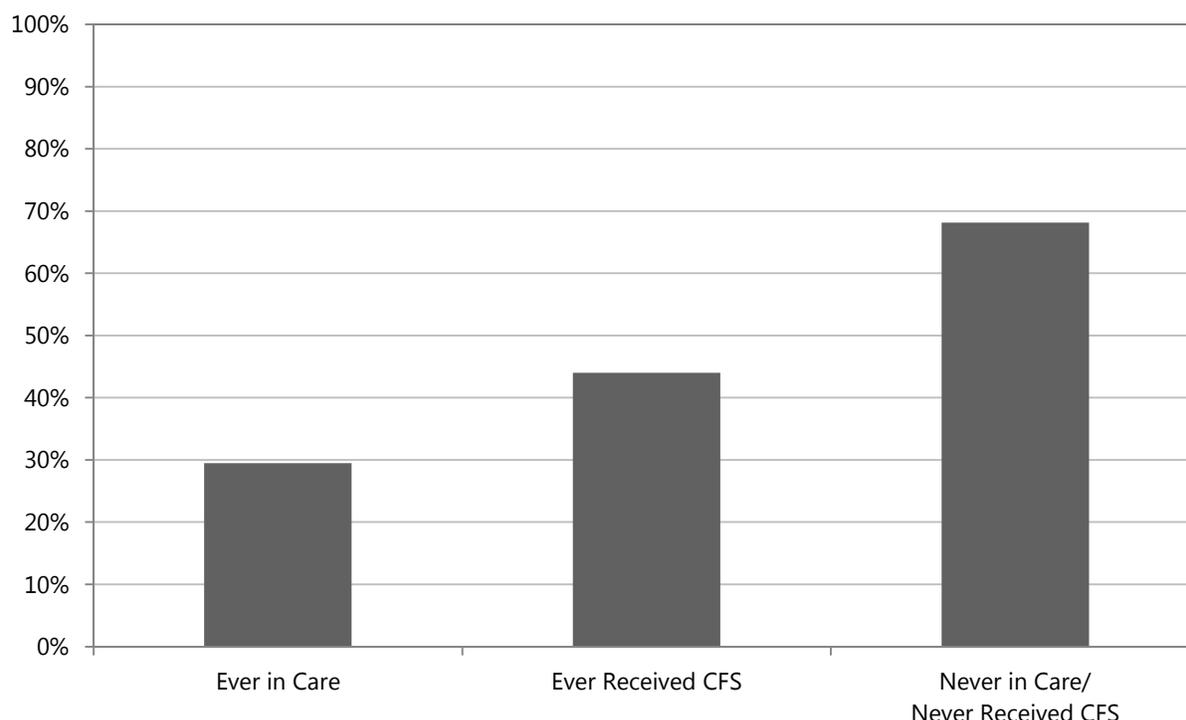
1) demonstrates an interest in his/her learning; 2) engages in self-assessment; 3) aware of learning goals as a unit of study and/or personal learning goals; 4) participates in lessons; and 5) accepts responsibility for assignments. Students are categorized into one of the five following levels of engagement for each measure: 1) established, which is for students who nearly always demonstrate the described behaviour; 2) developing, which is for students who frequently demonstrate the described behaviour; 3) emerging, which is for students who only occasionally demonstrate the described behaviours; 4) inconsistent, which is for students who demonstrate the described behaviour in some settings but not all; and 5) out of scope, for instances where the student has a profound mental health concern, cognitive disability, or other condition so severe that the engagement behaviour being measured is not applicable to the student. For this analysis, we combined all five measures of engagement and looked at the percent of students who had established or were developing engagement on all five measures. Grade 7 assessment data from 2007/08 through 2011/12 were examined. There were 57,295 students enrolled in grade 7 during these years. Of these, 55,290 (96.5%) had grade 7 assessment information.

For this measure, higher percentages represent better outcomes (i.e., more students with established or developing engagement). Figure 4.8 shows that the group of students who were ever in care had the lowest proportion who had established or were developing engagement on all five measures, at 29.5%. For students who ever received services from CFS (but never in care) the proportion was 44.0%, whereas 68.2% of students who were never in care or ever received services from CFS had established or were developing engagement in grade 7.

³⁴ French Immersion students are assessed on an additional measure of engagement to do with use of French, and Français students are assessed on an additional two measures of engagement to do with language and culture. For the purposes of this report, only the first five measures of engagement are analyzed, so that all students were assessed on the same five measures.

Figure 4.8: Percentage of Students Competent in Grade 7 Engagement, by In-Care Category

Students with Engagement Assessments who were Established or Developing in all 5 Competencies, 2007/08 – 2011/12



Grade 8 Assessment in Reading and Writing

Halfway through the school year, teachers in Manitoba assess grade 8 students on six reading and writing competencies:³⁵ 1) understands key ideas and messages in a variety of texts; 2) interprets a variety of texts; 3) responds critically to a variety of texts; 4) generates, selects and organizes ideas to support the reader's understanding; 5) chooses language (word choices and sentence patterns) to make an impact on the reader; and 6) uses conventions (spelling, grammar, and/or punctuation) and resources to edit and proofread to make meaning clear. Students are categorized into one of the four following levels of achievement for each competency: 1) meeting expectations; 2) approaching expectations; 3) not meeting expectations; and 4) out of range.³⁶ For this analysis, we combined all six competencies and looked at the percent of students who were meeting or approaching expectations in all six competencies. Grade 8 assessment data from 2007/08 through 2011/12 were examined. There were 58,310 students enrolled in grade 8 during these years. Of these, 56,232 (96.4%) had grade 8 assessment information.

For this measure, higher percentages represent better outcomes (i.e., more students meeting or approaching expectations for grade). Figure 4.9 shows that the group of students who were ever in care had the lowest proportion meeting or approaching expectations on all six competencies, at 49.0%. For students who ever received services from CFS (but never in care) the proportion was 66.2%, whereas 84.9% of students who were never in care or ever received services from CFS were meeting or approaching expectations for grade 8 reading and writing.

35 Students in French immersion are assessed in both French and English and therefore have two sets of scores. For this analysis we used the set of scores which were the highest; for the majority of students their scores were the same in both languages (Brownell et al., 2012).

36 Out of range is used to describe students working well below their grade due to learning disabilities or their need for new language learning.

New research from the United States suggests that increasing the education levels of young people previously in foster care is associated with increased levels of employment and increased earnings, and that the benefits are most pronounced for those who attain degrees (Okpych & Courtney, 2014). Of course, in order to be eligible for the university programs, children in care need to receive the supports necessary in the K–12 years so that they graduate from high school and are ready for post-secondary education.

In summary, the two recent reviews of the literature on programs aimed at improving educational outcomes for children in care, and some of the additional studies and programs discussed in this chapter, suggest some promising strategies. However, because these programs have not yet been rigorously evaluated, this report’s authors are not recommending any particular program, but offering these as potential interventions that could be explored by Manitoba Education and Advanced Learning. Implementation of programs should be culturally sensitive. Programs implemented should be evaluated to demonstrate whether they lead to improved outcomes for children in care.

CHAPTER 7: SUMMARY AND CONCLUSIONS

This report had five main objectives:

1. Describe the characteristics of children in care in Manitoba.
2. Describe the educational outcomes of children in care in Manitoba.
3. Identify factors that are associated with positive (and negative) educational outcomes for children in care in Manitoba.
4. Provide information on programs that improve educational outcomes for children in care.
5. Provide recommendations on how educational outcomes for children in care can be improved in Manitoba.

Our findings related to each objective are discussed below.

Characteristics of Children in Care in Manitoba

We found that children in care in Manitoba have many characteristics that can put healthy development at risk. Compared to children who have not been in care or been receiving services from CFS, children in care were over seven times more likely to have a developmental disability, over four times more likely to experience a mental disorder, over eight times more likely to have a mother who reported using substances (e.g., alcohol, illegal drugs) during pregnancy, almost six times more likely to be from a family that received income assistance, and over six times more likely to have a mother who was 17 years or younger when she gave birth to her first child. Of those children in care in Manitoba, close to a third entered care before their first birthday.

Many people are aware that Manitoba has a large number of children in care. The most recent report from Manitoba Family Services put that number at 10,293 on March 31, 2014. What the public may not be aware of is that Manitoba has one of the highest rates of children in care in the world. This should be a major concern for Manitobans. High rates of children in care are an indication that effective home-based services are lacking for families in need, and that unacceptable living conditions, such as poor housing, poverty, poor parenting skills, and family dysfunction are not being addressed on a broader community or societal level (Trocmé, 2012). Nico Trocmé, the principal investigator for the Canadian Incidence Study of Reported Child Abuse and Neglect and renowned authority on child welfare issues in Canada, has stated that “as a broader community health indicator, the incidence of out-of-home placement is an important gauge of the overall well-being of children in community” (Trocmé et al., 2009, p. 4). The high rates of children in care in Manitoba suggest that the well-being of too many children in Manitoba is in jeopardy.

It is also well-known that there is an over-representation of Indigenous children in care in Manitoba. Although they compose about 26% of the child population in Manitoba, almost 90% of the children in care in Manitoba are Indigenous. This means that Indigenous children in Manitoba are much more likely to be taken into care than non-Indigenous children. Using population census data from the Canada Census, we were able to quantify this inequity: when looking at all Manitoba children 0 to 14 years of age, we found that 1.7% of non-Indigenous children spent some time in care before their 15th birthday; for Indigenous children this value was 16.6%, a near 10-fold difference. The greatest inequity was for First Nations children, who were over 13 times more likely to spend some time in care before age 15 than their non-Indigenous counterparts. Put another way, one of every 61 non-Indigenous children in 2006 had spent some time in care before their 15th birthday, compared to slightly more than one of every five First Nations children.

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APPENDIX 2

Appendix Table 2.1: Regression Analysis of Factors Associated with Kindergarten Student "Not Ready" in One or More EDI domains
2005/06, 2006/07, 2008/09, and 2010/11

Factors	Level	Model 1		Model 2	
		Direction of Association	Statistical Significance	Direction of Association	Statistical Significance
Area-level SES of Child		↓	***	↓	***
Area-level SES of School					
Child's Age in Months		↑	***	↑	***
In Care Category	Never in Care/Never Received CFS	↓	***	↓	***
	Ever Received CFS	↓	**	↓	**
	Ever In Care (REF)				
Small for Gestational Age at Birth	Missing/No Category				
	Yes	↑	***	↑	***
	No (REF)				
Mother's Age (in Years) at First Birth	12-17	↑	***	↑	***
	≥18 (REF)				
Sex	Male	↑	***	↑	***
	Female (REF)				
Urban School	Yes				
	No (REF)				
Family Receipt of Income Assistance	Yes	↑	***	↑	***
	No (REF)				
Diagnosis of a Developmental Disability	Yes	↑	***		
	No (REF)				
Diagnosis of a Mental Disorder	Yes				
	No (REF)				
Maternal Substance Use During Pregnancy	Yes				
	No (REF)				
Proportion of Total Days Absent	Missing	↑	***	↑	***
	>0% - <10%	↑	***	↑	***
	10% - <20%	↑	***	↑	***
	20% - <30%	↑	***	↑	***
	≥30%	↑	***	↑	***
	0% (REF)				

Level of Statistical Significance: *p<0.05, **p<0.01, ***p<0.001

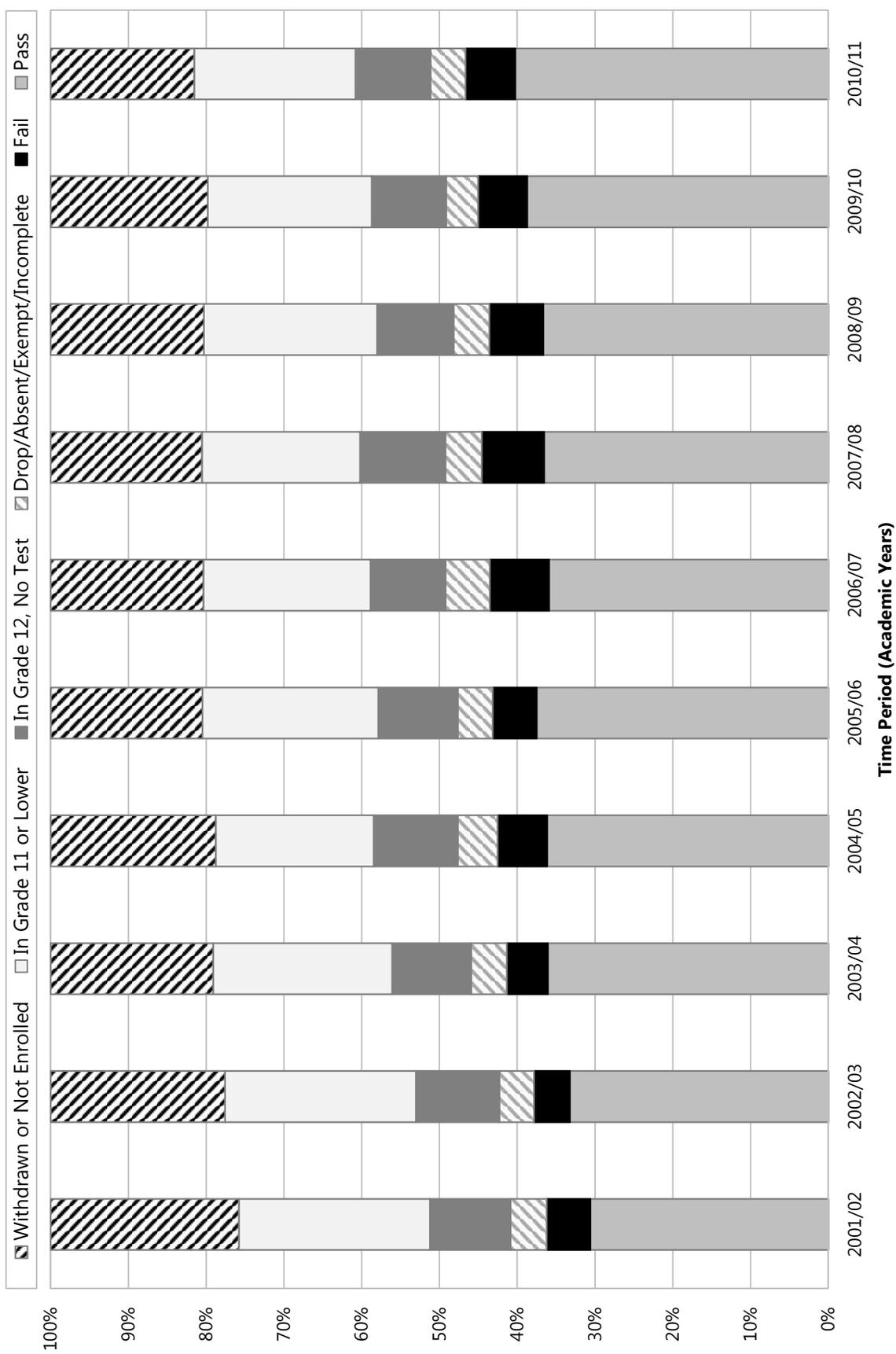
REF = Reference Group

Model 1 – model including all children in care with all factors included

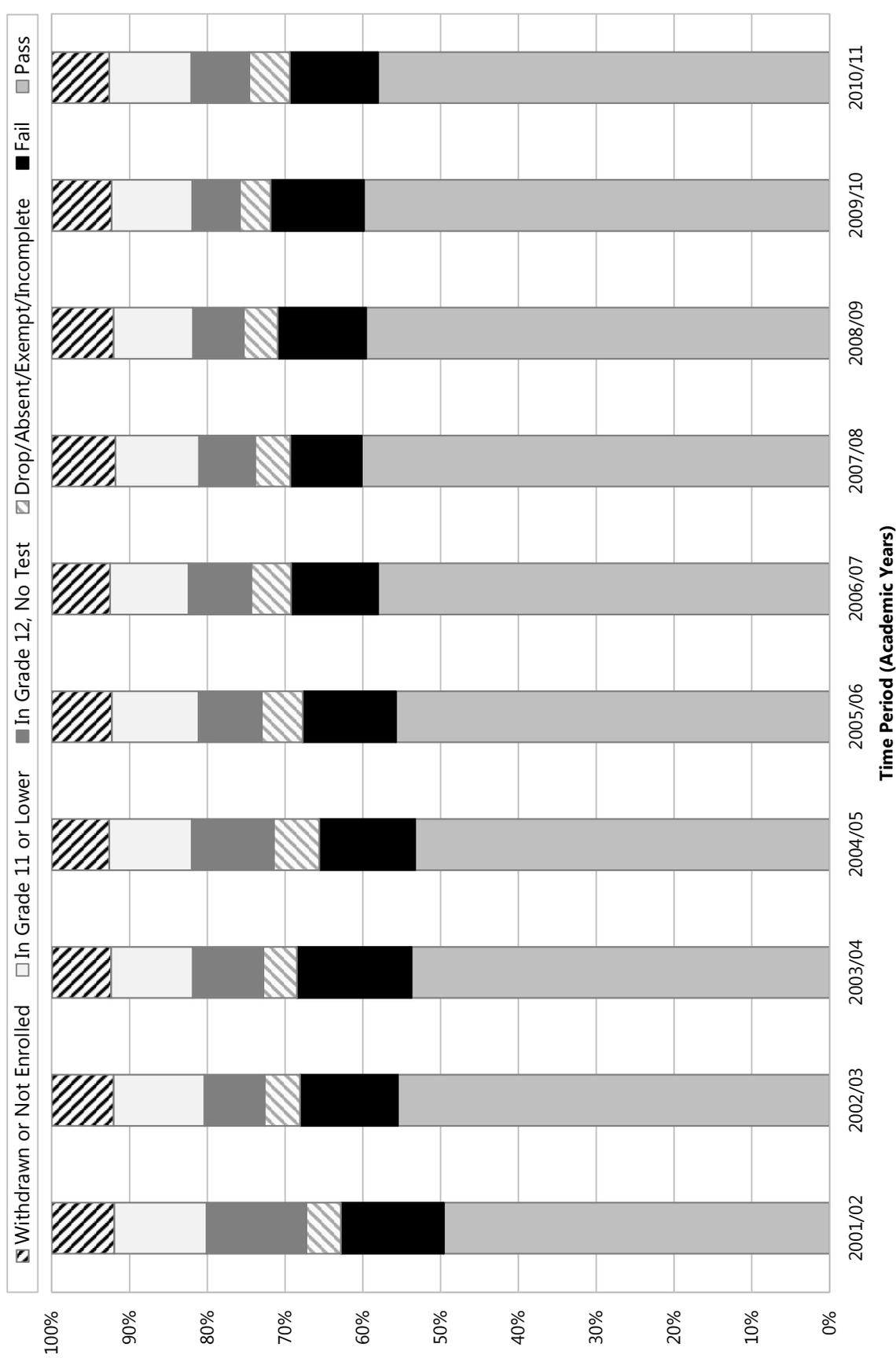
Model 2 – model including all children in care with Developmental Disability factor excluded

Table cells are shaded where data were not available or not applicable.

Appendix Figure 2.8: Grade 12 Language Arts Standards Test Performance for Children Who Ever Received Services from CFS but Never in Care, School Years 2001/02 – 2010/11
 Birth Cohort 1984 – 1993



Appendix Figure 2.12: Grade 12 Mathematics Standards Test Performance for Children Never in Care and Never Received Services from CFS, School Years 2001/02-2010/11
 Birth Cohort 1984-1993



Appendix Table 3.4: Regression Analysis of Factors Associated with Grade 7 Mathematics Assessment, by All Model Types
2007/08 – 2011/12

Factor	Model 1			Model 2			First Nations			Metis			Non-Indigenous		
	Direction of Association	Statistical Significance													
Area-level SES of Child	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	
Area-level SES of School															
Child's Age (in Months)															
Indigenous Group of Child															
Not Determined															
Non-Indigenous															
Metis															
First Nations (non-Status)															
First Nations (Status) (REF)															
Child's Legal Status while in Care															
Apprehension or PFCO															
Other	↓	*	↓	*	↓	*	↓	*	↓	*	↓	*	↓	*	
VPA	↓	*	↓	*	↓	*	↓	*	↓	*	↓	*	↓	*	
Permanent Ward (REF)															
Yes															
No (REF)															
Reason for Being in Care															
Abandonment															
Conditions of parent(s)															
Conditions of child															
Conduct of parent(s)															
Other															
Other															
Conduct of child (REF)															
1-4	↓	*	↓	*	↓	*	↓	*	↓	*	↓	*	↓	*	
5-9															
≥10															
<1 (REF)															
Missing/No Category															
Yes															
No (REF)															
Mother's Age (in Years) at First Birth															
12-17															
≥18 (REF)															
Male															
Female (REF)															
Urban School															
Yes															
No (REF)															
Family Receipt of Income Assistance															
Yes															
No (REF)															
Diagnosis of a Developmental Disability	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	
No (REF)															
Yes	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	
Diagnosis of a Mental Disorder															
No (REF)															
Yes															
Maternal Substance Use During Pregnancy															
No (REF)															
Yes															
Substantiated Abuse of Child															
No (REF)															
Yes															
Care at Time of Assessment															
Currently in care															
Previously in care (REF)															
Total Number of in Care Episodes															
1															
2															
3															
4+															
Total Number of Placements Experienced															
1-3															
4-6															
7+															
Length of Time (in Years)															
<1															
1-2															
3-4															
5+ (REF)															

Level of Statistical Significance: *p<0.05, **p<0.01, ***p<0.001

Model 1 – model including all children in care with all factors included

Model 2 – model including all children in care with all factors included Disability factor excluded

Model 3 – model including all children in care with all factors included, by Indigenous Group

Model 4 – model including all children in care with all factors included, by Indigenous Group

Table cells are shaded where data were not available or not applicable.

REF = Reference Group

PFCO = Petition Filed for Further Order

VPA = Voluntary Placement Agreement

Appendix Table 3.5: Regression Analysis of Factors Associated with Grade 7 Engagement Assessment, by All Model Types
2007/08 – 2011/12

Factor	Level	Model 1			Model 2			First Nations			Metis			Non-Indigenous		
		Direction of Association	Statistical Significance													
Area-level SES of Child		↑	**	↑	**	↑	*	↑	*	↑	*	↑	*	↑	*	
Area-level SES of School		↑	**	↑	**	↑	*	↑	*	↑	*	↑	*	↑	*	
Child's Age (in Months)		↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	
Indigenous Group of Child	Not Determined	↑	*	↑	**	↑	**	↑	**	↑	**	↑	**	↑	**	
	Non-Indigenous	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	
	Metis															
	First Nations (non-Status)															
	First Nations (Status) (REF)															
Child's Legal Status while in Apprehension or PFO	Other															
Child's Legal Status while in Apprehension or PFO	Temporary Ward															
Child's Legal Status while in Apprehension or PFO	VPA															
Child's Legal Status while in Apprehension or PFO	Permanent Ward (REF)															
Kinship Placement	Yes															
Kinship Placement	No (REF)															
Reason for Being in Care	Abandonment															
Reason for Being in Care	Conditions of parent(s)															
Reason for Being in Care	Conditions of child															
Reason for Being in Care	Conduct of parent(s)															
Reason for Being in Care	Other															
Reason for Being in Care	Conduct of child (REF)															
Age (in Years) at Entry Into Care	1-4															
Age (in Years) at Entry Into Care	5-9															
Age (in Years) at Entry Into Care	≥10															
Age (in Years) at Entry Into Care	<1 (REF)															
Small for Gestational Age at Birth	Yes															
Small for Gestational Age at Birth	Missing/No Category															
Small for Gestational Age at Birth	No (REF)															
Mother's Age (in Years) at First Birth	12-17															
Mother's Age (in Years) at First Birth	>18 (REF)															
Sex	Male		***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	
Sex	Female (REF)															
Urban School	Yes															
Urban School	No (REF)															
Family Receipt of Income Assistance	Yes															
Family Receipt of Income Assistance	No (REF)															
Diagnosis of a Developmental Disability	Yes		**	↑	**	↑	**	↑	**	↑	**	↑	**	↑	**	
Diagnosis of a Developmental Disability	No (REF)															
Diagnosis of a Mental Disorder	Yes		***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	
Diagnosis of a Mental Disorder	No (REF)															
Maternal Substance Use During Pregnancy	Yes															
Maternal Substance Use During Pregnancy	No (REF)															
Substantiated Abuse of Child	Yes															
Substantiated Abuse of Child	No (REF)															
Care at Time of Assessment	Currently in care															
Care at Time of Assessment	Previously in care (REF)															
Total Number of Episodes	1															
Total Number of Episodes	2															
Total Number of Episodes	3															
Total Number of Episodes	4+ (REF)															
Total Number of Placements Experienced	1-3															
Total Number of Placements Experienced	4-6															
Total Number of Placements Experienced	7+ (REF)															
Length of Time (in Years) Spent in Care	<1															
Length of Time (in Years) Spent in Care	1-2															
Length of Time (in Years) Spent in Care	3-4															
Length of Time (in Years) Spent in Care	5+ (REF)															

Level of Statistical Significance: *p<0.05, **p<0.01, ***p<0.001

Model 1 – model including all children in care with all factors included

Model 2 – model including all children in care with Developmental Disability factor excluded

Model 3 – model including all children in care with all factors included, by Indigenous Group

Model 4 – model including all children in care with Developmental Disability factor excluded, by Indigenous Group

Table cells are shaded where data were not available or not applicable.

REF = Reference Group

PFO = Petition Filed for Further Order

VPA = Voluntary Placement Agreement

Appendix Table 3.7: Regression Analysis of Factors Associated Earning 8+ Credits in Grade 9, by All Model Types
1996/97 – 2011/12

Factor	Level	Model 1				Model 2				Model 3				Model 4				Model 5			
		Direction of Association	Statistical Significance																		
Area-level SES of Child		↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
Area-level SES of School		↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
Child's Age (in Months)		↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
Indigenous Group of Child	Not Determined	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	Non-Indigenous	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	Metis	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	First Nations (non-Status)	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	First Nations (Status) (REF)	↑	*	↑	*	↑	*	↑	*	↑	*	↑	*	↑	*	↑	*	↑	*	↑	*
Child's Legal Status while in Care	Apprehension or PFCO	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	Other	↓	**	↓	**	↓	**	↓	**	↓	**	↓	**	↓	**	↓	**	↓	**	↓	**
	Temporary Ward	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	VPA	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	Permanent Ward (REF)	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
Kinship Placement	Yes	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	No (REF)	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
Reason for Being in Care	Abandonment	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	Conditions of parent(s)	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	Conditions of child	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	Conduct of parent(s)	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	Other	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	Other	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	Conduct of child (REF)	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
Age (in Years) at Entry Into Care	1-4	↓	**	↓	**	↓	**	↓	**	↓	**	↓	**	↓	**	↓	**	↓	**	↓	**
	5-9	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	≥10	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	<1 (REF)	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
Small for Gestational Age at Birth	Yes	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	No (REF)	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
Sex	Male	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	Female (REF)	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
Urban School	Yes	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	No (REF)	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
Family Receipt of Income Assistance	Yes	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	No (REF)	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
Diagnosis of a Developmental Disability	No (REF)	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	Yes	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
Diagnosis of a Mental Disorder	No (REF)	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	Yes	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
Substantiated Abuse of Child	Yes	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	No (REF)	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
Care at Time of Assessment	Currently in care	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	Previously in care (REF)	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
Total Number of in Care Episodes	1	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	2	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	3	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
	4+ (REF)	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***	↑	***
Total Number of Placements Experienced	1-3	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	4-6	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	7+ (REF)	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
Length of Time (in Years) Spent in Care	<1	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	1-2	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	3-4	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***
	5+ (REF)	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***	↓	***

Level of Statistical Significance: *p<0.05, **p<0.01, ***p<0.001
 Model 1 – model including all children in care with all factors included
 Model 2 – model including all children in care with Developmental Disability factor excluded
 Model 3 – model including all children in care with Indigenous Group
 Model 4 – model including all children in care with Developmental Disability factor excluded, by Indigenous Group
 Table cells are shaded where data were not available or not applicable
 REF = Reference Group
 PFCO = Petition filed for Further Order
 VPA = Voluntary Placement Agreement

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