

Examining the Response to Different Types of Exposure to Intimate Partner Violence

Kristina Nikolova¹, Stephanie L. Baird¹, Sarah Tarshis¹,
Tara Black¹, and Barbara Fallon¹

¹ Factor-Inwentash Faculty of Social Work, University of Toronto

Abstract:

Objectives: The objective of this study is to examine the differences and similarities in child, family, and case characteristics between different types of exposure to intimate partner violence (IPV), and to determine if type of exposure to IPV influences the decision to provide ongoing child protection services.

Methods: Using data from the 2008 Ontario Incidence Study of Reported Child Abuse and Neglect (OIS-2008), cases were selected if the investigation was substantiated for exposure to IPV, either as the primary or secondary maltreatment type, resulting in an estimated 17,006 cases. First, bivariate analyses were conducted to compare six different combinations of exposure to IPV and differences in child, family, household, and case characteristics. A logistic regression was used to determine whether the type of exposure was predictive of case opening when controlling for child, parent, and case characteristics.

Results: There were significant differences in child and family characteristics between types of exposure to IPV. For cases where exposure to IPV co-occurred with at least one other form of maltreatment, workers noted higher proportions of child and caregiver risk factors than exposure to IPV alone.

Conclusions: Cases involving children exposed to emotional violence and another form of maltreatment were most likely to result in case opening, when controlling for all other factors.

Implications: The results indicate several important differences in clinical characteristics between types of exposure to IPV in child maltreatment cases. These differences in child,

family, and case characteristics can be used to tailor service responses to better help these families.

Keywords:

intimate partner violence; child exposure to intimate partner violence; child abuse; child maltreatment

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Introduction

Intimate partner violence (IPV) is a term that has been used interchangeably with woman battering, spousal or wife abuse, domestic violence, and family violence (Pyles & Postmus, 2004), and refers to emotional, financial, psychological, physical, or sexual harm towards a partner (McLeod, Hays, & Chang, 2010). In Canada, self-report data from the General Social Survey indicate that 6% of women have experienced IPV victimization in the past five years (Sinha, 2013). In the United States, the National Intimate Partner and Sexual Violence Survey found that 31.1% of women report having experienced physical violence from a partner or ex-partner at some point in their lives, and 4% have experienced it in the past year (Breiding, et al., 2014). Psychological aggression by an intimate partner or ex-partner was experienced by 47.1% of women in their lifetime, with 14.2% having experienced it in the past year (Breiding et al., 2014).

A US study estimates that almost half of domestic violence incidents occur in households with children, and of those children, 95% were either directly or indirectly exposed to the abuse (Fusco & Fantuzzo, 2009). In Canada, statistics from the National Longitudinal Survey of Children and Youth indicate that approximately 17% of children between the ages of 6 and 11 witnessed violence in their homes during their lives (Hotton, 2003). Due to potential risk of harm to children who are exposed to IPV (Holden, 2003; Moylan et al., 2010; Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003), child protection services (CPS) become involved with families dealing with IPV.

While IPV is explicitly included in the child protection legislation of 23 US states and six Canadian provinces (Petersen, Joseph, & Feit, 2014; Weaver-Dunlop, Nixon, Tutty, Walsh, & Ogden, 2006), it is also interpreted as falling within existing definitions of harm and is included in child maltreatment assessment instruments (for an example, see Ontario Eligibility Spectrum, Ontario Association of Children's Aid Societies, 2003).

The CPS response to allegations of exposure to IPV is often varied, and has not always been consistently defined in the literature. As a result, it has been particularly difficult to understand the CPS response to IPV. This paper examines data from the 2008 Ontario Incidence Study of Reported Child Abuse and Neglect (OIS-2008), looking specifically at varying characteristics related to different types of exposure to IPV, as well as predictors of ongoing service provision. Based on these findings, this paper will discuss service alternatives for future CPS responses to IPV.

Literature Review

Intimate Partner Violence and Child Protection Services

In the United States, over 650,000 children each year will have some contact with child welfare (U.S. Department of Health and Human Service, 2012). In Canada, there are an estimated 235,000 CPS investigations each year and 34% of these cases are for exposure to IPV (Trocmé et al., 2010). Research suggests that substantiated investigations involving IPV are less likely to result in a placement than other forms of maltreatment (Black, Trocmé, Fallon, & MacLaurin, 2008). However, CPS investigations for exposure to IPV have been increasing in Ontario. The fifth cycle of the Ontario Incidence Study of Reported Child Abuse and Neglect (OIS-2013) found that exposure to IPV accounts for 48% of all substantiated maltreatment investigations or 8.7 cases per 1,000 children (Fallon et al., 2015). In comparison, in the OIS-2008, exposure to IPV accounted for 39% of substantiated investigations or 6.33 investigations per 1,000 children (Fallon et al., 2010).

Impact of Exposure to Intimate Partner Violence

For decades, research has shown that IPV and child maltreatment frequently co-occur within child welfare cases (Hamby, Finkelhor, Turner, & Ormrod, 2010; Kohl, Edleson, English, & Barth, 2005; Parke, Appel, & Holden, 1998). Kohl and colleagues (2005) suggest that children who are exposed to IPV are at a greater risk of being maltreated. In the literature, the term exposure is often used interchangeably with witnessed or observed to describe the experiences of children who are directly or indirectly impacted by physical and emotional violence (Carpenter & Stacks, 2009). However, multiple definitions and different types of exposure influence how exposure is understood in the literature. Conflicting terminology can also vary the scope and prevalence of this issue (Holden, 2003). Broadly defined, exposure is generally understood as being “within sight or sound of the violence” (Edleson et al., 2007, p. 963). Holden’s (2003) seminal work on the taxonomy of exposure to IPV outlines ten distinct types of exposure to IPV: exposed prenatally, intervened, victimized, participated, eyewitness, overheard, observed the initial effects, experienced the aftermath, heard about it, and ostensibly unaware. From these ten types, the Canadian Incidence Study (CIS) developed a three broader types of exposure: direct witness to physical violence, indirect exposure to physical violence, and exposure to emotional abuse. This simplified typology was needed as the CIS is filled out by child protection workers who might not have sufficient information to determine the exact type exposure – the simplified categories require workers to determine only whether there was physical violence versus emotional

violence, and whether the child was directly or indirectly exposed.

Children exposed to IPV can be at risk of experiencing short and long-term detrimental effects. Immediate effects can be seen as early as infancy: infants exposed to severe IPV have been found to exhibit trauma symptoms (Bogat, DeJonghe, Levendosky, Davidson, & von Eye, 2006). Children and adolescents exposed to IPV can exhibit more internalizing and externalizing problems than non-exposed comparison groups (Sternberg, Lamb, Guterman, & Abbott, 2006). Long-term detrimental effects can also be seen when children enter adulthood, with children exposed to IPV having higher risk of violence victimization and perpetration as adolescents and adults (Moynan et al., 2010; Schewe, Riger, Howard, Staggs, & Mason, 2006; Sousa et al., 2011; Wolfe et al., 2003). Recent studies have also found links between exposure to IPV and adolescent delinquency, depression, alcoholism and posttraumatic stress disorder (Cisler et al., 2012; Mirick, 2014).

The impact of exposure to IPV is influenced by several factors, including the exact type of exposure, such as direct or indirect exposure, the length of exposure, and the severity and type of IPV. In Bogat and colleagues' (2006) study, only infants exposed to severe physical IPV exhibited trauma symptoms, while infants exposed to emotional IPV did not exhibit such symptoms, when controlling for other factors. However, exposure during infancy does not necessarily mean that children will exhibit behavioral issues as they age. The length of exposure has been found to have a greater impact on internalizing and externalizing behaviors than the age of initial exposure, meaning that if the exposure is of short duration, the risk of problematic behaviors significantly decreases (Graham-Bermann & Perkins, 2010).

Examined within the ecological framework, the possible negative impacts of exposure to IPV are mediated by child, family, and community characteristics (Gewirtz & Edleson, 2007). For instance, girls exposed to IPV are more likely to exhibit internalizing and externalizing behaviors than boys, particularly if exposed to physical IPV (Baldry, 2003; Sternberg et al., 2006). Boys are more likely to experience physical and emotional harm, especially if they attempt to intervene in physical altercations between intimate partners, and are more likely to show a higher incidence of post-traumatic stress symptoms (Bayarri, Expeleta, & Granero, 2011; Reynolds, Wallace, Hill, Weist, & Nabors, 2001). However, when controlling for family and community-level risk factors, such as caregiver mental health, parenting skills, poverty and community violence, the impact of exposure to IPV on children's behavioral issues can be mediated or lose significance (Huang, Wang, & Warrenner, 2010; Moynan et al., 2010). Furthermore, while each of the developmental domains (cognitive, social, emotional, language, and physical) can be impacted by exposure to IPV, the short and long-term effects can be mediated by early intervention, strong interpersonal relationships and attachments, and the child's own coping strategies and resilience (Carpenter & Stacks, 2009; Holt, Buckley, & Whelan, 2008; Howell, 2011).

The issue of exposure to IPV is further complicated by the co-occurrence of IPV and child maltreatment. A Canadian study reported that while 31% of substantiated child maltreatment investigations are solely for exposure to IPV, another 10% are substantiated for both exposure to IPV and another co-occurring form of maltreatment (Lefebvre, Van Wert, Black, Fallon, & Trocmé, 2013). However, some researchers have found that the

impact of exposure to IPV exists even when controlling for other family violence, with children exposed to IPV exhibiting higher levels of depressive symptoms than those who were not exposed to IPV (Russell, Springer, & Greenfield, 2010). Other researchers have found that the risk of developing internalizing and externalizing behaviors is significantly higher for children facing both child maltreatment and exposure to IPV, indicating a possible interaction between the two (Moylan et al., 2010).

Study Rationale and Research Questions

While there is a significant amount of literature on the impacts of exposure to IPV on children, few studies have examined the role of CPS in responding to this form of child maltreatment, and even fewer studies have considered how CPS responds to the different types of exposure. The literature review revealed that the potential negative impacts of exposure to IPV for children are influenced by a number of factors, including the type of exposure, the co-occurrence of other forms of child maltreatment, and the characteristics of the child, family, and community. Given that previous literature grounded in the ecological framework indicates that the type of exposure has a differential impact on children, we would expect that the child, family, and case characteristics will differ between types of exposure, and that child protection workers investigating cases of exposure to IPV will make different decisions based on the characteristics of each case. Unfortunately, due to the limitations of the data we are unable to control for the length of exposure and the age at first exposure, only the age when the child was referred to CPS. As a result, the two research questions of this paper are:

- 1) What are the differences and similarities in child, family, and case characteristics between different types of exposure to IPV?
- 2) How does the type of exposure influence the decision to provide ongoing child protection services?

As this is an exploratory study into the different types of exposure, no hypotheses are made into how the types of exposure will differ in terms of risk factors or how they will influence workers' decision making.

Methods

The data used in this paper were drawn from the Ontario Incidence Study of Reported Child Abuse and Neglect – 2008 (OIS-2008; Fallon et al., 2010). The OIS is part of the national Canadian Incidence Study of Reported Child Abuse and Neglect – 2008 (CIS-2008; Trocmé et al., 2010). The purpose of the OIS is to look at the characteristics of reports of child maltreatment and the service decisions made by child protection services (Trocmé et al., 2010). The subsequent cycle of the study, OIS-2013, was not available for analysis at the time of writing this report. The ethics for the Ontario Incidence Study's data collection were approved by the University of Toronto's ethics review committee. The data for OIS-2008 were collected between October 1, 2008 and December 31, 2008 using a multi-stage sampling design which selected first a representative number of agencies in Ontario (n = 23), and second a representative number of cases within each agency. Investigating workers

were asked to complete a data collection form for each selected case and to indicate the primary form of maltreatment being investigated and, if applicable, up to two co-occurring maltreatment forms. The final sample consisted of 7,471 investigated children from 4,415 families in Ontario. This sample was weighted using a composite regionalization and annualization weight to estimate the annual incidence of referrals and investigations within Ontario (OIS-2008; Fallon et al., 2010). Only those cases that are substantiated for exposure to IPV, whether exposure to IPV is the only concern or it co-occurs with another form of child maltreatment, were used in this analysis. The final sample consisted of a weighted sample size of 17,006 estimated investigations substantiated for exposure to IPV, as Black and colleagues (2008) found that most IPV investigations are substantiated.

Six types of exposure were considered for this analysis: direct witness to physical violence (IPV-DW), indirect witness to physical violence (IPV-IE), exposure to emotional violence (IPV-EV), IPV-DW co-occurring with at least one other type of maltreatment, IPV-IE co-occurring with at least one other type of maltreatment, and IPV-EV co-occurring with at least one other type of maltreatment. IPV-DW included witnessing or intervening in physically violent episodes between caregivers, IPV-IE included seeing the aftermath or consequences of a physical altercation, or hearing it from another room, and IPV-EV included directly or indirectly hearing emotionally abusive altercations between caregivers. All analyses used SPSS version 22 for Windows (SPSS Inc., Chicago, IL, USA). Chi-square analyses were used to compare the differences between these six different types of exposure to IPV in terms of child, family, household, and case characteristics (see Table 1 for list of variables used). Sampling weights were used for all chi-square analyses to maintain the influence of the final OIS weight while reducing the actual number of reports to the original sample size to avoid inflating the significance of statistics as a result of the high number of reports. These weights were used to correct for possible errors in the sample that might lead to bias and other departures between the sample and the child population. As well, to further reduce the likelihood of Type I error, a conservative p-value of $p < .001$ was used to interpret the significance of associations based on the Bonferroni correction (Dunn, 1961). Estimates of less than 100 investigations were not shown in the figures as they are not reliable.

A logistic regression was used with the unweighted sample to determine which of the child, parent, and case characteristics were predictive of whether the case was opened for ongoing services or not. The initial model featured theoretically relevant predictors entered into blocks based on the ecological model (Bronfenbrenner, 1979) which features the child in the centre. As a result, first the child-level variables were entered, followed by the family and household-level variables, then the clinical case characteristics, including the type of maltreatment. The cut point for the outcome variable (whether the case opened) was 0.30, which reflects the rate of transfer to ongoing services in the provincial sample. Regressions were then re-run using only the statistically significant variables in order to develop a parsimonious model. This final model is presented in this paper.

Table 1: Study Variables of Child Welfare Cases in Ontario in 2008

Variable	Operationalization
Cases will stay open for ongoing child welfare services	Workers were asked whether the case would stay open for ongoing child welfare services or not. Dichotomous: yes/no.
Type of Maltreatment	Workers were asked to indicate up to three forms of maltreatment. The original categorical variable had 32 options that fell under five categories: physical abuse, sexual abuse, neglect, emotional maltreatment, and exposure to IPV (direct witness to physical violence; indirect exposure to physical violence; exposure to emotional abuse). For the purposes of this study, the variable was recoded into six levels: direct witness to physical violence (IPV-DW), indirect exposure to physical violence (IPV-IE), exposure to emotional violence (IPV-EV), IPV-DW co-occurring with at least one other form of maltreatment, IPV-IE co-occurring with at least one other form of maltreatment, and IPV-EV co-occurring with at least one other form of maltreatment.
Placement during investigation	Whether the child was placed in out of the home during the investigation was collapsed into two categories: not placed or placed.
Age	Child age, categorical variable of less than one, one to three, four to seven, eight to eleven, twelve to fifteen.
Child functioning (e.g., depression/anxiety/withdrawal, ADHD)	Workers were asked to rate the child's level of functioning using the 17 child functioning issues listed. Each was then collapsed into a dichotomous variable of noted or not noted.
Emotional harm	Workers were asked to determine whether the child was showing signs of mental or emotional harm (e.g., nightmares, bedwetting, or social withdrawal) following the maltreatment incident(s). Dichotomous: yes/no.
Caregiver functioning (e.g., alcohol abuse, few social supports, maltreated as a child)	Workers were asked to rate the primary caregiver on 9 risk factors. Each variable was then collapsed into a dichotomous variable of noted or not noted.
Previous case opening	Workers were asked to indicate if the family had a previous case opening with child welfare. Categorical: Never, once, two to three, more than three times.
At least one household hazard	Workers were asked to indicate if any unsafe housing conditions were evident. Variable was collapsed into a dichotomous variable of yes or no.
Number of moves	Workers were asked to indicate the number of times the family moved within the past year. Categorical: never, once, two or more, unknown
Household regularly runs out of money for basic necessities	Workers were asked to determine if the household regularly runs out of money for basic necessities (e.g., food, clothing). The variable was collapsed into a dichotomous variable of yes or no.
Home overcrowded	Workers were asked to indicate if the household was overcrowded. Categorical: yes/no/unknown.
Housing	Workers were asked to indicate the housing type of the family. Categorical: own home, public housing, rental band housing, hotel/shelter, unknown, other.

Results

In 2008, Ontario had an estimated 38,571 substantiated investigations, of which 50.6% involved investigating children exposed to IPV. The most common form of exposure was IPV-EV, representing 32.6 % of substantiated cases. This was closely followed by IPV-DW, which represents 30.4% of substantiated cases, IPV-IE with 20.2%, and exposure co-occurring with at least one other form of maltreatment with 16.7% (see Table 2).

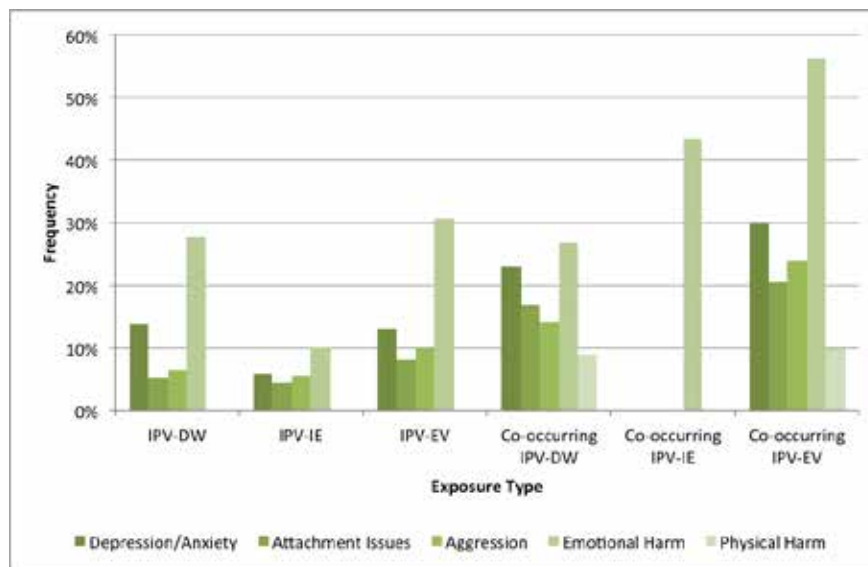
Table 2: Estimated frequencies of substantiated exposure to IPV by type in Ontario in 2008

Variable	Frequency	Percent
Direct witness to physical violence (IPV-DW)	5,175	30.4
Indirect exposure to physical violence (IPV-IE)	3,435	20.2
Exposure to emotional violence (IPV-EV)	5,549	32.6
Co-occurring IPV-DW	1,180	6.9
Co-occurring IPV-IE	524	3.1
Co-occurring IPV-EV	1,143	6.7
Total Investigations	17,006	100

Based on a sample of 1,013 unweighted maltreatment investigations. Columns are not additive.

In terms of child characteristics (see Figure 1), children experiencing co-occurring IPV-EV were noted to have negative outcomes more often than children in the other exposure categories. Depression/anxiety was noted most often in children substantiated for co-occurring IPV-EV (29.9%) and co-occurring IPV-DW (23%), proportions 2 to 4 times higher than children whose sole form of maltreatment was exposure to IPV ($\chi^2 = 38.068, p < .001$). As well, these two investigation types had percentages 2 to 4 times higher of noted attachment issues than exposure only cases ($\chi^2 = 32.739, p < .001$). Aggression was also 1.5 to 4 times more common in these two exposure types, with 24% of co-occurring IPV-EV cases and 14.2% of co-occurring IPV-DW cases having noted aggression issues ($\chi^2 = 30.186, p < .001$). Child characteristics such as ADD/ADHD, intellectual/developmental disabilities, academic difficulties, and failure to meet developmental milestones were relatively lower in percentages between all exposure types.

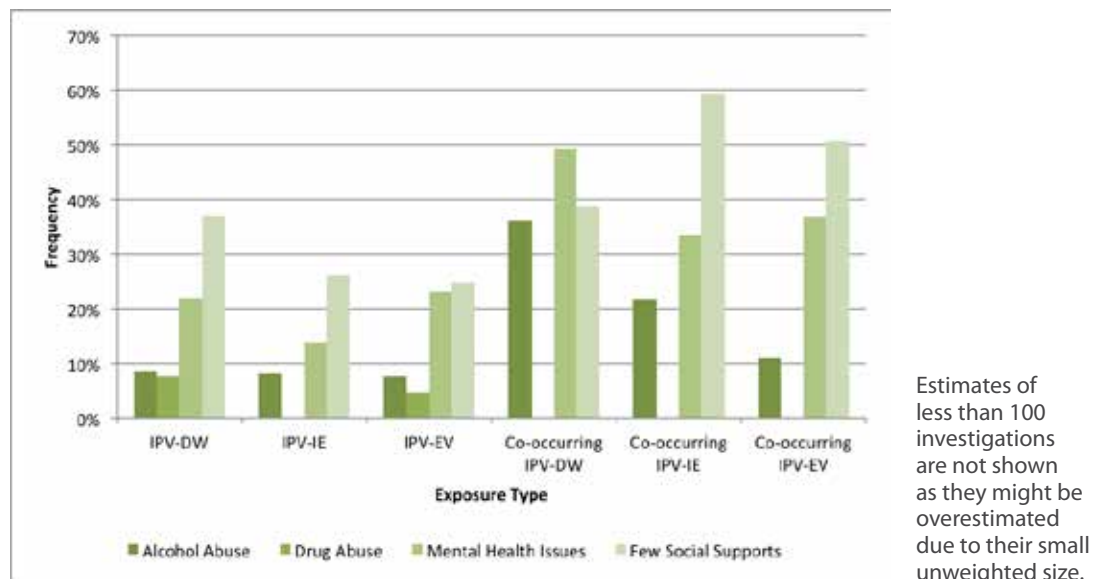
Figure 1: Child characteristics by type of exposure to IPV



Estimates of less than 100 investigations are not shown as they might be overestimated due to their small unweighted size.

Caregiver characteristics (Figure 2), like child characteristics, also featured some important differences between exposure types. For instance, 36% of co-occurring IPV-DW investigations noted caregiver alcohol issues; 1.5 to 4 times more frequently than all other types of exposure ($\chi^2 = 69.302, p < .001$). Co-occurring IPV-IE investigations noted caregiver drug abuse issues in 40.2% of cases, or 2 to 8 times more frequently than all other types of exposure ($\chi^2 = 64.788, p < .001$). The primary caregiver had proportions 3 to 10 times higher of cognitive impairment in cases of co-occurring indirect exposure compared to other exposure types ($\chi^2 = 25.057, p < .001$). Caregiver mental health issues were most noted among co-occurring IPV-DW (49.2%) and co-occurring IPV-EV (36.7%, $\chi^2 = 50.018, p < .001$). Lastly, the primary caregiver was noted to have few social supports most often in the co-occurring indirect exposure (59.2%) and the co-occurring emotional violence exposure (50.6%, $\chi^2 = 41.794, p < .001$). Caregiver physical health issues appear to be similarly low across all exposure types.

Figure 2: Caregiver characteristics by type of exposure to IPV



Exposure only cases tended to have less housing problems and financial difficulties than cases investigated for co-occurring forms of maltreatment involving IPV. Cases of co-occurring IPV-IE were noted to rent housing ($\chi^2 = 135.395, p < .001$) and change residences ($\chi^2 = 58.277, p < .001$) more frequently compared to other exposure types. Similarly, regularly running out of money occurred 1.5 to 3 times more frequently in cases of co-occurring IPV-DW and co-occurring IPV-EV ($\chi^2 = 39.871, p < .001$) than in exposure only cases.

Regarding the clinical case characteristics, co-occurring exposure investigations were more likely to note emotional and physical harm to the child. Evidence of mental

Table 3: Logistic regression predicting whether or not a case will proceed to ongoing child welfare services

Predictor	β	SE	Adjusted Odds Ratio
Block 1			
Child age	-0.054	0.017	0.947**
Child depression/anxiety/withdrawal (reference: not noted)	0.712	0.24	2.038**
Child aggression (reference: not noted)	0.499	0.279	1.648
Block 2			
Caregiver drug use (reference: noted noted)	1.232	0.276	3.429***
Caregiver cognitive issues (reference: not noted)	0.864	0.513	2.373
Caregiver mental health issues (reference: not noted)	0.688	0.182	1.990***
Caregiver physical health issues (reference: not noted)	1.452	0.324	4.272***
Caregiver few social supports (reference: not noted)	0.516	0.156	1.676**
Home overcrowded (reference: not overcrowded)			
Yes	1.597	0.392	4.939***
Unknown	-3.102	1.044	0.045
Block 3			
Exposure type (reference: IPV-DW)			
IPV-IE	-0.217	0.203	0.805
IPV-EV	-0.217	0.183	0.813
Co-occurring IPV-DW	0.577	0.335	1.780
Co-occurring IPV-IE	0.139	0.441	1.149
Co-occurring IPV-EV	1.095	0.313	2.990***
	Block 1	Block 2	Block 3
-2LL(Constant)-2LL Model	1324.789	1152.173	1128.834
Model X²	46.618	219.234	242.572
Df	3	10	15
Nagelkerke R²	0.061	0.263	0.287
Correct Classification Rate	45.3%	66.1%	65.9%
Correct classification of cases to remain open	93.1	79.3	79.3

* $p < .05$ ** $p < .01$ *** $p < .001$

Based on a sample of 1,013 unweighted maltreatment investigations

or emotional harm was present in 56% of co-occurring IPV-EV, followed by 43% of co-occurring IPV-IE investigations ($\chi^2 = 73.332, p < .001$). Physical harm was present in 8 to 10% of co-occurring exposure investigations ($\chi^2 = 64.191, p < .001$). These findings were reflective of the decision to open the case, as co-occurring exposure investigations were twice as frequently opened for ongoing child protection services compared to exposure only investigations ($\chi^2 = 69.280, p < .001$). However, investigations for co-occurring IPV-DW were noted to result in the child being placed outside the home three times more frequently, with 15% of children in this exposure category receiving placement, compared to all other types of investigations ($\chi^2 = 49.613, p < .001$). Lastly, case histories indicated that co-occurring IPV-IE were most likely to have been opened before, only 12.8% of investigations were new cases,

and that 76% of cases had been opened more than 3 times in the past. Thirty-five to 44% of cases of all other exposure types had never been opened before ($\chi^2 = 120.164, p < .001$).

The logistic regression model was effective at predicting whether a case was opened for ongoing services, explaining almost 29% of the variance. The model accurately predicted nearly 80% of cases that stayed open. Significant predictors of case opening at the child level were child age, and child depression, with child aggression approaching significance (see Table 3). Cases with younger children were more likely to be opened for ongoing services, as were cases with children who exhibited depression/anxiety (though both of these variables were only approaching significance, given our strict p -value of .001). Significant predictors of case opening at the caregiver level were drug use, mental health issues, and physical health issues. Caregiver few social supports was approaching significance ($p < .01$) as a predictor. Cases with caregivers noted to have any one of these issues were 1.6 to 4.2 times more likely to be opened for ongoing services. The only statistically significant household level predictor was home overcrowding, where investigations of families in overcrowded residences were almost 5 times more likely to be opened for ongoing services ($\beta = 1.597, p < .001$). Only IPV-EV co-occurring with another form of maltreatment was more likely to be opened for services ($\beta = 1.095, p < .001$) which was in line with the bivariate findings that this type of co-occurring exposure had more child, caregiver, and household risk factors. One possible reason that there was a lack of significance for other co-occurring exposure types was the small number of unweighted investigations that fall into these exposure categories (less than a hundred). It is important to note that the addition of caregiver and household risk factors accounted for 20% of the variance in the model. Once controlling for all client, case, and family characteristics, exposure type added less than 3% to the variance explained by the model (see Table 3). These findings indicate that workers placed more weight on caregiver risk factors than the type of exposure when determining if the case should be opened for ongoing services.

Discussion

The results indicate that there are several important differences in characteristics between types of exposure to IPV. Most notably, child, caregiver, and household issues tend to be more frequent in cases of IPV exposure co-occurring with at least one other form of child maltreatment. Children in these cases exhibit more internalizing and externalizing behaviors, their caregivers tend to have more addictions and mental health problems, and their housing tends to be less financially stable and secure. As a result, it is not surprising that cases of co-occurring IPV-EV are more likely to be opened for ongoing child protection services than cases of exposure to IPV only. However, the fact that there is little difference between exposure to physical violence and exposure to emotional violence in terms of child, family, and case characteristics is potentially important. While we would expect from previous literature that direct exposure to physical violence would have more impact on child functioning than exposure to emotional abuse (Holt et al., 2008), this was not the case in our study. The limitations discussed below outline possible reasons as to why this is the case.

Our findings relating to co-occurrence are in line with a meta-analysis by Wolfe,

Crooks, Lee, McIntyre-Smith, and Jaffe (2003). The study by Wolfe and colleagues (2003) found that when children's exposure to IPV co-occurred with child maltreatment (e.g. physical abuse, sexual abuse, neglect), children had increased levels of emotional and behavioral problems, compared to exposure to IPV alone. Thus, it is important to consider how children who experience co-occurring exposure to IPV have higher risk factors, and to consider how CPS can then best respond to these increased needs.

An important result of our study was that many of these investigations involving exposure to IPV, whether co-occurring or not, have been opened before, often multiple times. High levels for re-reports of children exposed to IPV have also been found in the US, with children exposed to IPV being twice as likely to be re-referred to CPS as children experiencing other forms of maltreatment (Casanueva, Martin, & Runyan, 2009). These findings indicate that families might not be receiving all the support they need in order to prevent further incidents of exposure to IPV. The high level of cases being reopened suggests that the ongoing needs of these families are not being met by the current system.

Families have different needs based on the type of exposure, mainly based on whether the exposure co-occurred with another form of maltreatment, and the relevant child and family characteristics. This information is useful in considering how CPS can tailor differential service responses to IPV, based on the differing needs of families. Over the last 15 years, some child welfare organizations in Canada and the United States have integrated differential service response models for child welfare cases (Godsoe, 2013; Marshall, Charles, Kendrick, Pakalniskiene, 2010). The models emphasize the individual needs of the family and tailor the intervention and services provided based on the specific needs of the family. The most common model features two streams, one for high risk families and one for low risk cases (Trocmé, Knott, & Knoke, 2003). Low risk cases are provided with less intrusive, more community-based services, while high risk cases tend to receive traditional child protection services. As seen in our results, different exposure types are associated with different child and caregiver risk factors, with co-occurring exposure, particularly co-occurring IPV-EV, noting the greatest proportions of risk factors.

Benefits of differential service responses have been seen in programs such as anti-poverty services for families that have resulted in less foster care placements and recidivism (Trocmé et al., 2003). Studies have found that integrating differential response has long term positive effects for CPS organizations and the families they serve, namely reducing case re-opening and out of home placements (Loman & Siegel, 2012; Marshall et al., 2010; Pennell & Burford, 2000). Furthermore, results show that the subsequent decrease in re-referrals was more cost effective in the long term despite the initial costs of setting up alternative response streams (Loman & Siegel, 2014; Pennell & Burford, 2000). This is particularly relevant in view of our results that over 75% of co-occurring IPV-IE cases have been referred more than three times in the past. Since the OIS data is limited to the investigation stage only, it is not possible to know if these cases are returning due to the same concerns or due to new concerns; however, what is known is that these families have ongoing needs that are not necessarily being addressed.

The findings of a recent systematic review by Wood and Sommers (2011) also reflect

the need for differential responses by CPS. The review found that interventions for children exposed to IPV need to take into account socioeconomic status, social support, as well as mental and physical health (Wood & Sommers, 2011). All of these factors also emerged as significant variables in our analyses. A differential service response would allow for flexibility, permitting CPS to intervene in ways that acknowledge the mediating impacts of early intervention and positive relationships and attachments on both short and long-term effects of IPV (Carpenter & Stacks, 2009; Holt et al., 2008).

In order for CPS to operate with the best interest of the child in mind, the full context of the family situation must be considered in order to make decisions around services, custody arrangements and appropriate interventions. Some suggestions include updating family assessment tools to reflect type of exposure and enhancing coordination between community organizations and CPS in order to more effectively strengthen families.

Limitations

A concrete definition of exposure to IPV in child welfare continues to be a challenge for the field, making the construct difficult to measure. As well, direct measurement of child exposure is not always possible and workers must infer the exposure from others' testimony. As such, it's possible that some types of exposure are underestimated by workers. Similarly, the emotional impacts on children might also be underestimated. For many children, the emotional distress can become evident months or even years after exposure which is outside the scope of the data. Child and caregiver functioning issues might not be fully known to the worker at the time of data collection. Moreover, the data set is based on cases of child maltreatment reported to CPS. Cases reported only to police, unreported cases, and cases screened out by the child welfare authority are not included. As a result, our findings likely underestimate the extent of the impact of IPV on children. As well, worker completion of the data collection instrument was not independently verified. It is possible that workers complete the data collection instrument in a way that justifies their judgments regarding the investigation (Fallon et al., 2012). Additionally, excluding estimates of less than 100 investigations resulted in missing data for some variables. Lastly, we were unable to account for community-level risk factors (such as poverty or community violence) as they were not included in the data collection instrument and we were unable to account for age of first exposure to IPV and length of exposure, variables which can influence the impact of exposure on children.

Conclusions

Despite a growing body of literature on impacts of exposure to IPV on children, there are few studies that specifically examine how CPS responds to different types of exposure. For the first time, data from the Ontario Incidence Study of Reported Child Abuse and Neglect – 2008 (OIS) allowed for an examination of the child, family, and case characteristics for different types of exposure to IPV, as well as an examination of how the type of exposure influences the decision to provide ongoing child protection services.

Key findings from the study show important differences in characteristics between

types of exposure to IPV, and that child, caregiver, and household issues tend to be more frequent in cases of exposure to IPV co-occurring with at least one other form of child maltreatment. The results indicate that children in these co-occurring cases are reported to have more internalizing and externalizing behaviors, their caregivers have more issues with mental health and addictions, and their housing is often less secure. The results also indicate that cases of co-occurring IPV-EV and IPV-IE are more likely to be opened for ongoing services than cases of exposure to IPV only, and that many of these cases have been opened previously, suggesting that these families might not be receiving all the support they need to prevent further incidents of exposure to IPV.

These findings reiterate how essential it is that CPS consider different forms of intervention for families coping with IPV. Given that all families dealing with IPV are not the same, families may benefit from services and supports individually tailored to their differing needs. By employing a differential service response, CPS would have the flexibility to respond accordingly to families dealing with IPV, potentially preventing future need for reopening and re-referral to CPS.

References

- Baldry, A. (2003). Bullying in schools and exposure to domestic violence. *Child Abuse & Neglect: The International Journal*, *27*, 713-732.
- Bayarri, E., Ezpeleta, L., & Granero, R. (2011). Exposure to IPV, psychopathology, and functional impairment in children and adolescents: Moderator effects of sex and age. *Journal of Family Violence*, *26*, 535-543.
- Black, T., Trocmé, N., Fallon, B., & MacLaurin, B. (2008). The Canadian child welfare system response to exposure to domestic violence investigations. *Child Abuse & Neglect*, *32*(3), 393-404.
- Bogat, G., DeJonghe, E., Levendosky, A., Davidson, W., & von Eye, A. (2006). Trauma symptoms among infants exposed to intimate partner violence. *Child Abuse & Neglect*, *30*, 109-125.
- Breiding, M. J., Smith, S. G., Basile, K. C., Walters, M. L., Chen, J., & Merrick, M. T. (2014). *Prevalence and characteristics of sexual violence, stalking, and intimate partner violence victimization — National Intimate Partner and Sexual Violence Survey, United States, 2011*. Centers for Disease Control and Prevention: Atlanta, GA. Retrieved from: http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6308a1.htm?s_cid=ss6308a1_e
- Bronfenbrenner, U. (1979). *The ecology of human development*. Boston, MA: Harvard University Press.
- Carpenter, G., & Stacks, A. (2009). Developmental effects of exposure to intimate partner violence in early childhood: A review of the literature. *Children and Youth Services Review*, *31*, 831-839.
- Casanueva, C., Martin, S., & Runyan, D. (2009). Repeated reports for child maltreatment among intimate partner violence victims: Findings from the National Survey of Child and Adolescent Well-Being. *Child Abuse & Neglect*, *33*, 84-93.
- Cisler, J. M., Begle, A. M., Amstadter, A. B., Resnick, H. S., Danielson, C. K., Saunders, B. E., & Kilpatrick, D. G. (2012). Exposure to interpersonal violence and risk for PTSD, depression, delinquency, and binge drinking among adolescents: Data from the NSA-R. *Journal of Traumatic Stress*, *25*(1), 33-40.
- Dunn, O. (1961). Multiple comparisons among means. *Journal of the American Statistical Association*, *56*(293), 52-64.
- Edleson, J. L., Ellerton, A. L., Seagren, E. A., Kirchberg, S. L., Schmidt, S. O., & Ambrose, A. T. (2007). Assessing child exposure to adult domestic violence. *Children and Youth Services Review*, *29*(7), 961-971.

- Fallon, B., Trocmé, N., MacLaurin, B., Sinha, V., Black, T., Felstiner, C., ... Johnston, A. (2010). *Ontario Incidence of Reported Child Abuse and Neglect – 2008 (OIS-2008)*. Toronto, ON: Child Welfare Research Portal.
- Fallon, B., Chabot, M., Fluke, J., Blackstock, C., MacLaurin, B., & Tonmyr, L. (2012). Placement decisions and disparities among Aboriginal children: Further analysis of the Canadian incidence study of reported child abuse and neglect part A: Comparisons of the 1998 and 2003 surveys. *Child Abuse & Neglect, 37*, 47-60.
- Fallon, B., Van Wert, M., Trocmé, N., MacLaurin, B., Sinha, V., Lefebvre, R., ... Goel, S. (2015). *Ontario Incidence Study of Reported Child Abuse and Neglect-2013 (OIS-2013)*. Toronto, ON: Child Welfare Research Portal.
- Fusco, R., & Fantuzzo, J. (2009). Domestic violence crimes and children: A population-based investigation of direct sensory exposure and the nature of involvement. *Children and Youth Services Review, 31*, 249-256.
- Gewirtz, A., & Edleson, J. (2007). Young children's exposure to IPV: Towards a developmental risk and resilience framework for research and intervention. *Journal of Family Violence, 22*, 151-163.
- Godsoe, C. (2013). Just intervention: Differential response in child protection.(reforming child protection law: A public health approach). *Journal of Law and Policy, 21*(1), 73.
- Graham-Bermann, S., & Perkins, S. (2010). Effects of early exposure and lifetime exposure to IPV (IPV) on child adjustment. *Violence and Victims, 25*, 427-439.
- Hamby, S., Finkelhor, D., Turner, H., & Ormrod, R. (2010). The overlap of witnessing partner violence with child maltreatment and other victimizations in a nationally representative survey of youth. *Child Abuse & Neglect, 34*(10), 734-741. doi:10.1016/j.chiabu.2010.03.001
- Holden, G. W. (2003). Children exposed to intimate partner violence and child abuse: Terminology and taxonomy. *Clinical Child and Family Psychology Review, 6*(3), 151-160.
- Holt, S., Buckley, H., & Whelan, S. (2008). The impact of exposure to domestic violence on children and young people: A review of the literature. *Child Abuse & Neglect, 32*, 797-810.
- Hotton, T. (2003). *Childhood aggression and exposure to violence in the home*. Canadian Centre for Justice Statistics, Statistics Canada: Ottawa, ON. Retrieved from: <http://www.statcan.gc.ca/pub/85-561-m/002/4193725-eng.pdf>
- Howell, K. (2011). Resilience and psychopathology in children exposed to family violence. *Aggression and Violent Behavior, 16*, 562-569.
- Huang, C., Wang, L., & Warrener, C. (2010). Effects of domestic violence on behavior problems of pre-school aged children: Do maternal mental health and parenting mediate the effects? *Children and Youth Services Review, 32*, 1317-1323.
- Kohl, P. L., Edleson, J. L., English, D. J., & Barth, R. P. (2005). Domestic violence and pathways into child welfare services: Findings from the National Survey of Child and Adolescent Well-Being. *Children and Youth Services Review, 27*(11), 1167-1182.
- Lefebvre, R., Van Wert, M., Black, T., Fallon, B., & Trocmé, N. (2013). A profile of exposure to IPV investigations in the Canadian child welfare system: An examination using the 2008 Canadian Incidence Study of Reported Child Abuse and Neglect (CIS-2008). *International Journal of Child and Adolescent Resilience, 1*, 142-180.
- Loman, L. A., & Siegel, G. L. (2012). Effects of anti-poverty services under the differential response approach to child welfare. *Children and Youth Services Review, 34*(9), 1659-1666. doi:10.1016/j.childyouth.2012.04.023
- Loman, L. A., & Siegel, G., L. (2014). *Extended Follow-up Study of Minnesota's Family Assessment Response: Final Report*. St. Louis, MO: Institute of Applied Research.
- Marshall, S. K., Charles, G., Kendrick, K., & Pakalniskiene, V. (2010). Comparing differential responses within child protective services: A longitudinal examination. *Child Welfare, 89*(3), 57-77.
- McLeod, A. L., Hays, D. G., & Chang, C. C. (2010). Female intimate partner violence survivors' experiences with accessing resources. *Journal of Counseling & Development, 88*(Summer), 303-310.
- Mirick, R. (2014). Engagement in child protective services: The role of substance abuse, intimate partner violence and race. *Child and Adolescent Social Work Journal, 31*(3), 267-279.

- Moylan, C., Herrenkohl, T., Sousa, C., Tajima, E., Herrenkohl, R., & Russo, M. (2010). The effects of child abuse and exposure to domestic violence on adolescent internalizing and externalizing behavior problems. *Journal of Family Violence, 25*, 53-63.
- Ontario Association of Children's Aid Societies. (2006). Ontario Child Welfare Eligibility Spectrum. Retrieved from: <http://www.oacas.org/pubs/oacas/eligibility/EligibilitySpectrum06nov1.pdf>
- Parke, R. D., Appel, A. E., & Holden, G. W. (1998). The co-occurrence of spouse and physical child abuse: A review and appraisal. *Journal of Family Psychology, 12*(4), 578-599. doi:10.1037/0893-3200.12.4.578
- Pennell, J., & Burford, G. (2000). Family group decision making: Protecting children and women. *Child Welfare, 79*(2), 131-58.
- Petersen, A.C., Joseph, J., & Feit, M. (Eds). (2014). *New Directions in Child Abuse and Neglect Research: Child Abuse and Neglect Policy*. Washington, DC: National Academies Press.
- Pyles, L., & Postmus, J. L. (2004). Addressing the problem of domestic violence: How far have we come? *Affilia, 19*(4), 376-388.
- Reynolds, M., Wallace, J., Hill, T., Weist, M., & Nabors, L. (2001). The relationship between gender, depression, and self-esteem in children who have witnessed domestic violence. *Child Abuse & Neglect, 25*, 1201-1206.
- Russell, D., Springer, K., & Greenfield, E. (2010). Witnessing domestic abuse in childhood as an independent risk factor for depressive symptoms in young childhood. *Child Abuse & Neglect, 34*, 448-453.
- Schewe, P., Riger, S., Howard, A., Staggs, S., & Mason, G. (2006). Factors associated with domestic violence and sexual assault victimization. *Journal of Family Violence, 21*, 469-475.
- Sinha, M. (2013). *Family violence in Canada: A statistical profile, 2011*. Juristat: Canadian Centre for Justice Statistics, 1-92. Retrieved from <http://search.proquest.com/docview/1413253331?accountid=14771>
- Sousa, C., Herrenkohl, T., Moylan, C., Tajima, E., Klika, J., Herrenkohl, R., & Russo, M. (2011). Longitudinal study on the effects of child abuse and children's exposure to domestic violence, parent-child attachments, and antisocial behaviour in adolescence. *Journal of Interpersonal Violence, 26*, 111-136.
- Sternberg, K., Lamb, M., Guterman, E., & Abbott, C. (2006). Effects of early and later family violence on children's behavior problems and depression: A longitudinal, multi-informant perspective. *Child Abuse & Neglect, 30*, 283-306.
- Trocme, N., Fallon, B., MacLaurin, B., Sinha, V., Black, T., Fast, E., ... Johnston, A. (2010). Chapter 4: Characteristics of Substantiated Maltreatment. In Public Health Agency of Canada (Ed.), *Canadian Incidence Study of Reported Child Abuse and Neglect-2008: Major Findings*. Toronto, ON: Public Health Agency of Canada.
- Trocme, N., Knott, T., & Knoke, D. (2003). *An overview of differential response models*. Toronto, ON: Centre of Excellence for Child Welfare, Faculty of Social Work, University of Toronto.
- United States Department of Health and Human Service. Administration for Children and Families. (2012). *Child Maltreatment Report*. Retrieved on January 9th 2014 from <http://www.acf.hhs.gov/programs/cb/resource/child-maltreatment-2012>
- Weaver-Dunlop, G., Nixon, K., Tutty, L., Walsh, C., Ogden, C. (November, 2006). *A review of policies to address children/youth exposed to domestic violence*. Background paper prepared for the International Policy Forum on Family Violence, Calgary, Alberta. Retrieved from: <http://www.ucalgary.ca/resolve-static/reports/2006/2006-08.pdf>
- Wolfe, D. A., Crooks, C. V., Lee, V., McIntyre-Smith, A., & Jaffe, P. G. (2003). The effects of children's exposure to domestic violence: A meta-analysis and critique. *Clinical Child and Family Psychology Review, 6*(3), 171-187.
- Wood, S. L., & Sommers, M. S. (2011). Consequences of intimate partner violence on child witnesses: A systematic review of the literature. *Journal of Child and Adolescent Psychiatric Nursing, 24*(4), 223-236. doi:10.1111/j.1744-6171.2011.00302.x