



Research article

## Canadian trends in filicide by gender of the accused, 1961–2011<sup>☆</sup>



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### ARTICLE INFO

**Article history:**

Received 4 March 2015

Received in revised form 9 July 2015

Accepted 17 July 2015

Available online 10 August 2015

**Keywords:**

Maternal/paternal filicide

Trends

Canada

### ABSTRACT

This paper provides a comprehensive historical and contemporary picture of filicide in Canada for more than half a century. Focusing on 1,612 children under age 18 that were killed by their parents between 1961 and 2011, regional and temporal trends in the gender of accused are examined as well as differences in maternal and paternal filicides by the gender and age of the victim, the age and marital status of the accused, type of parental relationship, cause of death, motive, history of family violence, and clearance status. Results show that there are significant differences in filicides by mothers and fathers. Five possible emerging trends were identified: an increasing gender gap in accused, increasing presence of relationship breakdown, growing number of cases involving stepfathers and a prior history of family violence, and declines in accused who committed suicide. Implications of these trends for interventions and prevention are discussed and future research priorities highlighted.

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### Introduction

The intentional killing of a child prompts reactions of shock and horror from most members of society, a situation that is greatly exacerbated when the accused is the child's father or mother. In Westernized societies, the majority of child homicide victims are killed by their parent, stepparent, or guardian, acts broadly referred to as filicide (Dixon, Krienert, & Walsh, 2013). During the past two centuries, filicide rates have declined in Westernized countries as have child homicide rates more generally (Sturup & Granath, 2014). The true rate of filicide remains unknown, however, because it is assumed that many filicide perpetrators successfully conceal their crimes (Koenen & Thompson, 2008). As a result, such acts are believed to be underreported, particularly when infants are involved (Bortoli, Coles, & Dolan, 2013). There is no standard definition of filicide, and studies often focus on types of filicide separately using different sample parameters. For example, some researchers have focused on infanticide which has been legally defined in several countries as the murder of a child before their first birthday by their mother (Porter & Gavin, 2010). Neonaticide is the murder of a newborn on his or her day of birth, and research has shown that these acts most commonly involve mothers rather than fathers (Porter & Gavin, 2010). When studies focus on filicides more generally, varying age groups are used to identify the sample. For these reasons, comparisons across studies can be difficult, and findings often appear contradictory.

<sup>☆</sup> The author thanks the Canada Research Chair program which supported this research.

It is recognized that at least half of filicidal acts are committed by fathers even though the majority of studies have focused on maternal filicide (West, Hatters Friedman, & Resnick, 2009). Few studies have systematically compared the similarities and differences in cases involving mothers and fathers who kill their children, but recent work in Australia (Eriksson, Mazerolle, Wortley, & Johnson, 2014), the Netherlands (Liem & Koenraadt, 2008), and the United States (Dixon et al., 2013) have begun to address this gap. To build on this growing body of international research, the aim of this study is to compare trends and patterns in filicide cases by gender of the accused focusing on the total population of filicide cases that occurred in Canada over more than half a century. Commonly found differences in the commission of and motivations for filicide by mothers and fathers may be important in the development of appropriate prevention strategies.

## Prior Research on Gender and Filicide

According to many community samples and aggregate crime data, mothers and fathers have been shown to commit filicide at almost the same rate, making it one of the few crimes that women commit as often as men (Adelson, 1961; Fox & Zawitz, 2007; Kunz & Bahr, 1996; Mariano, Chan, & Myers, 2014). However, depending on the jurisdiction, time period, and type of filicide being examined, research has also shown that mothers commit filicide more often than fathers (Bourget & Bradford, 1990; Dawson & Lanagan, 1994). Conversely, paternal filicide has been shown to be more common than maternal filicide (Bourget & Gagne, 2007; Flynn, Shaw, & Abel, 2007; Marks & Kumar, 1993). Some recent comprehensive reviews of filicide, infanticide, and neonaticide (Bourget, Grace, & Whitehurst, 2007; Harris, Hilton, Rice, & Eke, 2007; Koenen & Thompson, 2008; Porter & Gavin, 2010; West et al., 2009), and some recent empirical research (Dixon et al., 2013; Leveillee, Marleau, & Dubé, 2007; Liem & Koenraadt, 2008; Putkonen et al., 2011) have begun to examine whether mothers and fathers kill their children in the same way and for the same reasons. Findings have been contradictory because of the varying samples examined.

### *Socio-Demographic Characteristics of Femicide Accused and Their Victims*

**Perpetrators.** The majority of research has shown that fathers who kill their children are older (Bourget et al., 2007; Dixon et al., 2013; Koenen & Thompson, 2008; Liem & Koenraadt, 2008), more likely to be employed (Putkonen et al., 2011), and more likely to have a criminal record (Harris et al., 2007; Koenen & Thompson, 2008; Marks & Kumar, 1993; Putkonen et al., 2011) than mothers. Recent Australian research shows that filicidal fathers are more likely to report unemployment as well as alcohol and drug problems compared to mothers (Eriksson et al., 2014). Most studies show that single mothers are more at risk of perpetrating filicide than single fathers (Koenen & Thompson, 2008). Limited existing research shows that stepparents, particularly stepfathers, are more at risk of killing their stepchildren than biological parents (Daly & Wilson, 1988; Dixon et al., 2013; Harris et al., 2007; Wilson, Daly, & Daniele, 1995). Biological parents remain the most common filicidal perpetrator (Mariano et al., 2014).

**Victims.** The majority of research has found an even distribution of female and male filicide victims (Bourget & Gagne, 2007; Dixon et al., 2013; Flynn et al., 2007; Kunz & Bahr, 1996; Laporte, Tzoumakis, Marleau, & Allaire, 2005; West et al., 2009). However, findings are contradictory as to whether or not the victim's sex varies by gender of accused. For example, some research shows fathers were more likely to kill male children compared to mothers (Bourget et al., 2007; Mariano et al., 2014) whereas other work found mothers killed a higher proportion of male victims (Dawson & Lanagan, 1994). Overall filicide risk declines as children age (Koenen & Thompson, 2008). Fathers rarely commit neonaticide (Porter & Gavin, 2010), more often killing older children compared to mothers who more often kill infants (Bourget et al., 2007; Harris et al., 2007; Koenen & Thompson, 2008; Kunz & Bahr, 1996; Liem & Koenraadt, 2008; Mariano et al., 2014; Putkonen et al., 2011). Although the presence of risk factors has been examined, more attention needs to focus on the combinations of risk factors that may be more lethal, and whether these combinations vary by gender of the accused.

### *Situational Characteristics in Femicide*

Research shows that fathers are more likely to use what are argued to be more violent methods, including weapons and particularly knives (Dixon et al., 2013; Liem & Koenraadt, 2008; Putkonen et al., 2011). Fathers are more likely to stab, squeeze or beat their children to death whereas mothers are more likely to drown, suffocate or gas their victims (Koenen & Thompson, 2008; Putkonen et al., 2011). Substance abuse has been found to be more common among filicidal men than women (Eriksson et al., 2014; Harris et al., 2007; Putkonen et al., 2011). Findings are contradictory with respect to suicide as an outcome for filicidal offenders. Some research has shown that fathers are less likely to commit suicide than mothers, but other research shows that fathers are more likely to commit suicide following the filicide (Bourget et al., 2007; Cooper & Eaves, 1996; Daly & Wilson, 1988). Recent work has suggested that filicide-suicides have been declining overall in some countries, however (Sturup & Granath, 2014). Finally, the majority of research demonstrates that men are more likely to kill additional victims in cases of filicide, primarily their spouse and/or other children, whereas this is seldom the case for mothers (Dixon et al., 2013; Harris et al., 2007; Koenen & Thompson, 2008; Marleau, Poulin, Webanck, Roy, & Laporte, 1999; West & Hatters Friedman, 2007; West et al., 2009). Often ending with the suicide of the offender, these cases are referred

to as familicides (Bourget et al., 2007; Liem & Koenraadt, 2008; Wilson et al., 1995), and children are often collateral, rather than the primary, victims in these cases (Meyer & Post, 2013).

## Explaining Filicide

There has been little recent theoretical development contributing to our understanding of the phenomenon of filicide beyond various classifications or typologies (for reviews, see Harris et al., 2007; Koenen & Thompson, 2008). Some argue that various types of filicide require different explanations, such as infanticide (Silverman & Kennedy, 1988). Furthermore, little attention has been paid to examining whether or not typologies or theories of filicide apply similarly to mothers and fathers. Canadian researchers Bourget and Bradford (1990) were the first to recognize the role of gender as a significant category in and of itself when explaining filicides. They included paternal filicide as one of five categories in their typology with pathological filicide, accidental filicide, retaliating filicide, and neonaticide (p. 75). The lack of research on fathers who kill their children continues to persist, however, preventing further theoretical development and evolution of typologies. Existing research on motivations can begin to shed some light on the different reasons why mothers and fathers kill their children, however.

Some studies have demonstrated that fathers who kill their children more often had a documented history of violence than did mothers (Bourget et al., 2007; Eriksson et al., 2014). Thus, one motivation or precursor for paternal filicide is child abuse that results in a fatality (Liem & Koenraadt, 2008), including accidental filicides (Eriksson et al., 2014). Research has also shown that men are more likely to be motivated by retaliatory anger or jealousy (Bourget et al., 2007; Resnick, 1969). These emotions are most often directed toward the child's mother, but they also kill their child or children (Liem & Koenraadt, 2008). This is supported by studies that show filidical fathers often kill their female partner in the same incident. It is increasingly recognized that fathers act more often out of vengeful anger or retaliation because of sexual jealousy, marital instability, and actual or pending separation from a female partner (Harris et al., 2007). The latter situation often involves child custody and access disputes (Jaffe et al., 2013; Jaffe, Campbell, Hamilton, & Juodis, 2012). This is much less frequent for filidical mothers.

Linked to the above findings, one explanation for filicide that has dominated the literature is the evolutionary or selectionist framework first proposed by Daly and Wilson (1988). Within this tradition, filicide is perceived as the outcome of parental manipulation in which parental actions are "designed to seize control of reproduction by affecting resource allocation among offspring or by affecting the reproductive behaviour of mates" (Harris et al., 2007, p. 92). This framework is supported by research that has shown men are more likely to kill child when their paternity is in question (Daly & Wilson, 1988; Wilson et al., 1995), when they view children as a burden or an obstacle (Resnick, 1969), or when they fear losing their spouse (Daly & Wilson, 1988; Wilson et al., 1995). Support for this explanation can also be found in research that demonstrates stepparents, particularly stepfathers, are more likely to commit filicide than biological parents (Daly & Wilson, 1988; Dixon et al., 2013; Harris et al., 2007; Wilson et al., 1995).

Finally, traditional parenting cycles for men and women have been examined to aid in understanding research that has shown the age of filicide victims varies by offender gender. It is argued that mothers have more opportunities to kill younger children because they spend more time with them at that age than fathers – in short, their time at risk is higher. This fact, coupled with the role of postpartum depression or other mental health issues, makes the risk of maternal filicide highest when children are very young. As children age, fathers may begin to spend more time with their children, becoming more involved in their care and discipline. This increase in father-child interaction may also raise the likelihood of filicide. Although parenting traditions have changed over time, this gender patterning in childcare largely remains true today in most countries, including Canada.

Although mental illness is commonly assumed to be a major precursor or motivation for filicide, findings remain mixed (Flynn, Shaw, & Abel, 2013). Some research shows that the majority of cases do not include mental illness as an element (Flynn et al., 2013). Fathers have been found to be less often psychotic compared to mothers (Adelson, 1961; Eriksson et al., 2014; Koenen & Thompson, 2008; Liem & Koenraadt, 2008). However, one review concluded that a significant proportion of both filidical mothers and fathers were experiencing depression and/or psychosis as well as personality disorders, and particularly borderline personality disorders (Bourget et al., 2007). These authors concluded that both men and women were experiencing significant life stressors, socially isolated with few supports, and suffered a history of abuse during their childhood (Bourget et al., 2007; Eriksson et al., 2014). As such, time spent with the child combined with mental health issues or the experience of significant life adversities may explain, in part, gender differences in and motivations for filicide.

Traditional and current typologies of filicide, largely within the field of psychiatry, have been derived from small sample sizes, and represent general classifications systems that seldom capture differences in gender motivations. Findings also vary depending on the population being studied (Friedman, McCue Horwitz, & Resnick, 2005). To date, with respect to intervention and prevention, few studies have systematically compared maternal and paternal filicides. As such, rarely are the opportunities available to determine whether existing typologies reflect patterns at the more aggregate level with the total population of filicide cases. It is not the goal of this paper to test such typologies or classifications systems, but rather to begin to provide a more comprehensive understanding of filicide, moving us in that direction. In other words, although we "cannot directly measure these explanations using official homicide data, differences in the means of commission and motive

can help shed light on the viability of these explanations in accounting for this form of murder" (Silverman & Kennedy, 1988, p. 114).

## The Current Study

### Data Source and Sample

The primary data examined in this study were drawn from Statistics Canada's annual Homicide Survey that has collected information on homicide incidents, victims, and accused persons since 1961. Police departments across the country are mandated to complete a survey questionnaire following each homicide incident. In accordance with Canadian law, the Homicide Survey classifies criminal homicide as first-degree murder, second-degree murder, manslaughter, or infanticide (see *Criminal Code of Canada* Section 222(4)). Collection of information on cases of manslaughter and infanticide did not begin until 1974. To account for this difference in recording patterns, the earliest time period examined in this study captures the years 1961–1973 to distinguish this period from later periods when information on manslaughter and infanticide was collected. Using these data, it is acknowledged that there is a risk of undercounting filicides if they were not reported to police, or they were not classified as a homicide. Furthermore, given that data do not document court outcomes, some accused may have been subsequently acquitted of the filicide.

Consistent with the majority of previous research, filicide is defined in this study as the killing of a child less than 18 years of age by a biological parent or stepparent (Dixon et al., 2013; West and Hatters Friedman, 2007). Included in this sample, after 1974, are infanticides which is a legal term recognized in Canada and, by definition, can apply only to mothers who kill a child less than one year old (see Sections 233 and 237 in the *Criminal Code of Canada*). Fathers may kill a child less than one year old, but he will be charged with another criminal offense (e.g., murder or manslaughter). It is not possible to distinguish neonaticide from other filicides in these data because newborns are included in the category of victims less than one year old. The current sample includes filicide cases officially reported and recorded by police excluding manslaughter and infanticide for a 51-year period and including infanticide and manslaughter for a 38-year period. This represents the longest period of time over which the total population of filicides have been examined in any country. The total sample analyzed is 1,612 cases.

Below, patterns and trends in filicide are examined by gender of accused for various victim, accused, and incident characteristics. Variables include time period and region in which the filicide occurred, gender of the victim, age of the victim and the accused, accused marital status, cause of death, motive, history of family violence, clearance status of case, and most serious charge laid or recommended. Focusing on regions rather than individual provinces/territories, and time periods rather than individual years, meets the requirements of preliminary confidentiality screening guidelines used for releasing Homicide Survey descriptive data and information. Regions include the Atlantic provinces (Prince Edward Island, Nova Scotia, New Brunswick, and Newfoundland/Labrador), Quebec, Ontario, the Prairies (Manitoba, Saskatchewan and Alberta), British Columbia, and the Territories (Northwest Territories, the Yukon, and Nunavut). Table 1 shows the distribution by time period and region as well as by socio-demographic characteristics for the total sample, and then by comparing the number and proportion of male and female accused in each category.

## Results

### Temporal and Geographic Trends

As shown in Table 1, despite the research emphasis on filicidal mothers, significantly more than half of accused in Canada were males (57%). Examining patterns over time, the gender gap in those accused of filicide appears to be widening. Difference in male and female accused increased from 4% in the 1974–1983 period to 28% and 22% in the two most recent time periods (1994–2003 and 2004–2011, respectively; see also Chart 1). Although the number of filicides in each region stems, in part, from the size of the population at risk, examining the proportion of accused by gender in each region can shed light on their geographic distribution. Although not reaching overall significance, male accused outnumbered female accused in all parts of the country with the largest differences documented in the Prairies (26%) and the Territories (50%).

### Socio-Demographic Characteristics

**Age of accused by gender.** For the total sample, Table 1 shows that the largest accused age group were those aged 25 to 34 years followed almost equally by those aged 35–44 years and 18–24 years. Accused 55 and older and those less than 18 years of age represented the smallest groups of accused. Comparing the proportion of maternal and paternal filicides in each age category shows significant differences in the age of accused by gender. For example, similar proportions of fathers and mothers were aged 18–24 (49% and 51%, respectively) and 25–34 years (54% and 46%, respectively). However, women were disproportionately represented in the under 18 age group (92% compared to 8% males) whereas men were more dominant in the older age groups – 35 years and older – compared to women. In short, younger mothers and older fathers appear to be the most common filicidal perpetrators in Canada.

**Table 1**

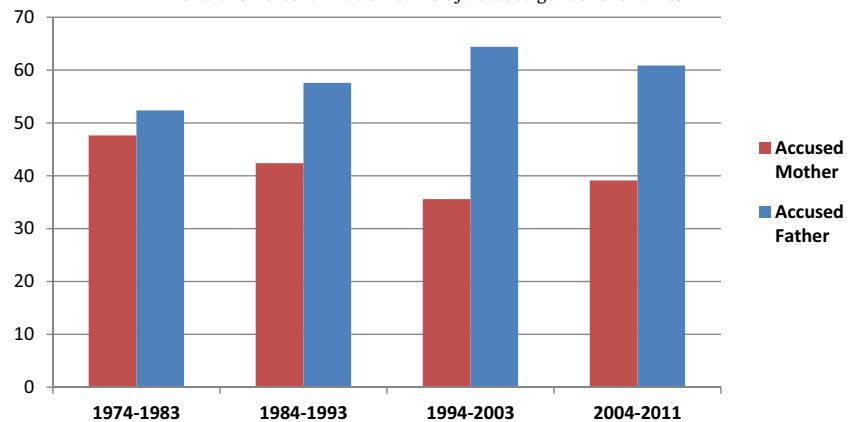
Time period, region, and socio-demographic characteristics of filicides by gender of the accused, Canada, 1961–2011 (N=1,612).

	Total sample		Male accused		Female accused		df	$\chi^2$
	N	%	N	%	N	%		
<b>Time period</b>	1612	100	919	57	693	43		
1961–1973	286	18	143	50	143	50	4	18.9**
1974–1983	382	24	200	52	182	48		
1984–1993	375	23	216	58	159	42		
1994–2003	385	24	248	64	137	36		
2004–2011	184	11	112	61	72	39		
<b>Region</b>							5	8.1
Atlantic	109	7	63	58	46	42		
Quebec	459	28	251	55	208	45		
Ontario	535	33	296	55	239	45		
Prairies	307	19	194	63	113	37		
British Columbia	190	12	106	52	84	44		
Territories	12	–	9	75	3	25		
<b>Age of accused</b>							5	127.8***
Under 18 years	53	3	4	8	49	92		
18–24 years	369	23	180	49	189	51		
25–34 years	626	39	336	54	290	46		
35–44 years	393	24	259	66	134	34		
45–54 years	141	9	117	83	24	17		
55 years and older	22	1	20	91	2	9		
<b>Marital status of accused</b>							2	127.6***
Single/never married	206	13	43	21	163	79		
Married <sup>a</sup>	1,119	69	701	63	418	37		
Divorced/separated/widow	269	17	168	62	101	38		
<b>Gender of victim</b>							1	2.7
Female	760	47	417	45	343	50		
Male	850	53	501	55	349	50		
<b>Age of the victim</b>							3	95.8***
Less than 12 months	481	30	197	41	284	59		
1–4 years	643	40	376	58	267	42		
5–11 years	361	22	244	68	117	32		
12–17 years	127	8	102	80	25	20		
<b>Relationship</b>							1	65.3***
Biological parent	1,479	92	799	54	680	46		
Stepparent	133	8	120	90	13	10		

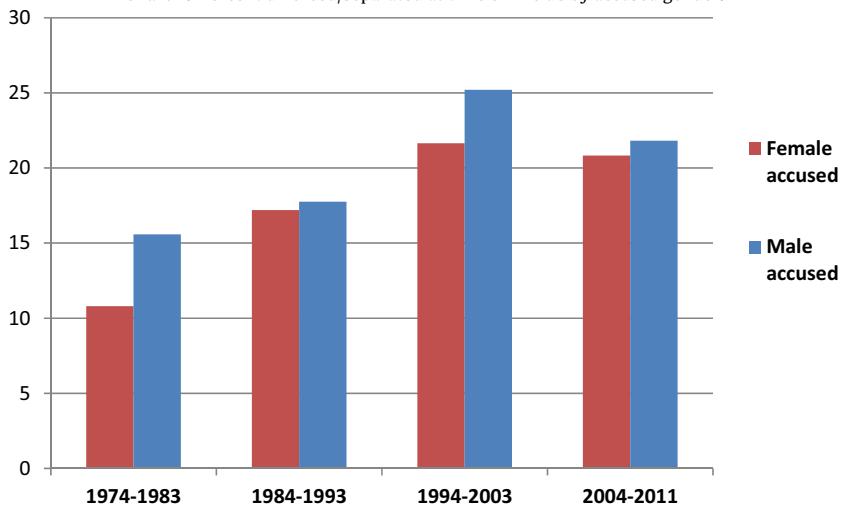
<sup>a</sup> Married includes legal spouses, common-law partners and those cohabitating (the latter added in 1997).

\*\* p&lt;0.01.

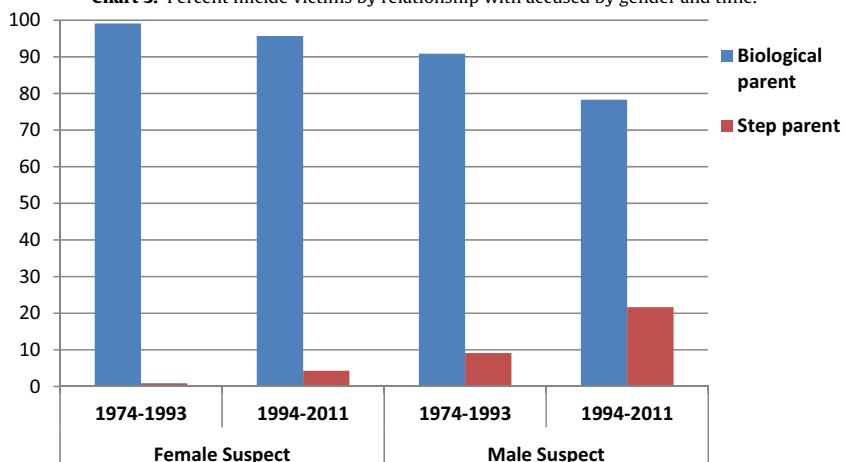
\*\*\* p&lt;0.001.

**Chart 1.** Percent filicide victims by accused gender over time.

Source: Statistics Canada, Canadian Centre for Justice Statistics, Homicide Survey.

**Chart 2.** Percent divorced/separated at time of filicide by accused gender.

Source: Statistics Canada, Canadian Centre for Justice Statistics, Homicide Survey.

**Chart 3.** Percent filicide victims by relationship with accused by gender and time.

Source: Statistics Canada, Canadian Centre for Justice Statistics, Homicide Survey.

*Marital status by gender of accused.* The majority of mothers and fathers who killed their children were married, in either legal or common-law unions, comprising 69% of the total sample. Table 1 shows that about four out of every five filicidal parents who were single/never married were mothers (79%). In contrast, a greater proportion of filicidal fathers were married (63%) or divorced/separated/widowed (62%) than filicidal mothers (37% and 38%, respectively). As shown in Chart 2, in the latter category – divorced/separated/widowed – over time patterns demonstrate that accused in this category increased in proportion in recent years from 16–18% to 22–25% for male accused and 11% to 21–22% for female accused.

*Gender of victim.* For the total sample, 53% of the victims were male and 47% of the victims were female and this distribution remained consistent over time. Not shown here, the distribution of the total sample by gender of victim and accused showed that the most common filicidal event involved fathers killing their sons (31%), followed by fathers killing daughters (26%). Mothers who killed sons and daughters were almost equally represented (22% and 21%, respectively). As expected, then, when comparing the proportion of male and female accused, Table 1 shows that, female accused were equally likely to kill female and male children. Male accused were more likely to kill male children although differences were not significant.

*Age of victim.* Table 1 demonstrates that younger children were more at risk from mothers than fathers (59% compared to 41%, respectively). However, after that point, fathers were more commonly the accused compared to mothers with the gap increasing as the child ages from 16% for victims aged one to four years to 60% for those aged 12–17 years. These general patterns have remained fairly consistent over time.

*Relationship.* More than 90% of the accused were the biological parents of the child they killed. Fathers were more often the perpetrators when stepchildren were killed by a ratio of 9 to 1 (90% compared to 10% of cases involving mothers). Although

**Table 2**

Incident characteristics and case outcomes in filicide cases by gender of the accused, Canada, 1961–2011 (N = 1,612).

	Total sample		Male accused		Female accused		df	$\chi^2$
	N	%	N	%	N	%		
	1,612	100	919	57	693	43		
<b>Cause of death<sup>a</sup></b>							5	223.2***
Shooting	306	19	260	85	46	15		
Stabbing	137	8	77	56	60	44		
Beating/blows	362	22	249	69	113	31		
Strangulation/suffocation	467	29	158	34	309	66		
Smoke inhalation/burns <sup>b</sup>	61	4	35	57	26	43		
Other methods <sup>c</sup>	249	15	130	52	119	48		
<b>Motive</b>							6	212.9***
Revenge	129	8	112	87	17	13		
Jealousy	88	5	75	85	13	15		
Argument/quarrel	99	6	80	81	19	19		
Frustration/anger/despair <sup>d</sup>	431	27	293	68	138	32		
No apparent motive	140	9	67	48	73	52		
Other <sup>e</sup>	560	35	212	38	348	62		
Unknown	165	10	80	48	85	52		
<b>History of family violence<sup>f</sup></b>							2	20.3***
Yes	149	26	117	79	32	21		
No	345	61	201	58	144	42		
Unknown	75	13	42	56	33	44		
<b>Clearance status</b>							2	75.6***
Cleared by charge	1,076	67	541	50	535	49		
Cleared by suicide	500	31	364	73	136	27		
Cleared otherwise <sup>g</sup>	36	2	14	39	22	61		
<b>Most serious charge laid<sup>h</sup></b>							3	105.6***
First-degree murder	314	29	178	57	136	43		
Second-degree murder	526	49	261	50	265	50		
Manslaughter	153	17	102	67	51	33		
Infanticide	83	19	—	—	83	100		

<sup>a</sup> Information was missing in some cases so sample for cause of death was 1,582 cases.<sup>b</sup> Prior to 1991, 'smoke inhalation/burns' was called 'arson' and in 1997 was expanded to include fire/liquid/acid.<sup>c</sup> This includes poisoning/lethal injection (1991), exposure/hypothermia/Shaken Baby Syndrome (1997) and other.<sup>d</sup> Collection began in 1961 but was discontinued from 1991 until 1997 when it was reintroduced.<sup>e</sup> Includes concealment (i.e., killing newborn, 1997 onward), financial gain/protection of assets, fear of apprehension, sexual violence (1997 onward), mercy killing/suicide (1991 onward) and other motives.<sup>f</sup> Sample size is reduced because information was not collected until in 1991 (N = 569). There is no indication of the direction of the violence. The accused or the victim may have perpetrated the violence or both parties against each other. If there were multiple victims, it is only necessary for the accused to have been previously violent against one family-member victim. The history of violence may be brief: even one previous incident would be scored as "yes."<sup>g</sup> Includes police discretion, mental illness of accused, witness incapacity, death of accused before charges laid or recommended, diplomatic immunity of accused, accused person cannot be extradited, witness refusal, and diversion of accused to a community or alternative justice forum or process.<sup>h</sup> Sample size depends on charge as information on infanticide and manslaughter was not collected until 1974.

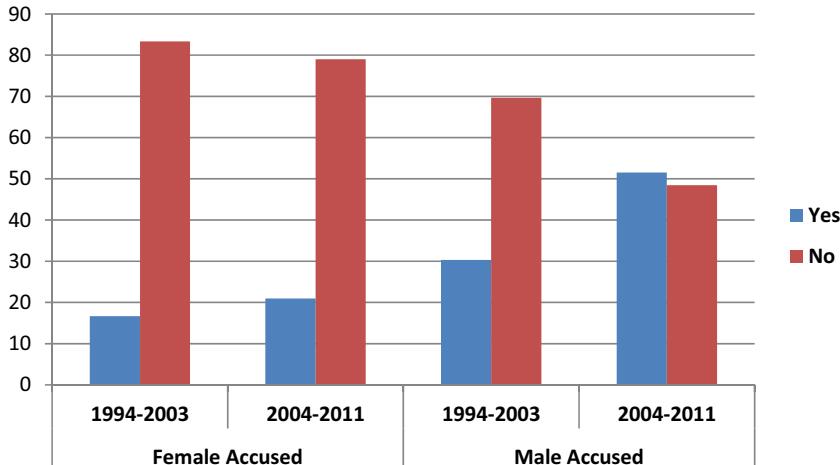
\*\* p &lt; 0.001.

numbers are small overall, **Chart 3** shows that the proportion is increasing over time, particularly for stepfathers from 11% between 1974 and 1983 to 29% in the most recent period (2004–2011).

### Incident Characteristics

**Cause of death.** **Table 2** shows that the most common primary method used in filicide cases was strangulation/suffocation/drowning (29%) followed by beating and/or blows (22%). Shootings were involved in close to one-fifth of the sample (19%) and stabbing in 8% of the cases. When shooting was the cause of death, only a small proportion of women were the perpetrators (15%) compared to men (85%). Women were also less likely than men to be the perpetrators when the cases involved stabbing (44% compared to 56%, respectively) and beating or blows (31–69%, respectively). In fact, women only outnumbered men as the accused in cases involving strangulation/suffocation as cause of death (66% compared to 34% of men). These patterns remained consistent over time.

**Motive.** As shown in **Table 2**, when revenge and/or jealousy were identified as the motive, filicidal fathers were significantly more common than filicidal mothers. In fact, the only motive category in which filicidal mothers were more common was the 'other' category and cases for which the motive remained unknown. Given the large proportion of 'other' motives, though, concrete conclusions are not possible given that this group encompassed a variety of diverse motives. These motives included concealment (i.e., killing a newborn), arguably more common for female accused, as well as financial/gain/protection of assets, fear of apprehension, sexual violence, and mercy killing/assisted suicide. Research has also shown that mental health issues are quite common in these cases, but it was not possible to capture this potential factor as a possible motive or precursor.

**Chart 4.** Percent filicides with history of family violence by accused gender.

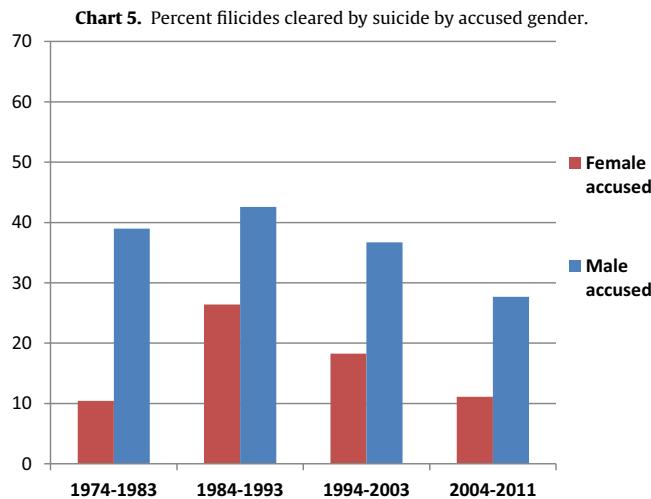
Source: Statistics Canada, Canadian Centre for Justice Statistics, Homicide Survey.

*History of family violence.* The collection of information for this variable did not begin until 1991. Therefore, it is only possible to examine the presence of a documented history of family violence for the latter two time periods (1994–2011;  $n = 569$ ). This variable captures whether or not there was a known history of family violence involving the accused and any homicide victim associated with the incident. Slightly more than one-quarter of the total sample of cases involved a history of domestic violence (26%). However, because another 13% of the cases were coded as 'unknown', this number should be viewed as a minimum estimate. With respect to gender of accused, fathers were more commonly the accused in cases involving a history of family violence compared to mothers by almost four to one (79% to 21%, respectively). As shown in Chart 4, this pattern was more evident for fathers in the more recent time period (52% of the cases from 2004 to 2011) than in the earlier period (30% of the cases from 1994 to 2003). This demonstrates what might be an emerging increase in violence prior to filicides by fathers. There was also a slight increase in such cases involving female accused from 17% in the earlier time period (1994–2003) to 21% in the latter time period (2004–2011).

*Clearance status.* This variable captures whether or not a filicide case was cleared by charge, cleared by suicide of the accused, or cleared otherwise. An incident is cleared by charge when the suspect is formally charged or when police recommend that charges be laid against the accused (CCJS Policing Services Program, 2010). Cleared otherwise designates when a suspect has been identified, a record is created, and there is evidence to lay a charge, but the police chose to proceed another way. This includes police discretion, mental illness of accused, witness incapacity, death of accused before charges laid or recommended, diplomatic immunity of accused, accused person cannot be extradited, witness refusal, and diversion of accused to a community or alternative justice forum or process. Cleared by suicide of the accused is self-explanatory.

In this study, the majority of filicide cases were cleared by charge (67%) with almost equal proportions of male and female accused. However, male accused were significantly more likely (73%) than female accused (27%) to commit suicide following the filicide. As shown in Chart 5, when examining patterns over time, it appears that the likelihood of suicide following a filicide has been decreasing in recent time periods for both male and female accused. For example, following a 16% jump from 1974–1983 to 1984–1993 in the proportion of filidical mothers who commit suicide, the proportion decreased in the two most recent time periods by 15%. Similarly, the proportion of male accused who commit suicide following the filicide dropped from about 42% during the time period 1984–1993 to 37% and 28% in the final two time periods – a total drop of 14%.

*Charge laid or recommended.* The Homicide Survey does not collect information on the criminal justice resolution for the accused beyond the most serious charge laid or recommended by police. Comparisons were made by those accused charged with first-degree murder, second-degree murder, manslaughter, and infanticide. Removing those cases that were cleared by suicide or cleared otherwise reduced the sample examined from 1,612 to 1,076 cases. When examining manslaughter or infanticide, the sample size was 909 cases because cases that occurred in the first period – 1961–1973 – were removed as these data were not collected in that period. With respect to the most serious charge laid or recommended by police in filicide cases, second-degree murder was the most common charge (49%) followed by first-degree murder (29%). There was a slightly higher proportion of infanticide charges (19%) compared to manslaughter (17%) despite the fact that only female accused, by definition, can be charged with infanticide. Examining gender distributions within each category, male and female accused were equally likely to be charged with second-degree murder. Male accused were more common among those charged with first-degree murder and manslaughter. This might be expected, particularly in the manslaughter category, given that women could be and were likely more often charged with infanticide rather than manslaughter.



Source: Statistics Canada, Canadian Centre for Justice Statistics, Homicide Survey.

## Discussion and Conclusion

At one time, it was rare to find any research that focused specifically on child homicide let alone children killed by their parents (Silverman & Kennedy, 1988). Today, much more is known about the phenomenon of filicide yet there remain significant gaps in knowledge, particularly with respect to differences by gender of the accused that can help inform intervention and prevention. To date, this study represents one of the most comprehensive examinations of filicide examining the total population of such cases in one country for more than half a century. As such, the study builds upon important findings of the earlier and primarily clinical studies by using national-level data that document all officially known filicide cases and by conducting a systematic comparison of filicidal mothers and fathers. The findings of the current study support much of the existing research on filicide in terms of similarities and differences in maternal and paternal filicide. For example, findings highlighted: (1) older ages of filicidal fathers compared to filicidal mothers; (2) greater risk of filicide for single mothers compared to single fathers; (3) higher proportions of mothers who kill younger children, and fathers who kill older children; (4) different methods used by mothers and fathers; and (5) the likelihood that fathers are more likely to be motivated by jealousy, revenge or retaliation. As previously noted, commonly found similarities and differences in the commission of and motivations for filicide by mothers and fathers may be important in identifying gender-specific prevention and intervention initiatives. In addition to these documented differences, five key trends that have emerged from this study are discussed below, identifying priorities for future research. This is followed by a discussion of some limitations and implications of the results of this study for the development of intervention and prevention initiatives.

### Emerging Trends in Maternal and Paternal Filicide

*Increasing gender gap in accused.* Traditionally, filicide has been viewed as a crime more often committed by mothers rather than fathers, and the emphasis of academic research on maternal filicide has underscored this perception. This study shows that men outnumber women as filicidal perpetrators, at least in Canada, and this gender gap (i.e., the ratio of male versus female offenders) has increased over time. It might be argued that this growing gap reflects similar trends in the gender gap in homicide more generally. However, there is no evidence of a growing gender gap in male and female homicide offenders, at least in the Canada and the United States, where the gender gap in arrests has remained relatively stable (Boyce & Cotter, 2013; Steffensmeier, Zhong, Ackerman, Schwartz, & Agha, 2006). Trends in arrest data are not an exact parallel to what is presented here because they would not include those cases cleared by suicide. However, it provides some partial evidence that there has been no obvious increase in gender offending in homicide more generally.

Another explanation may be that an increasing gender gap in filicidal mothers and fathers is the result of changes in parenting or childcare responsibilities. It is believed that fathers spend more time with children than in the past, arguably increasing their time at risk. Research shows that, even though mothers continue to dedicate more time to childcare than fathers, the gender gap has narrowed somewhat in various industrialized countries, including Canada (Boll, Leppin, & Reich, 2014; Gauthier, Smeedeng, & Frustenberg Jr., 2004). However, research also suggests that fathers' participation in childcare peaked in Canada in 1986 (Reich, Boll, & Leppin, 2012). Future research should examine filicide rates in countries with varying distributions of childcare responsibilities by gender that may also be impacted by parental leave policies and so on to more accurately assess the role of parenting cycles as an explanation for filicide.

A final explanation for what appears to be an increasing gender gap in filicidal accused may be that women's socioeconomic status has improved during the period of this study. As this occurs, children may arguably be safer thereby reducing

the risk of maternal filicide. This latter explanation is only partially supported by Hunnicutt (2007) who demonstrated that absolute female economic status was positively associated with infant and child homicide in urban, but not rural areas. Further examination of these and other explanations are required and, in particular, the urban/rural dimension as highlighted by Hunnicutt (2007) should be part of these investigations. Recall that results above showed that the proportion of male accused compared to female accused was much greater in the Prairie provinces and the Territories. These regions of the country have high rural populations. Regardless of the source of the growing gender gap, its existence underscores repeated calls for research on paternal filicides that could contribute to our understanding of these events, and how they differ (or not) from maternal filicides.

*Increasing proportion of accused experiencing relationship breakdown.* Almost 70% of filicide accused were married at the time of the incident; however, an examination of patterns over time demonstrated that the proportion of accused divorced, separated or widowed has increased in recent years. For male accused, this marital category increased from 16–18% to 22–25% and, for female accused, from 11% to 21–22%. It could be that the proportion of men and women in this relationship category has increased in the general population thereby increasing the numbers at risk. Peaks in the divorce rate in Canada occurred in 1968 and 1985 following changes in divorce legislation, but have remain stable since the late 1990s. These patterns capture the termination of legal marriages only, however, and not that of common-law unions which have been on the rise (Milan, Keown, & Urquijo, 2011). As such, it is difficult to accurately assess whether or not this finding reflects an actual increase in filicidal perpetrators or a function of an increase in those at risk.

Alternatively, it may be that filicides are increasingly occurring as a result of marital breakdown and, particularly, separation and estrangement that often involve custody and access disputes. This explanation is supported by the results of the current study as well as research that filicidal fathers are more often motivated by revenge and/or jealousy. Further, the fact that men more often kill a female partner at the same time as a child, whereas women do not, appears to provide some support for this explanation. For women, relationship breakdown may signal an inability to support their children on their own and despair about trying to survive without social supports if absent. Until research examines the context surrounding filicides in these situations, however, these explanations must remain speculative only.

*Increasing proportion of filicidal stepfathers.* Even though biological parents remain the largest group of filicidal perpetrators, the risk posed by stepparents to children has long been recognized. Daly and Wilson (1988) argued that natural selection will see parents invest more in genetic offspring and, therefore, risks to children may be higher, particularly from stepfathers in situations where family violence is ongoing (see also Wilson et al., 1995). Consistent with this expectation, when comparing the relationships in this study, results show that stepfathers are more likely to commit filicide than are stepmothers. Overall numbers and proportions are small and must be treated cautiously, but they are disproportionately common, particularly for stepfathers, and consistent with prior research (Harris et al., 2007).

The current study also showed that the proportion of accused who are stepparents has increased over time, particularly for stepfathers. Stepfathers were the accused in 11% of the cases between 1974 and 1983. This increased to 29% in the most recent period (2004–2011). As argued by Daly and Wilson (1988) as well as Harris and colleagues (2007), the greater risk posed by stepparents to stepchildren may be explained by a concern with the control of reproduction, and the allocation of resources to children that are not genetic offspring. Research has shown males to be particularly concerned with this issue, and have been found to kill children when their paternity is in question or, in the case of stepchildren, when they know they are supporting someone else's genetic offspring (Daly & Wilson, 1988; Wilson et al., 1995). The 2011 Canadian Census was the first to provide information about stepfamilies and these data show that stepfamily parents were over three times more likely to be living common-law than parents with no stepchildren (48% compared to 14%, respectively; Statistics Canada, 2012). Common-law status has long been considered a risk factor for intimate partner homicide and children may be collateral victims in these cases (Meyer & Post, 2013). Regardless of the explanation, with the rise of 'blended families,' the population at risk has grown. In 2011, 11% of children 24 years and younger in Canada, or one out of every 10 children, were in stepfamilies (Statistics Canada, 2014). As a result, interventions that focus on step-relations and violence are a priority. Agencies responding to incidents of domestic and family violence should be particularly attuned to those involving the presence of stepchildren which has also been identified as a risk factor for intimate partner homicide.

*Increasing presence of prior history of family violence.* The difficulties in documenting whether or not there was a history of violence in a relationship are many and well known, particularly in intimate partner relationships. Reporting rates are so low that it is understood that what is known is always a significant underestimation. Nonetheless, it is important to examine patterns in documented histories of violence. Consistent with other research, results in this study demonstrated that a known history of violence was significantly more common in filicide cases involving male accused compared to female accused. Further, it appears that the likelihood of paternal filicides involving a history of violence has increased. These increases could reflect higher reporting rates with growing public policy and legislative initiatives that have been implemented to improve responses in recent years. However, in the 2009 Victimization Cycle of the Canadian General Social Survey, it was found that spousal violence victims were less likely to report incidents to police than in the past, and this decline was largely due to lower rates of reporting among female victims (Statistics Canada, 2011). It is expected that reporting rates for violence against children is even lower. Future research needs to examine this issue further to tease out the context surrounding prior family violence given that the Homicide Survey has limited detail on the direction or frequency of violence.

*Decreases in filicide-suicides.* High rates of homicide-suicide occur in familial homicides compared to other types of homicide. Among intimate partner homicides and filicides, suicide by the accused is almost exclusively a male phenomenon. However, in filicide-suicide cases, this study showed that the gender gap in suicide following filicide is less than in the other

types of homicide, although it remains more frequent for male than female accused. Examining patterns over time, the likelihood of an accused committing suicide following the filicide appears to be decreasing, similar to trends elsewhere (Sturup & Granath, 2014). Some historical research on infanticides suggests that filicide-suicides may have been declining for some time (Oberman, 2003). Regardless, the reasons for these decreases are not immediately clear. It may be that filicides not followed by the suicide of the accused less often involve mental illness and, over time, treatment for mental health issues has improved. Some research supports this argument, demonstrating that mental health issues are more pronounced among accused in filicide-suicide cases with depression and psychosis being most common (Hatters Friedman, Holden, Hrouda, & Resnick, 2008; Leveille et al., 2007), particularly for mothers (Flynn et al., 2013). This finding would have significant implications for the direction of prevention initiatives and future priorities. However, filicide-suicide cases are excluded from samples drawn from correctional or psychiatric populations (Hatters Friedman, McCue Horwitz, & Resnick, 2005). Future research will need to focus in more detail on samples that includes such cases.

#### *Further Implications for Future Research to Inform Intervention and Prevention*

Theoretical exploration of the phenomenon of filicide is limited, and there has been little significant development in the construction of typologies in the past several decades. Dominant explanations remain focused on sociobiology and selectionism (Harris et al., 2007), and few studies incorporate a feminist framework to understand why parents kill. Hunnicutt (2007) moves theory and research in that direction with her emphasis on female labor force participation, but more work is needed using feminist frameworks. In particular, motivations for such crimes as well as the impact of changing parental and childcare responsibilities for women and men should be examined using a feminist theoretical lens.

One key limitation of this study relates to the information available about motives or precursors to filicide. Identifying motive for any crime is a complex task, but exacerbated in cases of homicide because one of the parties involved is now dead. In cases of filicide, this is no less true given the privacy of such acts, despite the fact that children would often have been too young to speak for themselves. As such, motive remains a poorly conceptualized variable that nonetheless remains the focus of most research on violence, including filicide. Recently, Sidebotham (2013) called for research that moves us beyond the traditional typologies and motives that dominate filicide research by seeking to identify "more measurable components of observed behavior" (p. 307) which may require different types of data. In the current study, more concrete conclusions about motive were not possible given aggregate data and the significant number of cases that were classified as 'other'. However, when one moves from aggregate formats to identify motive in more detail, research is restricted by small, non-random samples that do not allow for generalizations or the identification of key patterns. Therefore, collaboration between agencies who collect total population data, those who provide access to such data, and researchers may be required to identify a middle ground where detail does not forfeit sample size and vice versa. This would help improve information about the role played by a prior history of family violence discussed next.

One potential avenue for addressing data limitations of both large aggregate data and smaller clinical samples is through the work of domestic violence death review committees which have arisen in the past few decades in various industrialized countries. These committees investigate and review deaths of persons that occur as a result of domestic violence to identify common risk factors, and to make recommendations to help prevent such deaths in similar circumstances in the future. To achieve these goals, most review teams compile demographic and descriptive data to identify common environmental, situational, and human risk factors. They develop a chronology or history of system contacts and possible points of intervention. They highlight gaps or missed opportunities in service delivery, policy inadequacies as well as opportunities and strategies for reform. As such, they collect detailed information that are often not available in the larger aggregate data, but often focus on the total sample of domestic homicides, addressing the problem of non-random samples. For example, the first of its kind in Canada, the Ontario Domestic Violence Death Review Committee (DVDRC) found that there were 23 paternal filicides that had occurred in the context of domestic violence (DVDRC, 2008). Although these data are limited to domestic homicides and may not capture filicides that occur outside of this context, this mechanism for collecting much-needed information for developing appropriate prevention strategies is crucial. The utility of such an approach is illustrated below.

Research has shown that domestic violence, including child abuse, can be both a contributor to and an outcome of parental separation (Brown & Alexander, 2007; Jaffe et al., 2013). Separation or divorce can reduce the harm a child faces, but it may also increase their risk as potential conflicts arise, including custody and access disputes (Jaffe, Wolfe, & Campbell, 2012). In such cases, where there was a history of violence against the child or one of the parents, potential harm to the child or other members of the family may increase. As such, it is recognized that separation or estrangement between partners can be the most dangerous time for those involved, and particularly children. "Separation includes the risk for domestic homicide (killing an intimate partner) as well as retaliating filicide (deliberate murder of a child to cause harm and suffering to the other parent) or familicide (killing multiple members of the family"; Jaffe et al., 2013). These events are almost exclusively perpetrated by fathers. Some have explained this fact by highlighting the father's shame, in part, arising out of their belief that they have not fulfilled their gender role as a husband or father (Websdale, 2010). If the "perpetrator feels that his domination of the family is threatened often by family members' threats to leave and/or report his abuse to others, he may resort to homicidal violence in a misguided effort to maintain control and prevent a complete rupture of the family unit (Websdale, 2010, p. 135). For example, one study showed that more than three-quarters of homicide-suicides involving children as victims were perpetrated by primarily males experiencing relationship problems (Brennan & Boyce, 2013, p. 28). Over half involved perpetrators embroiled in custody disputes and close to one-third had recently separated or were in the

process of getting a divorce. "Violent partners have often been shown to use access to children or legal custody proceedings to control or punish their former partners (Harrison, 2008; Radford, Hester, Humphries, & Woodfield, 1997).

With respect to the findings of the Ontario DVDR regarding the role played by sexual jealousy, cases reviewed showed that "sexual jealousy or suspected infidelity can also be connected to an abusive father who questions the paternity of his child and can increase the risk of harm to both the adult victim and children" (Jaffe et al., 2013, p. 24). For example, in their 2004 report, the Ontario DVDR reported on nine cases involving 11 fatalities. Eight of the nine cases involved male perpetrators and, of those, four involved child custody and access disputes, two ending in the deaths of the children by their fathers retaliating against their former female partners by killing their children (p. 24). The latter two cases involved criminal and family court proceedings involving criminal charges and conflict over access to children. In their 2005 report, the committee described one case that involved the attempted homicide of a child by the father who was targeting his estranged spouse by attempting to kill their child after which he subsequently committed suicide (p. 27).

Keeping these illustrative real-life examples in mind, three of the five emerging trends noted above are pertinent to developing appropriate interventions in such cases: (1) filicides perpetrated by divorced/separated/widowed accused; (2) the rise in filicides by stepparents; and (3) increasing evidence of a history of domestic violence, particularly by fathers. The accompanying declines in suicide suggest that filicides today may be less about mental illness and more about control and manipulation of reproduction, at least those perpetrated by fathers (Daly & Wilson, 1988). Further research on these trends and the various explanations for them may identify new areas of intervention and prevention in these cases.

## Acknowledgements

The author thanks Tina Hotton, Wendy Regoeczi, Sarah Cahill, and Janice Hicks for their assistance and the Canadian Centre for Justice Statistics for preparing the data used in the analysis.

## References

- Adelson, L. (1961). *Slaughter of the innocents: A study of forty-six homicides in which the victims were children*. *New England Journal of Medicine*, 264, 1345–1349.
- Boll, C., Leppin, J., & Reich, N. (2014). Paternal childcare and parental leave policies: Evidence from industrialized countries. *Review of Economic Households*, 12, 129–158.
- Bourget, D., & Bradford, J. M. (1990). Homicidal parents. *Canadian Journal of Psychiatry*, 35, 233–238.
- Bourget, D., & Gagne, P. (2007). Paternal filicide in Quebec. *Journal of the American Academy of Psychiatry and Law*, 33, 354–360.
- Bourget, D., Grace, J., & Whitehurst, L. (2007). A review of maternal and paternal filicide. *Journal of American Academic of Psychiatry Law*, 35, 74–82.
- Boyce, J., & Cotter, A. (2013). *Homicide in Canada, 2012*. Ottawa: Statistics Canada. Juristat no. 85-002-X.
- Brennan, S., & Boyce, J. (2013). Family-related murder-suicides. In *Family Violence in Canada: A statistical profile, 2011* (Catalogue no. 85-002-X).
- Brown, T., & Alexander, R. (2007). *Child abuse in the context of separation and divorce and family law*. Sydney: Allen and Unwin.
- Canadian Centre for Justice Statistics (CCJS) Policing Services Program. (2010, July). *Uniform crime reporting incident-based survey manual*. Ottawa: Statistics Canada.
- Cooper, M., & Eaves, D. (1996). Suicide following homicide in the family. *Violence and Victims*, 11, 99–112.
- Daly, M., & Wilson, M. (1988). *Homicide*. Hawthorne, NY: Aldine de Gruyter.
- Dawson, J. M., & Lanagan, P. A. (1994). *Murder in families*. Washington, DC: Bureau of Justice Statistics.
- De Bortoli, L., Coles, J., & Dolan, M. (2013). A review of maternal neonaticide: A need for further research supporting evidence-based prevention in Australia. *Child Abuse Review*, 22, 327–339.
- Dixon, S., Kriener, J. L., & Walsh, J. (2013). Femicide: A gendered profile of offender, victim and event characteristics in a national sample of reported incidents, 1995–2009. *Journal of Crime and Justice*, 37, 339–355.
- Eriksson, L., Mazerolle, P., Wortley, R., & Johnson, H. (2014). Maternal and paternal filicide: Case studies from the Australian Homicide Project. *Child Abuse Review*, <http://dx.doi.org/10.1002/car.2358>
- Flynn, S. M., Shaw, J. J., & Abel, K. M. (2007). Homicide of infants: A cross-sectional study. *Journal of Clinical Psychiatry*, 68, 1501–1509.
- Flynn, S. M., Shaw, J. J., & Abel, K. M. (2013). Femicide: Mental illness in those who kill their children. *Public Library of Science Open Access*, 8, 1–8.
- Fox, J. A., & Zawitz, M. W. (2007). *Homicide trends in the United States*. Washington, DC: US Department of Justice.
- Gauthier, A. H., Smeedeng, T. M., & Furstenberg, F. F., Jr. (2004). Are parents investing less time in children? Trends in selected industrialized countries. *Population and Development Review*, 30, 647–671.
- Harris, G. T., Hilton, N. S., Rice, M. E., & Eke, A. (2007). Children killed by genetic parents versus stepparents. *Evolution and Human Behaviour*, 28, 85–95.
- Harrison, C. (2008). Implacably hostile or appropriately protective? Women managing child contact in the context of domestic violence. *Violence Against Women*, 14, 381–405.
- Hatters Friedman, S., Holden, C. E., Hroudka, D. R., & Resnick, P. J. (2008). Maternal filicide and its intersection with suicide. *Brief Treatment and Crisis Intervention*, 8, 283–291.
- Hatters Friedman, S., McCue Horwitz, S., & Resnick, P. J. (2005). Child murder by mothers: A critical analysis of the current state of knowledge and a research agenda. *American Journal of Psychiatry*, 162, 1578–1587.
- Hunniscutt, G. (2007). Female status and infant and child homicide victimization in rural and urban counties in the U.S. *Gender Issues*, 24, 35–50.
- Jaffe, P. G., Campbell, M., Hamilton, L. H. A., & Juodis, M. (2012). Children in danger of domestic homicide. *Child Abuse and Neglect*, 36, 71–74.
- Jaffe, P. G., Scott, K., Jenney, A., Dawson, M., Campbell, M., & Straatman, A. L. (2013). *Risk factors for children in situations of family violence in the context of separation and divorce*. Ottawa: Department of Justice.
- Jaffe, P. G., Wolfe, D. A., & Campbell, M. (2012). *Growing up with domestic violence: Assessment, intervention, and prevention strategies for children and adolescents*. Cambridge, MA: Hogrefe Publishing.
- Koenen, M. A., & Thompson, J. W., Jr. (2008). Femicide: Historical review and prevention of child death by parent. *Infant Mental Health Journal*, 29, 61–75.
- Kunz, J., & Bahr, S. J. (1996). A profile of parental homicide against children. *Journal of Family Violence*, 11, 347–362.
- Laporte, L., Tzoumakis, S., Marleau, J. D., & Allaure, J.-F. (2005). Sex of victims in maternal filicide. *Psychological Reports*, 96, 637–643.
- Leveille, S., Marleau, J. D., & Dubé, M. (2007). Femicide: A comparison by sex and presence or absence of self-destructive behavior. *Journal of Family Violence*, 22, 287–295.
- Liem, M., & Koenraadt, F. (2008). Femicide: A comparative study of maternal versus paternal child homicide. *Criminal Behaviour and Mental Health*, 18, 166–176.

- Mariano, T. Y., Chan, Choon, Oliver, H., & Myers, W. C. (2014). Toward a more holistic understanding of filicide: A multidisciplinary analysis of 32 years of U.S. arrest data. *Forensic Science International*, 236, 46–53.
- Marks, M. N., & Kumar, R. (1993). Infanticide in England and Wales. *Medical Science Law*, 33, 329–339.
- Marleau, J. D., Poulin, B., Webanck, T., Roy, R., & Laporte, L. (1999). Paternal filicide: A study of 10 men. *Canadian Journal of Psychiatry*, 44, 57–63.
- Meyer, E. M., & Post, L. (2013). Collateral intimate partner homicide. *Sage Open*, 3, 1–11.
- Milan, A., Keown, L.-A., & Urquijo, C. R. (2011). Families, living arrangements and unpaid work. In *Women in Canada*. Ottawa: Statistics Canada.
- Oberman, M. (2003). Understanding infanticide in context: Mothers who kill, 1870–1930 and today. *Journal of Criminal Law and Criminology*, 92, 707–737.
- Office of the Chief Coroner of Ontario. (2008). *Sixth annual report of Domestic Violence Death Review Committee*. Toronto: OCC.
- Porter, T., & Gavin, H. (2010). Infanticide and neonaticide: A review of the 40 years of research literature on incidence and causes. *Trauma, Violence & Abuse*, 11, 99–112.
- Putkonen, H., Amon, S., Eronen, M., Klier, C. M., Almiron, M. P., Cederwall, J. Y., & Weizmann-Henelius, G. (2011). Gender differences in filicide offense characteristics: A comprehensive register-based study of child murder in two European countries. *Child Abuse & Neglect*, 35, 319–328.
- Radford, L., Hester, M., Humphries, J., & Woodfield, K.-S. (1997). For the sake of the children: The law, domestic violence, and child contact in England. *Women's Studies International Forum*, 20, 471–482.
- Reich, N., Boll, C., & Leppin, J. S. (2012). Fathers' childcare and parental leave policies: Evidence from Western European countries and Canada. HWI research paper N. 115.
- Resnick, P. J. (1969). Child murder by parents: A psychiatric review of filicide. *American Journal of Psychiatry*, 126, 73–82.
- Sidebotham, P. (2013). Rethinking filicide. *Child Abuse Review*, 22, 305–310.
- Silverman, R. A., & Kennedy, L. W. (1988). Women who kill their children. *Violence and Victims*, 3, 113–127.
- Statistics Canada. (2011). *Family Violence in Canada: A Statistical Profile* (Catalogue no. 85-224-X).
- Statistics Canada. (2012, October 18). Profile of parents in stepfamilies, 2011. *The Daily*.
- Statistics Canada. (2014, April 29). Living arrangements of children in Canada, 1901–2011. *The Daily*.
- Steffensmeier, D., Zhong, H., Ackerman, J., Schwartz, J., & Agha, S. (2006). Gender gap trends for violent crimes, 1980–2003: A UCR-NCVS comparison. *Feminist Criminology*, 1, 72–98.
- Sturup, J., & Granath, S. (2014). Child homicides in Sweden: A descriptive study comparing the 1990s and the 2000s. *Homicide Studies*, 19, 175–187.
- Websdale, N. (2010). *Familicidal hearts*. New York: Oxford University Press.
- West, S. G., & Hatters Friedman, S. (2007). Filiocide: A research update. In R. C. Browne (Ed.), *Forensic psychiatry research trends* (pp. 29–62). New York: Nova Science.
- West, S. G., Hatters Friedman, S., & Resnick, P. J. (2009). Fathers who kill their children: An analysis of the literature. *Journal of Forensic Science*, 54, 463–468.
- Wilson, M., Daly, M., & Daniele, A. (1995). Filiocide: The killing of spouse and children. *Aggressive Behaviour*, 21, 275–291.