### **Insights on Canadian Society**

### Childhood physical abuse: Differences by birth cohort

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### by Darcy Hango

### Overview of the study

This study uses self-reported data from the 2014 General Social Survey (GSS) on Victimization to examine trends in and characteristics of childhood physical abuse over time. Respondents are grouped into one of three birth cohorts: (1) 1940 to 1959; (2) 1960 to 1979; or (3) 1980 to 1999. For each cohort, this article also explores the relationship to the person responsible for the most serious incident of abuse during childhood as well as the probability that it was disclosed to someone. This article also examines the association between childhood physical abuse and various indicators of social integration and trust, health and victimization during young adulthood.

- Among Canadian adults born between 1940 and 1979, about one in five reported that they experienced physical abuse during their childhood years. This proportion declined to 13% for those who were born between 1980 and 1999.
- Some characteristics are more likely to be associated with childhood abuse, such as being male, having an Aboriginal identity, and having been under the legal responsibility of the government at some point during childhood.
- The proportion of those who talked to someone about the abuse increased across successive cohorts. In the most recent birth cohort, females who experienced childhood physical abuse remained more likely to disclose the abuse (48%) than males (40%).
- Among all individuals aged 15 to 74 who frequently witnessed parental violence, 70% reported that
  they also experienced childhood physical abuse. Among those who were sexually abused, nearly half
  (46%) also experienced childhood physical abuse.
- Childhood physical abuse is associated with lower levels of social integration, trust, and physical and mental health among young adults. For example, 31% of persons aged 15 to 34 who experienced very severe physical abuse had a psychological or health condition that at least sometimes limited their daily activities, compared with 6% of those who did not experience any physical abuse.

### Introduction

Over the past century, society has changed substantially and, in turn, the way adults and children interact has undergone a massive transformation. Laws have changed alongside these societal adaptations resulting in changes to the way adults—parents, school officials and other authority figures alike—treat children. It follows that people's perception of their childhood experiences might also have changed over time.

This paper examines trends in childhood physical abuse (CPA) by birth cohort. Although some recent Canadian research has examined trends in childhood sexual abuse (CSA) by birth cohort and while CPA and CSA are highly correlated, they remain distinct childhood traumatic events and may have different risk factors and characteristics across time. This past research found a decline in CSA rates across birth cohorts.

Similar to earlier work on CSA, this paper also observes different levels of childhood physical abuse (CPA) depending on the era in which individuals were born and spent their childhood years.

The 2014 General Social Survey (GSS) on Canadians' Safety (Victimization) is a useful source of data to examine trends in CPA across birth cohort. Ideally, a longitudinal design would be used; however, they are not as common.<sup>2</sup> In the absence of such longitudinal data, one alternative is to conduct a study using a retrospective design—a cross-sectional survey that asks adult respondents about childhood experiences.

This paper is divided in two parts. The first part focuses on differences by birth cohort. The concept of childhood physical abuse is examined across birth cohort, initially in terms of frequency of abuse and type of abuse. Following that analysis, the pertinent characteristics associated with childhood physical abuse are studied separately by birth cohort. The relationship of the adult responsible for the most severe incident of childhood physical abuse and whether the abuse was disclosed rounds out the analysis by birth cohort.

In the second part, additional analyses on childhood physical abuse examine the relationship that childhood physical abuse has with other measures of childhood victimization/maltreatment, namely childhood sexual abuse and witnessing parental violence. Lastly, for the youngest age cohort—those aged 15 to 34 in 2014, or born between 1980 and 1999—the implications of childhood physical abuse are explored on a range of adult outcomes involving

social integration and trust, physical and mental health, and adult victimization.

### A birth cohort approach to analyze childhood physical abuse

During the past 75 years, Canadian society and its families have undergone tremendous changes,3 and issues such as childhood physical abuse are likely to have changed in frequency and intensity. The 2014 GSS contains a sample that spans the ages of 15 to 98 (those born between 1916 and 1999). For this analysis, the age range is capped at 744 (i.e. those born before 1940 are excluded) due to potential recall bias associated with reporting childhood events such as physical abuse. Moreover, in surveys using a retrospective design, it is only possible to interview survivors, which becomes especially important if the surviving members of older cohorts are less representative than survivors of younger cohorts.5 The following three birth cohorts were created to examine trends in childhood physical abuse across relatively meaningful and homogenous periods: (1) 1940 to 1959; (2) 1960 to 1979; and (3) 1980 to 1999.6

The 2014 GSS has relatively few retrospective indicators that can be used to measure childhood experiences. Nonetheless, in this study, several measures that describe the respondent and which are related to childhood experiences are included. The first measures are sex and Aboriginal self-identification. Sex is important to consider in any issue related to childhood, especially those related to childhood events such as abuse. Aboriginal identity is important to consider because,

on average, Aboriginal children in Canadaface many different challenges compared with their non-Aboriginal counterparts—from poorer labour market integration and higher rates of living in single-parent homes and foster care to an increased risk of violent attacks and exposure to unhealthy environments.<sup>8</sup>

Similarly, an important measure of quality and stability in a child's life is included, namely, whether they were ever under the legal responsibility of the government at any point in their childhood. The issue of childhood physical abuse and having ever been under the legal responsibility of the government is complicated without knowing which of these two events came first. For example, was the child removed from the home because of the abuse or did the abuse occur once the child was in foster care? A lack of custody stability in a child's life may also be associated with abuse. Hence, this paper interprets the results as associations, and not as cause and effect relationships.

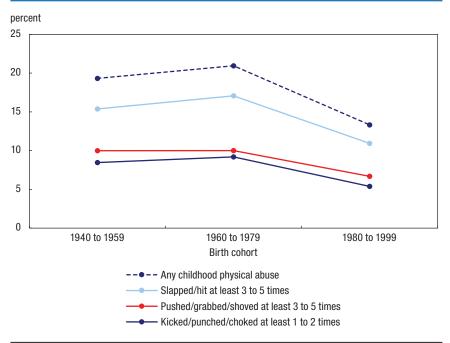
Geographic residence at birth and potential international mobility during childhood can be used to possibly serve as a proxy for conditions present in one's surrounding area around the time of birth as well as to account for unmeasured familial stress. Some sources have suggested that there is a link between adverse childhood experiences (such as child abuse) and residential mobility.9 The respondent's province/region of birth is included in this study. This measure takes whether the respondent was born outside Canada into account, and, if so, the age at which they immigrated. It is split by birth to age 6 and age 7 to 15 to account for stress

and upheaval at different points in a child's life. Age at immigration matters for a host of outcomes, including the stress associated with becoming accustomed to a new country, integration and eventual educational attainment. <sup>10</sup> Lastly, mother tongue, or first language spoken, is included as an additional background measure.

Two additional measures are included to tap into parental resources and one's family situation during childhood: parents' country of birth and level of education. With respect to country of birth, information is combined from both parents to include a measure indicating whether both parents were born in Canada, only one parent was born in Canada, or both parents were born outside Canada. Parental education is included as a potential proxy, in the absence of other socioeconomic information, for different parenting styles or practices. For example, parental education has been used to explain variations in caring for children as an indicator of potential stress and anxiety with respect to resources, and as a proxy for higher socioeconomic status. 11 In this paper, mother's and father's education are combined and coded ranging from both having less than a high school diploma to at least one having a university degree. A category indicating that the respondent did not know the education level of either parent is included. A lack of information about parental education level might indicate the absence of a parent in the household or perhaps a poor relationship with that parent.12

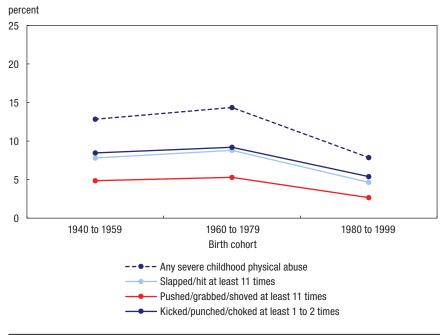
Given the changes across society, especially those associated with families and children,<sup>13</sup> and the fact that previous work has shown a decline in childhood sexual abuse,<sup>14</sup> it is important to examine whether

Chart 1
Prevalence of childhood physical abuse, by birth cohort, 2014



Source: Statistics Canada, General Social Survey (GSS) on Canadians' Safety (Victimization), 2014.

Chart 2
Prevalence of severe childhood physical abuse, by birth cohort, 2014



Source: Statistics Canada, General Social Survey (GSS) on Canadians' Safety (Victimization), 2014.

a similar decline was observed for childhood physical abuse and also to explore pertinent characteristics of physical abuse across different time periods.

### Prevalence of childhood physical abuse is lower for the youngest cohort

Using self-reported information on frequency and type of assault, this report considers past research in Canada when defining childhood physical abuse (CPA) and severe childhood physical abuse. <sup>15</sup> This earlier work incorporated information from literature reviews, expert consultations (such as with child welfare workers) and qualitative interviews with adolescents in determining its minimum threshold for abuse.

In this paper, CPA is deemed to be present if one or more of the following three variables meet the following minimum cut-offs. "Before age 15, did an adult...": (1) slap you on the face, head or ears or hit you with something hard enough to hurt 3 times or more; (2) push, grab, shove, or throw something at you hard enough to hurt 3 times or more; and (3) kick, bite, punch, choke, burn, or physically attack I time or more. "Severe" CPA adds a more stringent cut-off and increases the number of times that (1) and (2) occurred to at least II times. The cut-off for (3) remains at I time or more 16 (see the Data sources, methods and definitions section).

Hence, for example, respondents who had been slapped on the face, head or ears, or hit with something hard enough to hurt them at least 3 times in their childhood (even if none of the other abusive events

Table 1
Prevalence of childhood physical abuse across sociodemographic characteristics, by birth cohort, 2014

	Birth cohort		
	1940 to 1959	1960 to 1979	1980 to 1999
		percent	
Sex			
Male (ref.)	25.2	24.5	14.5
Female	13.8**	17.0**	11.9*
Aboriginal identity			
No (ref.)	19.0	20.0	12.9
Yes	30.6**	37.4**	20.9*
Ever under the legal responsibility			
of the government as a child			
No (ref.)	18.7	20.2	12.7
Yes	44.7**	42.8**	40.5**
Respondent's province/region of birth			
Atlantic provinces	17.6**	20.9	9.6**
Quebec	15.5**	19.9	12.8
Ontario	20.3**	21.0	11.6*
Manitoba/Saskatchewan	18.3**	22.9	13.1
Alberta/British Columbia	26.1	22.1	15.9
Immigrated to Canada between birth and age 6 (ref.)	24.9	24.2	18.2
Immigrated to Canada between age 7 and 15	18.5*	28.8	15.0
Immigrated to Canada after age 15	19.4**	17.7*	12.7
Parents' country of birth			
Both parents were born in Canada	18.5	20.7	12.2**
One parent was born in Canada	23.2 <sup>†</sup>	21.0	11.6*
Neither parent was born in Canada (ref.)	19.7	20.8	15.8
Parents' highest level of education			
Both parents have less than a high school diploma	21.3	23.8*	20.5 **
At least one parent has a high school diploma	19.8	19.1	16.1 **
At least one parent has a non-university diploma or certificate	18.2	22.8 <sup>†</sup>	12.7
At least one parent has a university degree (ref.)	20.7	20.0	11.4
Do not know the education level of either parent	13.2**		12.1
First language of respondent			
English	21.2	21.8†	13.5
French	15.3*	19.7	12.0
Other (ref.)	18.9	19.3	13.5
Total, grand mean	19.3	20.7	13.2

<sup>\*</sup> significantly different from the reference category (ref.) (p < 0.05)

Source: Statistics Canada, General Social Survey (GSS) on Canadians' Safety (Victimization), 2014.

occurred) are defined in this study as having experienced "any CPA". If the frequency of this type of abuse had been at least 11 times (even in the absence of other types of abuse), then the respondent falls under the "severe CPA" category. However, in those instances when at least one incident of being kicked, punched,

choked or burned occurred in childhood, the respondent also falls under the "severe CPA" category (and by default also within any CPA).<sup>17</sup>

In line with past research, 18 the current findings suggest that the incidence of childhood physical abuse (CPA) has declined for the

<sup>\*\*</sup> significantly different from the reference category (ref.) (p < 0.01)

 $<sup>^{\</sup>dagger}$  significantly different from the reference category (ref.) (p < 0.10)

most recent cohort. The rate of childhood physical abuse was 19% for those born between 1940 and 1959, and 21% for those born between 1960 and 1979 (Chart I) before it fell by almost 8 percentage points to 13% for the most recent birth cohort. A similar pattern is noted for those who experienced severe childhood physical abuse: the rate varied between 13% and 14% for the first two cohorts, but declined to 8% for the most recent birth cohort (Chart 2).19 An important question to address is whether the risk associated with experiencing childhood physical abuse was distributed evenly across population subgroups in each birth cohort.

# The characteristics of childhood physical abuse are not always similar across birth cohorts<sup>20</sup>

Higher rates of childhood physical abuse among males

Males typically report higher rates of childhood physical abuse than females.<sup>21</sup> This study is no exception. Across all three birth cohorts and regardless of severity, males were more likely than females to have experienced childhood physical abuse (tables I and 2)22. The rates for males have declined across birth cohort, which in turn has fueled the decline in the gender difference across birth cohorts. Among those who were born between 1940 and 1959, for example, 25% of males experienced CPA—II percentage points higher than for females. while the difference for males and females born between 1980 and 1999 was less than 3 percentage points. The CPA rate for females has remained relatively constant over birth cohorts.

Table 2
Prevalence of severe childhood physical abuse across sociodemographic characteristics, by birth cohort, 2014

		Birth cohort	
	1940 to 1959	1960 to 1979	1980 to 1999
		percent	
Sex			
Male (ref.)	16.4	16.6	9.1
Female	9.4**	11.6**	6.1 **
Aboriginal identity			
No (ref.)	12.4	13.8	7.4
Yes	22.9**	23.7**	13.9*
Ever under the legal responsibility			
of the government as a child			
No (ref.)	12.2	13.5	7.2
Yes	36.7**	39.0**	33.5 **
Respondent's province/region of birth			
Atlantic provinces	11.3**		4.1 **
Quebec	10.6**		7.7
Ontario	13.3*	14.4	6.5*
Manitoba/Saskatchewan	11.1 **	14.8	6.9 <sup>†</sup>
Alberta/British Columbia	16.7	14.5	10.0
Immigrated to Canada between birth and age 6 (ref.)	18.1	16.8	9.0
Immigrated to Canada between age 7 and 15	13.2	21.3	8.3
Immigrated to Canada after age 15	13.0 <sup>†</sup>	12.4	8.8
Parents' country of birth			
Both parents were born in Canada	12.0	13.8	7.1 <sup>†</sup>
One parent was born in Canada	16.1	14.0	7.0
Neither parent was born in Canada (ref.)	13.4	14.6	9.1
Parents' highest level of education			
Both parents have less than a high school diploma	14.7	17.5 **	13.1 **
At least one parent has a high school diploma	12.0	13.0	8.6†
At least one parent has a non-university diploma	100	45.04	7.0
or certificate	12.0	15.0†	7.8
At least one parent has a university degree (ref.)	13.2	12.3	6.4
Do not know the education level of either parent	9.1 *	11.5	7.4
First language of respondent			
English	13.6	14.8	8.0
French	10.3*	13.0	7.0
Other (ref.)	13.4	13.5	7.4
Total, grand mean	12.7	14.1	7.1

 $<sup>^{\</sup>star}$  significantly different from the reference category (ref.) (p < 0.05)

Source: Statistics Canada, General Social Survey (GSS) on Canadians' Safety (Victimization), 2014.

### Decrease in childhood physical abuse among the Aboriginal population

Past work finds that the Aboriginal population experiences higher rates of victimization and family violence but the differences with the non-Aboriginal population were more pronounced for those born before 1984 than for those born between

1985 and 1999.<sup>23</sup> The CPA rate is highest for Aboriginal children born between 1960 and 1979—close to 40%—which is almost twice that of the non-Aboriginal population born during the same period. In this same birth period, 24% of the Aboriginal population experienced severe CPA, while the rate was significantly lower for the non-Aboriginal population

 $<sup>^{\</sup>star\star}$  significantly different from the reference category (ref.) (p < 0.01)

<sup>†</sup> significantly different from the reference category (ref.) (p < 0.01)

at 14%. However, for the 1980-to-1999 birth cohort, for Aboriginal children the rate for any type of childhood physical abuse dropped to 21%; for severe forms of childhood physical abuse the rate dropped to 14%.<sup>24</sup>

The Aboriginal population has a greater likelihood than the non-Aboriginal population to have spent some time as a child under the legal responsibility of the government. The Aboriginal population also has a greater likelihood of victimization while under the legal responsibility of the government than the non-Aboriginal population.25 During the period covered in this study (i.e., for those born between 1940 and 1999), a large number of Aboriginal children attended the residential school system which existed in Canada from 1830 to the mid-1990s.<sup>26</sup> However, since the GSS did not collect information on the type of government care, it is not possible to separate residential schools from other forms of government-assisted care such as foster care. Links between the Aboriginal population, childhood abuse and the effects of the residential school system cannot be addressed directly with these

There is a strong association, however, between spending some time in childhood under the legal responsibility of the government and the risk of childhood physical abuse. It is not possible to determine if the child was removed from an abusive home or whether the abuse happened elsewhere, or in a foster home, for example. Nonetheless, across all birth cohorts those who ever spent some time under the legal responsibility of the government were twice as likely to also have experienced physical abuse before

the age of 15. With respect to the most severe kinds of abuse, the rate approaches 40% for those born before 1980, while it is over 30% for the most recent birth cohort.

Other factors are also associated with childhood physical abuse

Four additional measures can be used to tap into childhood circumstances involving both potential instability (in terms of immigration-related mobility during childhood) and parents' socioeconomic status.

This study's results indicate that there is little variation between place of birth and childhood physical abuse. Interestingly, those who were born between 1940 and 1959 and immigrated between birth and the age of 6 had significantly higher rates of childhood physical abuse than any Canadian province of birth other than Alberta/British Columbia. Fewer geographical differences were seen for the two most recent birth cohorts.

With respect to parents' country of birth, the most significant variation in terms of childhood physical abuse is found in the youngest birth cohort (1980 to 1999). Individuals born during this period with at least one parent born in Canada had a significantly lower rate of childhood physical abuse than those whose parents were both born outside Canada. The effect remains for severe physical abuse and also in multivariate models that control for a wide range of other factors. Among those born prior to 1980, parents' country of birth appears to have less of an impact on the risk of CPA.

Parental education may serve as a proxy for several factors in childhood, most notably, parental socioeconomic status and childrearing practices.<sup>27</sup> Compared with the highest category of parental education, those in the youngest cohort with parents who had a high school diploma or less education were more likely to have experienced childhood physical abuse-between 16% and 21%, compared with 11% for those in the highest education category. This relationship is also observed among those who experienced the most severe forms of abuse as well as for those born between 1960 and 1979. Moreover, a consistent finding for those born before 1980 is that not knowing the education level of both parents leads to a lower level of childhood physical abuse, compared with those who had at least one parent with a university degree. This result could indicate that a person was raised by someone other than their parents, or that a person had a less intimate relationship with their parents and thus never learned about their highest level of completed education. Earlier birth cohorts had much higher rates of not knowing their parents' level of education<sup>28</sup>: the proportions of those who did not have this information were 17%, 9% and 5% for the 1940-to-1959, 1960-to-1979 and 1980-to-1999 birth cohorts, respectively.29

Lastly, mother tongue appears to have a weak effect on the probability of having experienced childhood physical abuse. There is some indication that those whose first language was French had lower rates of CPA, including severe CPA, but only among the oldest cohort. Those whose first language was English had the highest rates of CPA, a finding that only comes forth in the multivariate analyses.<sup>30</sup>

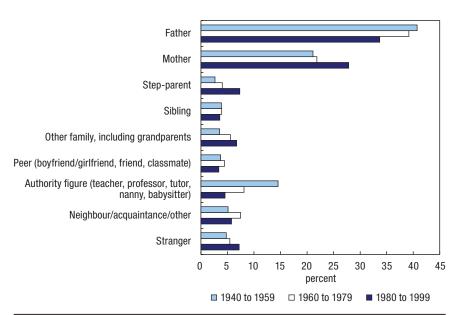
### Parents are the family members most responsible for childhood physical abuse

Knowing the identity of the individual who perpetrated child abuse is important as it can help align policy for better targeting of programs aimed at preventing abuse. For all cohorts, parents are responsible for the disproportionate share of physical abuse that occurred in childhood.31 Given the role of families and the physical and emotional proximity of parents to their children,32 it is perhaps not surprising that parents are the family members most responsible for physical abuse in childhood. The results presented in this section are also based on self-reported data.

Across all birth cohorts, the father was responsible for over 30% of the most serious incidents of abuse. The rate is highest for those born between 1940 and 1959—at over 40%—and drops to 34% for the most recent cohort. On the other hand, the proportion that said their mother was responsible for the most serious incident has increased: it was 21% for those born prior to 1980 and close to 30% for those born after 1980 (Chart 3).

This relationship can be explored further by looking at the sex of the respondent, because, during childhood, boys and girls may experience abuse differently depending on the abuser. 33,34 For the two earliest birth cohorts, the highest rates of physical abuse are at the hands of the father. For example, for those born between 1940 and 1959, about 40% of both males and females said that it was their father who was responsible for the most serious incident of physical abuse before the age of 15 (Chart 4).

Chart 3
Relationship of victims of childhood physical abuse to the person responsible for the most serious incident of physical assault prior to age 15,1 by birth cohort, 2014



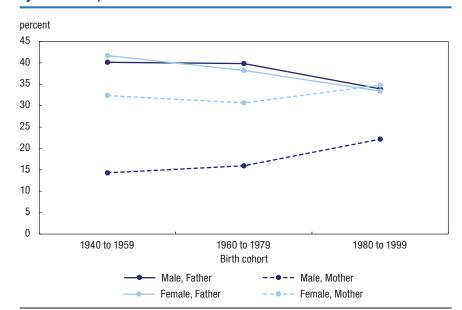
1. The sample is restricted to those who experienced an assault.

Source: Statistics Canada, General Social Survey (GSS) on Canadians' Safety (Victimization), 2014.

by birth cohort, 2014

Chart 4
Relationship of male and female victims of childhood physical abuse to the parent

responsible for the most serious incident of physical assault prior to age 15,1



The sample is restricted to those who experienced an assault.
 Source: Statistics Canada, General Social Survey (GSS) on Canadians' Safety (Victimization), 2014.

Females were more likely than males to be physically abused by their mother.

The rate of childhood physical abuse where the mother was responsible increased for the most recent cohort. For females in that cohort. the rates of childhood physical abuse at the hands of the mother and father were virtually identical: for males in the same cohort, the proportion of those who said that their mother perpetrated the most serious incident was 22%—up from 16% for males born between 1960 and 1979. One possible explanation for this trend could be the increase in the number of lone-parent families, which are more likely to be headed by women.35

Two other trends are worthy of attention. First, and perhaps not surprisingly given the rise in divorce rates,<sup>36</sup> blended families and stepparenthood, the rates of abuse where the main abuser was a stepparent have increased over time. In fact, the rate for the 1980-to-1999 birth cohort was more than double the rate for the 1940-to-1959 cohort.<sup>37</sup>

The other notable trend is that the rates of abuse at the hands of an authority figure have fallen over successive birth cohorts. Authority figures in this study include teachers, professors, tutors, nannies and babysitters.38 About 15% of those born between 1940 and 1959 said that one of these authority figures was responsible for the most serious incident of physical abuse during childhood. The rate dropped to 8% for the 1960-to-1979 birth cohort and fell further to 5% for the 1980-to-1999 birth cohort. It is difficult to determine exactly why these rates have fallen. Possible reasons for the decline may include societal awareness, an increase in

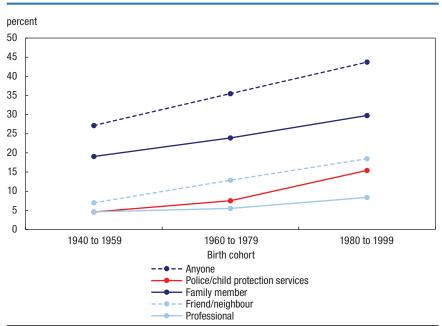
support services to get help, and the diminishing role of corporal punishment within the school system.<sup>39</sup>

# To what extent are victims of childhood physical abuse talking to anyone about the abuse?

Past work suggests that disclosing childhood physical abuse varies by severity and frequency of the abuse. Those who were victims of the most severe types of abuse and who experienced a higher number of incidents were more likely to say that they had discussed the abuse with someone. However, what is less known is whether victims born in more recent birth cohorts are more likely to have spoken with someone than victims born in previous cohorts.

In general, the proportion of those who talked to someone about the abuse increased. That was the case, by about 17 percentage points, between the 1940-to-1959 and the 1980-to-1999 birth cohorts (Chart 5). The rate of increase is similar across all categories, with at least a 10 percentage point increase observed across each of the groups (except for professionals).41 Disclosing physical abuse to a family member appears to be most common, regardless of birth cohort: 19% of victims of abuse who were born between 1940 and 1959 said they had talked to a family member, which increased to 24% for those born between 1960 and 1979, and to 30% for those born between 1980 and 1999. Discussing abuse with professionals, including the police and child services, likely involves the most serious and frequent child

Chart 5
Percentage of victims of childhood physical abuse who talked to anyone about the abuse, by birth cohort, 2014



Note: Professional includes doctor/nurse; priest/rabbi/imam/elder; and teacher.

Source: Statistics Canada, General Social Survey (GSS) on Canadians' Safety (Victimization), 2014.

physical abuse, which are the least common. <sup>42</sup> However, the proportion of those who reported the abuse to police or child protection services increased, particularly between the 1960 to 1979 and the 1980 to 1999 cohort.

Just as childhood physical abuse rates vary by gender, so too does the likelihood that abuse will be disclosed. Earlier results showed that males have significantly higher rates of childhood abuse than females across all birth cohorts, yet males are less likely to disclose their abuse (Chart 6). This gap decreased slightly for the most recent cohort, but is still 8 percentage points higher for females than males (48% versus 40%).

In this analysis, abuse that victims discussed with other people may also include sexual abuse, which is more frequently experienced by females.<sup>43</sup> As such, this inclusion could be driving the gender gap results

observed in Chart 6. However, supplementary analyses shows that when data were restricted to include those who reported physical abuse only, females were still more likely than males to have disclosed the abuse to someone.

### Childhood physical abuse is associated with other types of violence

Childhood physical abuse might not occur on its own—it often cooccurs with other types of violence, such as sexual abuse and witnessing parental violence. <sup>44</sup> Child protection research often includes physical and/or sexual abuse as well as exposure to parental violence as indicators of childhood maltreatment. The latter is often considered a warning sign that the child might also be a victim of abuse. <sup>45</sup> In fact, extensive research draws attention to the impact of multiple forms of family violence as they often happen simultaneously,

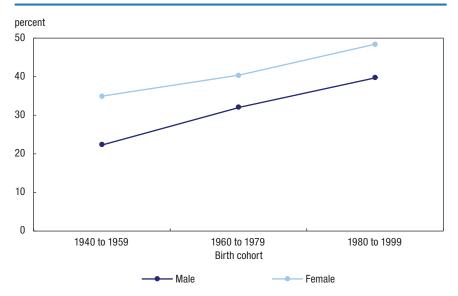
with victims of multiple occurrences of abuse often experiencing greater trauma over the short and long term. He while the impact of these multiple points of childhood trauma has been proven, for simplicity this study focuses primarily on physical abuse.

This section presents information on the proportion of victims who experienced childhood physical abuse, along with whether they also experienced childhood sexual abuse, witnessed violence committed by a parent (or guardian) against another adult, or all three. Results indicate that childhood physical abuse is strongly correlated with sexual abuse in childhood as well as an increased frequency of witnessing parental violence.

For example, the overall rate of childhood physical abuse across ages 15 to 74 is about 18% (Table 3). However, if the respondent had also experienced sexual abuse in childhood, the rate of physical abuse was 46%—a finding that is present across all birth cohorts.

Witnessing parental violence in childhood is also related to experiencing childhood physical abuse. For example, for all individuals aged 15 to 74, the rate of experiencing physical abuse in childhood is 70% if they also witnessed parental violence at least six times. Among those who said they witnessed parental violence between one and five times, 45% said they were victims of childhood physical abuse. And for those who witnessed no parental violence, 13% also said they were victims of childhood physical abuse. The same pattern is observed across all birth cohorts; the results also indicate that the rate of childhood physical abuse decreases slightly over time, regardless of whether victims witnessed parental violence.

Chart 6
Percentage of male and female victims of childhood physical abuse who talked to anyone about the abuse, by birth cohort, 2014



Source: Statistics Canada, General Social Survey (GSS) on Canadians' Safety (Victimization), 2014.

The bottom panel of Table 3 shows the results from an analysis that combines all three of the aforementioned measures of child maltreatment and examines their distribution by birth cohort. Among those aged 15 to 74 who said they had experienced any type of violence in childhood, 53% said it was physical abuse only, 19% said it was sexual abuse only, and 4% said that they had witnessed frequent parental violence only. A further 19% said that they had experienced any two of the three maltreatment factors, while about 5% said they had experienced all three.

### Childhood physical abuse and risk factors in young adulthood

A vast body of research has examined the link between childhood violence and later outcomes. For instance, links have been made with increased risk of physical<sup>47</sup> and mental health problems, <sup>48</sup> lower academic achievement<sup>49</sup> and a greater risk of victimization.<sup>50</sup> The impact of these early negative life events can

be viewed through the lens of a life course framework, which aims to tie life events, experiences and behaviours at multiple points in life together.<sup>51</sup> The pathways and processes through which violence early in life impacts later life outcomes are beyond the scope of this paper since longitudinal data are required for this kind of analysis. However, retrospective reports can be useful,<sup>52</sup> especially if care is taken to reduce recall bias associated with remembering childhood events.<sup>53</sup>

This part of the paper examines the relationship between childhood physical abuse and several pertinent factors among the young adult population aged 15 to 34 (those born between 1980 and 1999).<sup>54</sup> In this section, four mutually exclusive groups are determined based on the degree of severity of the abuse reported by respondents.

The first group are those who have been kicked, bit, punched, choked, burned or physically attacked in some way at least I I times, and are referred to as having experienced "very severe CPA". The second

group, called "severe CPA", includes those who have experienced between one and ten instances of the abuse described above, as well as those who said they had been slapped or hit or pushed, grabbed or shoved, or had something thrown at them hard enough to hurt at least 11 times. "CPA, excluding severe" refers to those who had been slapped or hit or pushed, grabbed or shoved or had something thrown at them, but less frequently (3 to 10 times). The rest of the population are considered as having experienced "no CPA".55

The factors pertinent to young adulthood that were used were organized into the following three main areas:

I. Social and economic integration and trust includes level of trust in their family, people in their neighbourhood, and people from work or school;<sup>56</sup> their level of confidence in police and courts;<sup>57</sup> their sense of belonging to their local community;<sup>58</sup> and whether they were part of the

Table 3
Relationship between childhood physical abuse and other forms of violence during childhood, all persons and by birth cohort, 2014

	Total.	Birth cohort		
	ages 15 to 74	1940 to 1959	1960 to 1979	1980 to 1999
		perc	ent	
Proportion experiencing any childhood physical abuse by other forms of childhood violence				
Any childhood physical abuse	17.8	19.3	20.9	13.3
Childhood sexual abuse				
No childhood sexual abuse	15.0	16.1	17.7	11.7
Any childhood sexual abuse	46.4	43.6	47.9	48.3
Witnessed parental violence <sup>1</sup>				
Never	13.3	14.3	15.8	10.1
1 to 5 times	44.8	47.4	47.5	38.9
6 or more times	69.5	71.7	69.7	65.9
Accumulation of violent events				
Childhood physical abuse only	52.9	46.8	51.3	63.5
Childhood sexual abuse only	18.8	23.3	18.8	12.9
Witnessed only parental violence 6 or more times	4.2	4.0	4.1	4.8
A combination of any two forms of violence	19.4	20.5	20.8	15.5
All three forms of violence	4.7	5.3	5.1	3.3

<sup>1.</sup> Refers to the number of times that the respondent saw or heard at least one of their parents, step-parents or guardians hit each other or another adult. **Source:** Statistics Canada, General Social Survey (GSS) on Canadians' Safety (Victimization), 2014.

- NEET population (i.e., not in education, employment or training).<sup>59</sup>
- 2. Health includes both mental and physical health. Poormental health is measured by asking respondents whether they have a psychological/mental health condition that at least sometimes limits their daily activities, while poor physical health is measured by asking respondents whether they at least sometimes have difficulty with physical activities such as walking, using stairs, using hands or fingers, or doing other physical activities.
- 3. Adult victimization uses two measures of victimization—whether respondents said they had experienced cyberbullying in the past five years, and whether the respondent said they had experienced physical or sexual violence while dating in the last five years (for the latter, only those who said that they had dated at all in the past five years were included).

Across all outcomes, a significant effect is observed for those who said they experienced very severe childhood physical abuse. In most cases, the increase in negative outcomes is substantial over and above those who said they experienced no physical abuse in childhood, and in some cases it is also greater than those who said they experienced forms of childhood physical abuse not categorized as severe. With respect to trust, there is a clear relationship between lack of trust in family, people in the neighbourhood, and people at work or school and having been a victim of childhood physical abuse.

In general, persons who experience even mild physical abuse in childhood have an increased probability of having more mistrust. For instance, when no childhood physical abuse occurred, about 2% of 15-to 34-yearolds had a weak level of trust in their family members (Table 4). In cases of CPA not categorized as severe, however, the proportion increased to 5%, and to 6% for instances of severe abuse. The largest increase is observed in cases where very severe abuse was experienced—among them, 18% of young adults said they had a low level of trust in their family members. Especially large increases were also noted for low levels of trust in people from work or school. When no physical abuse took place, 28% of 15-to-34-year-olds said they had a low level of trust in people from work and school, whereas when very severe physical abuse occurred, the proportion increased to 50%.

Similarly, large increases were observed with respect to low levels of confidence in the police and court system when an individual had experienced physical abuse in childhood. For instance, in the case of low confidence in the police, the rate increased from 9% for those who did not experience childhood physical abuse to 37% for those who experienced very severe physical abuse. Young adults who had experienced childhood physical abuse also had a weak sense of belonging to their local community: 46% who had experienced very severe physical abuse in childhood felt a weak attachment to their current local community.

Rounding out the indicators of social and economic integration is a measure often used to indicate lack of youth integration into society

via the labour market and the postsecondary education system: the NEET population. NEET refers to those who said their main activities in the past year were "not in education, employment or training." NEET youth may be more vulnerable to economic downturns and their future earnings and potential savings might also be affected. 60

In this study, young adults aged 20 to 34 who had not experienced any childhood physical abuse had a NEET rate of 12%, however, this proportion rose to 32% if they said they had been the victim of very severe physical abuse in childhood. The implication is that in cases where very severe abuse took place, not only are young adults at risk for a wide range of deleterious social consequences, they are also more likely to be financially vulnerable.

With respect to health, both measures used in this paper indicate that persons who experienced any physical abuse in childhood (regardless of severity) had an increased risk of poor health in early adulthood. For example, 6% of individuals who experienced no physical abuse in childhood said they had a psychological or mental health condition that at least sometimes limits their daily activities. However, if they had experienced physical abuse not categorized as severe, their rate of a limiting psychological condition increased to 13%; to 15% if severe abuse had occurred, and to 31% if the abuse was very severe. Similar results are observed for physical health. The proportion of the population aged 15 to 34 who said they at least sometimes had difficulty with physical activities increased from 5% if they had experienced no physical abuse in childhood to 19% if very severe physical child abuse had occurred.

Table 4
Relationship between severity of childhood physical abuse and various indicators of social and economic integration, health and adult victimization, all persons aged 15 to 34,12014

		Childhood physical abuse (CPA)			
			CPA		Very
		No CPA	excluding	Severe	Severe
	Total	(ref.)	severe	CPA	CPA
		pro	pportions (perc	ent)	
Social and economic integration and trust					
Respondent has a weak level of trust in					
family	2.3	1.6	4.6 <sup>†</sup>	5.5*	17.8 **
people in the neighbourhood	45.3	43.3	54.4**	57.0 **	61.7**
people from work/school	29.1	27.5	36.0*	37.9 **	49.6 **
Respondent has a low level of confidence in					
police	10.6	9.0	12.7 <sup>†</sup>	20.0 **	37.2**
courts	17.3	15.9	20.1	27.7 **	39.7 **
Weak sense of belonging to local community	30.2	29.0	33.0	38.3 **	46.0*
Not in education, employment or training (NEET) in the past year (aged 20 to 34)	12.4	11.5	12.4	15.9†	32.3*
Health					
Respondent has a psychological/mental health condition that at least sometimes limits					
their daily activities	7.5	6.2	13.1 **	15.0 **	31.1 **
Respondent at least sometimes has difficulty with their physical activities <sup>2</sup>	5.9	4.9	9.7*	12.6 **	19.3*
Adult victimization					
Victim of cyberbullying in the past 5 years (aged 20 to 34)	8.8	6.9	15.9 **	22.3 **	28.4 **
Experienced violence while dating in the past 5 years (aged 20 to 34)	5.7	4.0	12.2 **	16.2**	28.9**
			number		
Unweighted sample size	7,855	6,768	423	562	102
Weighted sample size	9,344,646	8,102,999	506,966	613,150	121,531

 $<sup>^{\</sup>star}$  significantly different from the reference category (ref.) (p < 0.05)

Source: Statistics Canada, General Social Survey (GSS) on Canadians' Safety (Victimization), 2014.

The last two indicators—the risk of being a victim of cyberbullying and whether violence had been experienced while dating over the past five years—have been selected to demonstrate the risk of victimization. Cyberbullying has been shown to be a risk factor for poor mental health.61 In this study, the risk of being a victim of cyberbullying in early adulthood increased if physical abuse occurred in childhood. Compared to cases where no abuse occurred, the rate increased by 9 percentage points (to 16%) if abuse not categorized as severe occurred, and 22 percentage points (to 28%) if very severe abuse occurred. Moreover, there also appears to be an association between physical abuse in childhood and experiencing violence in a dating relationship. For example, 29% of young adults who had been a victim of very severe physical child abuse experienced dating violence, compared with 4% for their counterparts who had not experienced any physical abuse in childhood.<sup>62</sup>

#### Conclusion

Childhood physical abuse has decreased among more recent birth cohorts in Canada. Looking at the experiences of those born between 1940 and 1999, childhood physical abuse declined for the most recent birth cohort (1980 to 1999) compared with earlier cohorts (i.e., those born between 1940 and 1959 and between 1960 and 1979).

Self-reported data from the 2014 General Social Survey show that males were more likely than females to experience physical abuse in childhood. However, in each birth cohort they were also less likely to discuss the abuse with authorities or others. The Aboriginal population also had significantly higher rates of physical abuse in childhood—although in more recent birth cohorts the gap with the non-

 $<sup>^{\</sup>star\star}$  significantly different from the reference category (ref.) (p < 0.01)

 $<sup>^{\</sup>dagger}$  significantly different from the reference category (ref.) (p < 0.10)

<sup>1.</sup> Aged 15 to 34 unless stated otherwise.

<sup>2.</sup> Includes walking, using stairs, using hands or fingers or doing other physical activities.

Aboriginal population decreased. For each cohort, having been in government care was also related to childhood physical abuse. Parental background was also found to be an important factor.

Childhood physical abuse does not usually occur on its own; it often occurs in conjunction with other forms of violence, particularly sexual abuse and the witnessing of violence committed by a parent or guardian. The results of this study showed that experiencing either of these other forms of violence increased the probability that the respondent had also experienced physical abuse.

Lastly, this paper showed that physical abuse in childhood is associated with numerous harmful

situations in young adulthood. Young adults who experienced physical abuse in childhood were at increased risk of having low levels of trust in family, people in the neighbourhood and at work and school, as well as low levels of confidence in police and the court system.<sup>63</sup> Childhood physical abuse may also have an influence on the socioeconomic integration of youth: young adults aged 20 to 34 who experienced very severe childhood physical abuse had a significantly higher probability of being in the NEET (not in education, employment or training) population in the past year. Lastly, physical abuse was associated with a higher prevalence of physical and mental health conditions, and a higher prevalence of adult victimization.

The results of this study are based on retrospective reports of childhood physical abuse and therefore may be subject to bias related to memory and changing definitions of what constitutes abuse.<sup>64</sup> In the absence of longitudinal studies, the results based on retrospectively collected child maltreatment histories from cross-sectional surveys such as the 2014 GSS are an important tool in the study of child maltreatment over different time periods.

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### Data sources, methods and definitions

#### **Data sources**

This report uses data from the 2014 General Social Survey (GSS) on Canadians' Safety (Victimization). The target population consists of the non-institutionalized Canadian population aged 15 and over, living in the 10 provinces. The data were collected throughout the 2014 calendar year. Responding to the survey is voluntary and the data are collected directly from the survey respondents (self-declared). The 2014 GSS on Canadians' Safety (Victimization) had a final sample size of 33,127 and a 52.9% response rate. Self-reported data is different from police-reported data because not all incidents are necessarily reported to police.

#### **Definitions**

#### Childhood physical abuse

This report applies a definition that appears elsewhere in the literature, <sup>65</sup> using **frequency** and **severity** to define childhood physical abuse and severe childhood physical abuse. The definition is based on the GSS questions below:

**Definition: Any childhood physical abuse** (based on a minimum frequency of 3 to 5 for item 1 or item 2, or a minimum frequency of 1 to 2 for item 3)

Question: Before age 15, how many times did an adult...

- slap you on the face, head or ears, or hit you with something hard to hurt you? (answer: at least 3 to 5 times)
- 2. push, grab, shove or throw something at you to hurt you? (answer: at least 3 to 5 times)
- kick, bite, punch, choke, burn you, or physically attack you in some way? (answer: at least 1 to 2 times)

**Definition: Severe childhood physical abuse** (based on a minimum frequency of more than 10 for item 1 or item 2, or a minimum frequency of 1 to 2 for item 3)

Question: Before age 15, how many times did an adult...

- slap you on the face, head or ears, or hit you with something hard to hurt you? (answer: at least 11 times)
- push, grab, shove or throw something at you to hurt you? (answer: at least 11 times)
- kick, bite, punch, choke, burn you, or physically attack you in some way? (answer: at least 1 to 2 times)

### **Supplementary information**

Table A1 Distribution of population across sociodemographic characteristics, by birth cohort, 2014

		Birth cohort	
	1940 to 1959	1960 to 1979	1980 to 1999
		percent	
Sex			
Male (ref.)	48.7	50.1	50.9
Female	51.3*	49.9*	49.2
Aboriginal identity			
No (ref.)	97.3	96.8	96.1
Yes	2.7*	3.2*	3.9
Ever under the legal responsibility of the government as a child			
No (ref.)	97.7	97.5	98.0
Yes	2.3*	2.5*	2.0
Respondent's province/ region of birth			
Atlantic provinces	9.4*	7.4*	6.4
Quebec	24.4*	20.3*	19.2
Ontario	24.2*	25.6*	30.3
Manitoba/Saskatchewan	8.4*	7.0*	6.6
Alberta/British Columbia	11.9*	12.7*	18.3
Immigrated to Canada between birth and age 6 (ref.)	2.8	3.7	4.2
Immigrated to Canada			
between age 7 and 15	2.8	3.0	6.0
Immigrated to Canada			
after age 15	16.1*	20.4*	8.9
Parents' country of birth			
Both parents were born in Canada	64.0*	57.6*	60.1
	04.0	37.0	00.1
One parent was born in Canada	9.9*	7.3*	10.7
Neither parent was born	3.3	7.5	10.7
in Canada (ref.)	26.1	35.2	29.2
Parents' highest level of education	20.1	00.2	20.2
Both parents have less than			
a high school diploma	38.2*	22.5	5.8
At least one parent has			
a high school diploma	22.1*	26.0	19.4
At least one parent has			
a non-university diploma			
or certificate	10.9	18.1*	27.5
At least one parent has	400		
a university degree (ref.)	12.0	24.5	41.9
Do not know the education	4074	0.04	- 4
level of either parent	16.7*	8.9*	5.4
First language of respondent		F0 7+	F0 7
English	57.5*	53.7*	58.7
French	25.1*	20.7*	19.8
Other (ref.)	17.4	25.6	21.5
		number	
Unweighted sample size	11,627	10,418	7,959
Weighted sample size	7,772,348	9,949,442	9,476,566

<sup>\*</sup> significantly different from the reference category (ref.) (p < 0.05)

Source: Statistics Canada, General Social Survey (GSS) on Canadians' Safety (Victimization), 2014.

Table A2 Predicted probability of childhood physical abuse across sociodemographic characteristics (expressed as a difference from the reference category), by birth cohort, 2014

		Birth cohort	
	1940 to 1959	1960 to 1979	1980 to 1999
	ave	rage marginal et	ffects
Sex (ref: Male)			
Female	-11.6**	-7.9*	* -2.4*
Aboriginal Identity (ref: No)			
Yes	9.9**	16.3*	* 6.4*
Ever under the legal			
responsibility of the			
government as a child			
(ref: No)			
Yes	27.1 **	23.9*	* 24.8**
Respondent's province/			
region of birth (ref:			
immigrated to Canada			
birth to age 6)	0.0*	1.4	7.0*
Atlantic provinces	-8.6*	-1.4	-7.2*
Quebec Ontario	-8.8*	-0.1 -1.7	-0.8 -5.9†
	-6.7 <sup>†</sup>		
Manitoba/Saskatchewan	-8.6*	-0.5	-5.2
Alberta/British Columbia	1.7	-1.0	2.2
Immigrated to Canada	F 0	0.1	0.1
between age 7 and 15	-5.0	3.1	-3.1
Immigrated to Canada	-4.8	-5.8 <sup>†</sup>	-5.6 <sup>†</sup>
after age 15  Parents' country of birth	-4.0	-3.0	-3.0
(ref: Neither parent was			
born in Canada)			
Both parents were born			
in Canada	0.6	-5.3*	-7.8**
One parent was born	0.0	0.0	
in Canada	2.9	-4.8 <sup>†</sup>	-7.6**
Parents' highest level			
of education (ref: At			
least one parent has a			
university degree)			
Both parents have less			
than a high school diploma	2.0	4.5 *	* 8.9**
At least one parent has			
a high school diploma	-1.4	-1.3	5.0*
At least one parent has			
a non-university diploma			
or certificate	-1.5	3.0 †	1.8
Do not know the education	0 = 44	- 0.1	
level of either parent	-6.7**	-5.8*	* -0.4
First language			
of respondent (ref: Other)	0.0+	0.0+	F 0.11
English	3.3†	3.9†	5.3**
French * significantly different from the re	0.1	1.4	1.6

Note: Estimates are average marginal effects at the mean, derived from a multivariate logistic regression. They have been multiplied by 100.

Source: Statistics Canada, General Social Survey (GSS) on Canadians' Safety (Victimization),

 $<sup>^{\</sup>star\star}$  significantly different from the reference category (ref.) (p < 0.01)

 $<sup>^{\</sup>dagger}$  significantly different from the reference category (ref.) (p < 0.10)

Table A3
Predicted probability of severe childhood physical abuse across sociodemographic characteristics (expressed as a difference from the reference category), by birth cohort, 2014

	Birth cohort		
	1940 to 1959	1960 to 1979	1980 to 1999
	avera	ige marginal effe	cts
Sex (ref: Male)			
Female	-7.0 **	-5.3**	-2.8**
Aboriginal identity (ref: No)			
Yes	8.6 **	8.7**	4.5 <sup>†</sup>
Ever under legal responsibility of the government as a child (ref: No)			
Yes	24.4 **	26.9**	22.6 **
Respondent's province/ region of birth (ref: immigrated to Canada birth to age 6)			
Atlantic provinces	-6.7 <sup>†</sup>	-1.4	-4.6*
Quebec	-5.8	0.0	1.5
Ontario	-5.3	-1.3	-2.8
Manitoba/Saskatchewan	-7.4*	-1.5	-2.8
Alberta/British Columbia	2.6	-1.5	-0.1
Immigrated to Canada	2.0	1.0	0.1
between age 7 and 15	-3.8	2.8	-0.6
Immigrated to Canada	3.0	2.0	0.0
after age 15	-4.3	-3.9	0.1
Parents' country of birth	7.0	0.0	0.1
(ref: Neither parent was born in Canada)			
Both parents were born			
in Canada	0.1	-4.2*	-4.2*
One parent was born			
in Canada	2.7	-3.7	-3.7 <sup>†</sup>
Parents' highest level			
of education (ref: At			
least one parent has a			
university degree)			
Both parents have less	0.0	E 0.44	0.044
than a high school diploma	2.2	5.9**	6.3**
At least one parent has		0.0	0.04
a high school diploma	-1.4	8.0	2.2*
At least one parent has			
a non-university diploma	0.0	0.0*	1.5
or certificate	-0.6	2.9*	1.5
Do not know the education	0.7*	4.7	0.1
level of either parent	-3.7*	-1.7	0.1
First language			
of respondent (ref: Other)	1.3	3.4*	4.0**
English			
French	-1.2	0.5	1.0

 $<sup>^{\</sup>star}$  significantly different from the reference category (ref.) (p < 0.05)

**Note:** Estimates are average marginal effects at the mean, derived from a multivariate logistic regression. They have been multiplied by 100.

**Source:** Statistics Canada, General Social Survey (GSS) on Canadians' Safety (Victimization), 2014.

### **Notes**

- See Shields et al. (2016c).
- 2. See Hovdestad et al. (2015) for a recent comprehensive review of the literature on child maltreatment.
- 3. See Bohnert et al. (2014).
- 4. This restriction removes about 3,100 unweighted cases, or about 2,230,084 weighted cases (approximately 7.6%).
- 5. See Widom and Shepard (1996); Scott and Alwin (1998); Smith (2009).
- 6. The current birth cohorts do not align with earlier work by Shields et al. (2016c) on childhood sexual abuse by birth cohort. Their birth cohorts would not have been feasible for many parts of the analysis in this paper due to their small sample size. However, when possible, supplementary analyses carried out on the same birth cohorts showed quite similar findings to those currently presented.
- 7. See Burczycka and Conroy (2017); Shields et al. (2016c).
- See Carrière et al. (2017); Boyce (2016); Moyser (2017); Turner (2016).
- 9. See Dong et al. (2005).
- See Berry and Hou (2016); Corak (2011); Gil and Vega (1996).
- See Guryan et al. (2008); Nomaguchi and Brown (2011); Ravanera and Rajulton (2006); Sayer et al. (2004).
- 12. It is not known if information on parental education was obtained before the respondents were born or some time during their childhood. Like previous research, this paper assumes that parents' highest level of education was likely completed before childbearing started (see Blossfeld and Huinink, 1991; Guzzo, 2006; Ravanera and Rajulton, 2006). With respect to earlier birth cohorts, this is especially salient considering that life events such as childbearing and educational attainment followed more of a linear path (Marini, 1984). It can thus likely be assumed that, for the most part, parents' level of completed education reported in 2014 was likely obtained before respondents' birth.
- 13. See Bohnert et al. (2014).
- 14. See Shields et al. (2016c).

<sup>\*\*</sup> significantly different from the reference category (ref.) (p < 0.01)

 $<sup>^{\</sup>dagger}$  significantly different from the reference category  $\,$  (ref.) (p < 0.10)

- 15. See Walsh et al. (2008); Shields et al. (2016a); Afifi et al. (2015). A word of caution on comparisons between this paper and those that have used the CCHS: studies that have used the CCHS included spanking in their definition, however, this term is not used in the GSS.
- 16. The current definition uses a slightly expanded definition of severe CPA than Shields et al. (2016a) use—it also includes those who said they had been slapped or hit or pushed, grabbed or shoved, or had something thrown at them hard enough to hurt them more than 10 times before the age of 15, which Shields et al. did not include in their definition of severe CPA.
- 17. Past work from Statistics Canada (Burczycka and Conroy, 2017; Perreault, 2015) use a less stringent definition of CPA. In those studies, CPA also included individuals who said that they had experienced either (1) or (2) at least once or twice.
- 18. See Burczycka and Conroy (2017).
- 19. The exact reasons for the decline are not easily testable. Some work from the United States, however, suggests that multiple factors likely contributed to the decline in child maltreatment in more recent time periods, including greater economic prosperity, an increase in social agencies dealing with child maltreatment, and an increase in psychiatric pharmacology that might address parents' potential mental health issues (see Finkelhor and Jones 2006).
- See Table A1 in the Supplementary information section for the detailed sociodemographic characteristics of each cohort.
- 21. See Burczycka and Conroy (2017).
- 22. The results of multivariate logistic regressions including all the variables observed in tables I and 2 are located in tables A2 and A3 in the Supplementary information section.
- 23. See Boyce (2016); Burczycka and Conroy (2017).
- 24. When other variables are considered at the same time, the rate is no longer significantly higher for the Aboriginal population than the rate for the non-Aboriginal population at the 5% level. See the multivariate results in Table A3 in the Supplementary information section.
- 25. See Burczycka and Conroy (2017); Trocmé et al. (2004).
- 26. See Aboriginal Healing Foundation (2002); Arriagada (2016); Truth and Reconciliation Commission of Canada (2015).

- 27. See Ravanera and Rajulton (2006); Sayer et al. (2004); Guryan et al. (2008); Nomaguchi and Brown (2011).
- 28. Recall bias may be a factor for the older cohorts.
- 29. Some supplementary analyses that modeled the effect of various characteristics on the likelihood of not knowing the education level of both parents by birth cohort were carried out. For the earliest birth cohort, the most significant factors increasing the risk of not knowing their parents' education level were having ever been under the legal responsibility of the government and having a mother tongue that is French. For the middle birth cohort, being male, having ever been under the legal responsibility of the government and having foreign-born parents increased the probability. For the most recent cohort, being male and having foreign-born parents increased the probability of not knowing their parents' education level.
- 30. See tables A2 and A3 in the Supplementary information section.
- 31. Burczycka and Conroy (2017) found a similar effect for physical abuse. For sexual abuse, however, the opposite was found: the most severe incident was more likely committed by a non-family member.
- 32. See Anderson (2010).
- 33. See Burczycka and Conroy (2017).
- 34. Some work from the United States, for example, found that when controlling for fathers' employment status, physical assault of sons at the hands of either parent may be greater than for girls in households where mothers were employed for all or most of childhood (Nomaguchi and Milkie 2006).
- 35. More than 80% of lone-parent families are headed by women (Bohnert, 2014).
- 36. See Milan (2013) for an overview of current and historical marital status from Canadian censuses.
- 37. In some supplementary analyses that separated stepparents into stepmothers and stepfathers, the increase in the CPA rate for step-parents was found to be mostly the result of an increase in the CPA rate for stepfathers. The sample size for stepmothers was insufficient to carry out additional analyses.
- 38. The group that comprises "teachers, professors, tutors" is combined with "nannies and babysitters" because of small cell sizes for the latter group. When only teachers, professors and tutors are examined, the results and trends observed across birth cohorts are unchanged.

- 39. For example, a Toronto Board of Education case study (Axelrod 2010) found that the City of Toronto prohibited the use of the strap in 1971—the first school board in Ontario to do so. Physical discipline was not officially abolished from all Canadian schools until 2004 following a Supreme Court ruling (Canadian Legal Information Institute 2004)
- 40. See Burczycka and Conroy (2017); Afifi et al. (2015).
- 41. The proportions in Chart 5 that refer to birth cohorts after 1960 (with the exception of professionals) are significantly higher at the 0.05 level than for those before 1960, while for all groups, including professionals, the 1980-to-1999 birth cohort is significantly higher than the 1940-to-1959 birth cohort.
- 42. For these latter types of disclosure, this paper sees very similar increases across birth cohorts as observed by other recent Canadian research (see Afifi et al. 2015), which found a threefold increase in the disclosure of child abuse to child protection services for those born between 1948 and 1962 and between 1978 and 1994 (from 4.5% to 13.6%, respectively). The increase currently observed in this paper was also about three times larger between similar time periods. Little work has been carried out to examine the prevalence of social service agencies and/or programs in the educational system that increase awareness of physical abuse among children. See Macmillan et al. (2009) and Sege and Flaherty (2008) for two examples of research on the issue of public awareness and intervention of child maltreatment.
- 43. See Burczycka and Conroy (2017).
- 44. See Afifi et al. (2015); Burczycka and Conroy (2017).
- 45. See Osofsky (2003).
- 46. See Anderson (2010); Cross et al. (2012); Finkelhor et al. (2007); Romito and Grassi (2007).
- 47. See Afifi et al. (2016); Ferraro et al. (2016); Shields et al. (2016a); Shields et al. (2016b).
- 48. See Afifi et al. (2014); Hill et al. (2010); Horwitz et al. (2001); Schilling et al. (2008); Turner et al. (2006).
- 49. See Macmillan (2000); Perez and Widom (1994); Porche et al. (2011).
- 50. See Burczycka and Conroy (2017); Perreault (2015); Ehrensaft et al. (2003); Smith et al. (2003).
- 51. See Macmillan (2001); Wheaton and Gotlib (1997).
- 52. See Burczycka and Conroy (2017); Perreault (2015).
- 53. See Widom and Shepard (1996).

- 54. In some cases when the occurrence of the event in young adulthood took place in the five years prior to the survey, the sample is restricted to those aged 20 to 34 in order to reduce ambiguity on temporal ordering of CPA and the event in young adulthood. The sample for the analysis of the NEET population is also restricted to those aged 20 to 34 such that students in high school were not included.
- 55. See Shields et al. (2016b). This approach was not feasible for the birth cohort analysis as the sample size was not large enough across all covariates and categories of abuse.
- 56. Using a scale of I to 5, where I means "cannot be trusted at all" and 5 means "can be trusted a lot," respondents were asked how much they trust the people in their family, neighbourhood, or at work or school. Those scoring I, 2 or 3 were deemed to have a lower level of trust.
- 57. Respondents who said that they had "not very much confidence" or "no confidence at all" in the police or criminal courts were deemed to have a low level of confidence in these two institutions.
- 58. Respondents who stated that their opinion of their sense of belonging to their local community is "somewhat" or "very" weak were defined as having a weak sense of belonging to their local community.
- 59. Within the NEET population in this sample of 20- to 34-year-olds, the top 5 other main activities in the past year were caring for children (49%), looking for work (17%), maternity/paternity leave (10%), household work (7%), and long-term illness (5%).
- 60. See Carcillo et al. (2015).
- 61. See Hango (2016).
- 62. Some past work suggests that the violence experienced in childhood may undermine victims' perception of self-worth and agency. See Macmillan (2001) for an overview of this literature.
- 63. Burczycka and Conroy (2017) recently found similar results across a wider age group.
- 64. See Horwitz et al. (2001); Widom and Shepard (1996). However, there is also some evidence to suggest that this bias may not be particularly pronounced. See more recent evidence from Smith (2009) based on the recollection of health histories in childhood.
- 65. See Walsh et al (2008); Shields et al. (2016a).

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