Journ Child Adol Trauma (2017) 10:77–86
DOI 10.1007/s40653-016-0121-0

ORIGINAL RESEARCH

Clinical Differences and Outcomes of Sexual Abuse Investigations by Gender: Implications for Policy and Practice

Barbara Fallon[1] · **Delphine Collin-Vezina**[2] · **Bryn King**[1] · **Nicolette Joh-Carnella**[1]

Published online: 23 November 2016

Abstract Although the detrimental impact of child sexual abuse is well documented, there is a dearth of literature on differential outcomes and on child protection services by gender. Using a representative dataset of child welfare investigations, this paper explores how boys and girls investigated by the child protection system for alleged sexual abuse ($n = 4{,}261$) compare on key clinical characteristics and on the likelihood of a transfer to ongoing services. These characteristics include sexual abuse type, associated physical and emotional harm, and caregiver and child functioning concerns. The results indicate that there are significant differences in child functioning concerns by gender, with investigations involving boys having a stronger association with aggressive behaviour, attention problems, academic difficulties, depression, and the presence of an intellectual disability. Paradoxically, although sexual abuse investigations involving boys are less likely to note emotional harm and be substantiated, they are more likely to be transferred to ongoing child welfare services.

Keywords Child welfare · Sexual abuse · Gender

The experience of child sexual abuse (CSA) is strongly associated with poor child and adult outcomes including deficits in neurobiological, emotional, behavioural, and social development over the life course (Chen et al. 2010; Maniglio 2009). Although the detrimental impact of CSA is well documented, there is a dearth of literature on differential outcomes experienced by boys and girls and on child protection services to address the victims' needs. Research about the experience of CSA which examines differences in gender is a relatively new field of study; much of the CSA literature has been focused on the effects of such abuse on females (Walker et al. 2004). With regards to the child welfare system's response to CSA, the emerging literature is also scarce and suggests that in comparison to boys, child protection workers substantiate sexual abuse for girls at higher rates (Maikovich et al. 2009). Among victims of CSA, the needs of males are therefore likely to go undetected and unaddressed.

This study uses a large representative dataset of child welfare investigations involving an allegation of sexual abuse to explore how boys investigated by the child protection system for alleged sexual abuse compare to girls on key clinical characteristics. It also examines the decision to transfer a sexual abuse investigation to ongoing servies and whether the gender of the child has a role in determining this outcome.

Definitions of Child Sexual Abuse

Definitions of CSA range from events that involve contact (intercourse, attempted intercourse, oral-genital contact, fondling of genitals directly or through clothing) to non-contact activities such as exhibitionism, exposing children to adult sexual activity or pornography, or the use of the child for prostitution or pornography (Putnam 2003). Although a standard definition that specifies the behaviours and severity which constitute CSA has not yet been established, the World Health Organization's definition is generally accepted as encompassing the major constructs essential for understanding and researching sexual abuse:

✉ Barbara Fallon
barbara.fallon@utoronto.ca

[1] Factor-Inwentash Faculty of Social Work, University of Toronto, 246 Bloor Street W, Toronto, ON M5S 1V4, Canada

[2] Centre for Research on Children and Families, McGill University, Montreal, QC, Canada

> Child sexual abuse is the involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared and cannot give consent, or that violates the laws or social taboos of society. Child sexual abuse is evidenced by this activity between a child and an adult or another child who by age or development is in a relationship of responsibility, trust or power, the activity being intended to gratify or satisfy the needs of the other person (World Health Organization 1999, pp. 15–16).

Measuring the nature and extent of CSA is fraught with significant obstacles, perhaps most importantly, the embarrassment and secrecy associated with the abuse which makes it difficult to reliably document when the event occurs (Collin-Vézina et al. 2013; Lyon 2007). The variation in estimates of the extent of sexual abuse is also driven by the way in which data is collected (e.g., official reports vs. population surveys), and how sexual abuse is defined (e.g., contact vs. non-contact) (Stoltenborgh et al. 2011).

Despite these methodological challenges, international trends from recent systematic reviews and meta-analyses have consistently shown alarming rates of CSA for both genders, with averages of 18–20 % for females and of 8–10 % for males (Pereda et al. 2009), with the lowest rates for both girls (11.3 %) and boys (4.1 %) found in Asia, and highest rates found for girls in Australia (21.5 %) and for boys in Africa (19.3 %) (Stoltenborgh et al. 2011). Research findings do, however, clearly demonstrate a major lack of convergence between the low number of official reports of CSA to authorities, and the high rates of CSA that youth and adults self-report retrospectively.

A comprehensive meta-analysis that combined estimations of CSA in 217 studies published between 1980 and 2008, showed the rates of CSA to be more than 30 times greater in studies relying on self-reports (127 per 1,000) than in official-report inquiries, such as those based on data from child protection services and the police (4 per 1,000; Stoltenborgh et al. 2011). National and provincial data on official reports of sexual abuse to child welfare authorities indicate that there were an estimated 2,607 substantiated sexual abuse investigations (0.43 per 1,000 children) in Canada in 2008 (Public Health Agency of Canada 2010) and 848 substantiated sexual abuse investigations (0.36 per 1,000 children) in Ontario in 2013 (Fallon et al. 2015). Despite incidence statistics likely to be an underestimation of the actual magnitude of CSA, researchers have argued that there is a steady decline in sexual abuse since the 1990s in the United States (Finkelhor et al. 2005, 2015). There is an analagous decrease in *official reports* of sexual abuse in Canadian indicidence studies, although statistics from victimization surveys and police databases do not support the finding that CSA is in decline (Collin-Vézina et al. 2010).

Disclosure, Outcomes, and Child Welfare Service Involvement for Victims of CSA

Disclosure Victims of CSA often delay reporting their experience of abuse, which is likely to be an important factor that contributes to the discrepancy between data of official inquiries from those of self-report surveys. Based on a review of studies of CSA disclosure rates, London et al. (2008) concluded that between 55 and 69 % of CSA survivors did not disclose as children. Results from population surveys conducted in Canada and the US show similar trends: 70 to 75 % of respondents reporting CSA waited 5 years or more before disclosing the abuse, or had never disclosed prior to the survey (Hébert et al. 2009; Smith et al. 2000). Although delaying disclosure for months and years is very common for both male and female survivors of CSA, men are more likely to wait many years before finding a person to confine in (Hébert et al. 2009).

As reviewed by Collin-Vézina and colleagues (Collin-Vézina et al. 2015), barriers to disclosure most frequently reported in research include: feelings of guilt and shame; self-blame; developmental factors affecting the understanding of and ability to talk about the abuse; fear of retaliation, of being blamed, or not being believed. Female victims seem to be particularly susceptible to experience these barriers as research findings suggest they are more likely to have feelings of responsibility or to be confused about who was responsible for the abuse; more than males, females fear being blamed or not believed (Alaggia 2005). Other barriers to disclosure that pertain to the sociocultural and structural level are related to taboos; expected or experienced negative reactions to disclosure, including those based in racism and stereotypes; and conflicting media messages regarding teenagers and seduction (Alaggia and Millington 2008). Sociocultural barriers reported more specifically by males include: being abused by a woman (which may be socially perceived as sexual exploration rather than abuse); lack of social acceptance of males as victims; fear of uncertainty regarding sexual orientation and of becoming an abuser later in life, and perceived complicity in the abuse and confusion over simultaneous feelings of arousal and disgust (Alaggia 2005; Alaggia and Millington 2008; Gagnier and Collin-Vézina in press).

A child's disclosure of sexual abuse is a critical component to a sexual abuse investigation (Reitsema and Grietens 2016). Understanding their readiness to disclose can be used for early detection and prevention of abuse (Alaggia 2004; Alaggia and Kirshenbaum 2005; Humphries et al. 2016; Paine and Hansen 2002; Reitsema and Grietens 2016). Several factors can impact disclosure including a child's "age, gender, type of abuse,

fear of negative consequence, and perceived responsibility" (Collin-Vézina et al. 2013; Goodman-Brown et al. 2003; Smith et al. 2000). Boys disclose less frequently for fear of being labelled as homosexual and as victims (Alaggia 2004; Collin-Vézina et al. 2015; Goodman-Brown et al. 2003; Gagnier and Collin-Vézina 2016; Gries et al. 1996; Finkelhor 1984), whereas the impact of negative consequences are likely to influence girls' disclosure (Goodman et al. 2003).

Outcomes Although research posits that victims of both genders can experience negative mental health and behavioural outcomes following CSA, the scholarship remains equivocal on the question of the magnitude of impact across genders. On the one hand, there is some evidence that the severity of the effects of sexual abuse can vary by gender. Using the National Comorbidity Study, Molnar and colleagues (Molnar et al. 2001), found that after controlling for other childhood adversities, CSA was associated with the development of a significantly higher number of mood, anxiety, and substance disorders in women than in men. Similarly, MacMillan and colleagues (MacMillan et al. 2001) found that a lifetime risk of psychiatric disorders was higher for individuals with a history of CSA, and that this risk was more prominent in females than males. While these studies are suggesting the odds to be greater for girls, Rhodes and colleagues (2011) suggested the opposite. In their review, a clear association between CSA and suicidal thoughts, suicide-related behaviour and suicide attempts were found for both boys and girls. When adjusting for possible confounders, the association remained stronger for boys than for girls, specifically for suicide attempts. Coohey's research (2010) drawing from the National Survey on Child and Adolescent Well-Being (NSCAW) also suggested that sexually abused boys aged 11 to 14 were more likely to be in the clinical range for internalizing behaviours than girls, thus challenging the notion that boys' typical adaptation to CSA includes more acting out and delinquent behaviours and fewer internalizing symptoms.

On the other hand, many studies did not confirm gender-specific reactions to CSA. Also drawing from NSCAW, Maikovich-Fong and Jaffee (2010) analyzed gender characteristics in the severity of internalizing, externalizing, or trauma symptoms in children aged 4 to 18 investigated by child protection services for sexual abuse. Their findings revealed that there were no significant gender differences in the association between abuse characteristics and emotional/behavioural problems. This latter perspective has been echoed in a systemtic review of meta-analyses that examined the extent of adult mental health issues linked to CSA (Maniglio 2009). No gender difference between victims' perceived level of mental health difficulties were found but female victims were more likely to report suffering greater psychological harm from these experiences than male victims. A recent longitudinal birth cohort study involving 900 participants suggested that the effects of CSA on adult developmental outcomes were both profound and similar for males and females (Fergusson et al. 2013). Regardless of gender, those exposed to severe CSA – which involved penetration – had nearly 2.5 times more mental health problems than those not exposed to CSA. This finding is consistent with data from the Adverse Childhood Expereince study conducted among 17,337 adults in California (Dube et al. 2005). CSA significantly increased the risk of a range of outcomes and the magnitude effects were similar for men and women. Severity of the CSA consistently showed that CSA involving intercourse was associated with an elevated risk for negative outcomes among both genders.

Overall, research suggests that CSA is a strong determinant for challenging mental health, behavioural, and social outcomes, but the extent to which the impact of CSA is similar among female and male victims is still debated. Notably, most studies in this field have focused on adult samples, thus providing little insight on gender differences in earlier stages in life. Yet, this is an important area to explore as recent studies are suggesting that the impact of CSA by gender should also be looked at over time. For instance, using a birth cohort of 465 females and 471 males born in 1972–73 in New Zealand, Van Roode and colleagues (Van Roode et al. 2009) demonstrated that while the impact of CSA appeared to lessen with age for women, abused men appeared to carry increased risks into adulthood. Also, better understanding short-term outcomes in both male and female victims could inform decision-making processes to provide early services to victims.

Ongoing Services The decision to provide ongoing services after a child maltreatment investigation has serious resource implications. In a fiscally-constrained child welfare service environment, decisions regarding which families and children receive scarce services needs to be understood. Although limited, research examining this consequential service decision is growing within a Canadian child welfare context (e.g., Fallon et al. 2011, 2013a, b; Fast et al. 2014; Jud et al. 2012). Caregiver risk factors, such as alcohol abuse, few social supports and caregiver age have been found to be the most influential predictors in the decision to provide ongoing services (Fallon et al. 2011, 2013a, b). The child's gender has been found to be significantly associated with the decision to provide ongoing services and/or a referral for specialized services for the family, with female children receiving more services than males (Jud et al. 2012). Fast and colleagues (2014) found that internalized functioning concerns, child Aboriginal status, and caregiver functioning concerns predicted the decision to transfer a case to ongoing child welfare services.

Generally, substantiation is highly correlated with the decision to provide ongoing services (DePanfilis and Zuravin 1999; Freeman et al. 1996). However, DePanfilis and

Zuravin (2001) found that families with a previous substantiated report were 22 % less likely to receive ongoing services than families with no previous substantiated maltreatment. Other predictor variables which have been found to be associated with the decision to provide ongoing services include mother's age (younger mothers are more likely to be provided ongoing services) as well as type and severity of maltreatment; childhood history of abuse or neglect by a parent; the number of children in the home; caregiver impairments; and level of social support (DePanfilis and Zuravin 2001; English et al. 1999). A referral for ongoing services was mostly likely made in cases where both maternal drug and alcohol issues were noted by the child protection worker (DePanfilis and Zuravin 2001).

DePanfilis and Zuravin (2001) found that substantiated cases of neglect were 20 % less likely to receive ongoing services than substantiated cases of physical abuse. Jonson-Reid (2002) examined the decision to provide services among children reported for maltreatment and found that among 7 to 10 year-olds, those reported for physical abuse and those reported for neglect were equally likely to be referred for ongoing services. Children under the age of 14 who were reported for sexual abuse were more likely to be referred for ongoing services than children who were reported for physical abuse or neglect. Early adolescents (aged 11 to 14) were more likely to be referred for ongoing services than children between the ages of 7 to 10 and 15 to 17 .

Research Questions Limitations and differences between studies have resulted in little consensus about the differences for boys compared to girls in the experience of CSA and the response of the child protection systems. This study addresses the following research questions: 1) What is the proportion of males and females reported to child protection services for a concern of sexual abuse; (2) How do the clinical characteristics of the investigation differ for boy and girls; and (3) Does gender predict the decision to transfer a case to ongoing child protection services? Clarifying how the experience of CSA is different for males and females is fundamental to the development and refinement of intervention and prevention programs.

Methods

The primary objective of the Ontario Incidence Study of Reported Child Abuse & Neglect-2013 (OIS-2013) is to produce a provincial estimate of the incidence of child maltreatment in 2013. Using a multi-stage sampling design, a representative sample of 17 child welfare sites was selected from 46 child welfare organizations in Ontario. The second sampling stage involved selecting cases opened in the study sites during the 3-month period from October 1, 2013 to December 31, 2013. Screened-in investigations were evaluated by study staff to ensure that they met the OIS-2013 definitions of maltreatment. Investigations in which child maltreatment was alleged / suspected or the possibility of future maltreatment was assessed during the investigation were included in the sample. These procedures yielded a final sample of 5,265 children aged 0 to 15 investigated because of maltreatment-related concerns. This excludes children over the age of 15, siblings who were not investigated, and children who were investigated for non-maltreatment concerns.

Two sets of weights were applied to derive provincial annual estimates. First, results are annualized to estimate the volume of cases investigated by each agency in 2013. To account for the non-proportional sampling design, regional weights are then applied to reflect the size of each agency relative to the child population in the region from which the site was sampled, resulting in a weighted sample of 125,281. OIS estimates cannot be unduplicated because annualization weights are based on unduplicated service statistics provided by the study sites. Therefore, estimates for the OIS refer to child maltreatment investigations.

A subsample of investigations is used in this analysis. Only investigations in which the primary maltreatment concern is substantiated sexual abuse are included in the study. For this study, the final weighted sample of child maltreatment investigations involving a primary concern of sexual abuse was 4,261 child maltreatment investigations.

The information about the investigation was collected using a three-page data collection instrument consisting of an Intake Face Sheet, a Household Information Sheet, and a Child Information Sheet. Data collected by this instrument included the following: type of abuse and neglect investigated; level of substantiation and duration of maltreatment; physical and emotional harm to the child; functioning concerns for the children and their caregivers; housing information, and information about short-term service dispositions.

Measures

Workers were asked to indicate whether the investigation would be opened for ongoing child welfare services at the conclusion of the investigation. The decision to transfer a case to ongoing services is a dichotomous variable.

Predictor Variables

Key clinical variables representing an ecological model of child maltreatment were included in the model to determine their relative contribution. Clinical variables were chosen based on empirical literature of factors related to child maltreatment or risk of child maltreatment. These included child functioning concerns, caregiver risk factors, and household characteristics. The operational definitions and codes used in the analysis are provided in Table 1.

Table 1 OIS-2013 variable definitions

Outcome variable	Measurement	Description
Transferred to ongoing service	Dichotomous variable Transfer to ongoing service (1)	Workers were asked to indicate whether the investigation would be opened for ongoing child welfare services at the conclusion of the investigation
	Close case (0)	
Predictor variables		
	Categorical variable	
Type of sexual abuse investigation	Penetration/Attempted Penetration/Oral Sex/Fondling	Workers were asked to indicate the nature of the sexual abuse investigation using 9 forms. These forms were divided into three subtypes: contact (penetration, attempted penetration, oral sex, fondling); non-contact (sex talk, voyeurism, Exhibitionism, Exploitation) and other sexual abuse (child presents as symptomatic leading to the investigation of possible sexual abuse)
	Sex talk/Voyeurism/Exhibitionism/Exploitation	
	Other Sexual Abuse	
Physical harm	Dichotomous variable Physical Harm Noted (1) No Physical Harm (0)	Workers were asked to note whether there was physical harm.
Emotional harm	Dichotomous variable Emotional Harm Noted (1) No Emotional Harm (0)	Workers were asked to note whether there was emotional harm evident as a result of the maltreatment
Primary caregiver functioning	Nine dichotomous variables Suspected or Confirmed (1) No or Unknown (0)	Workers could note up to nine functioning concerns for the primary caregiver. Concerns were: alcohol abuse, drug/solvent abuse, cognitive impairment, mental health issues, physical health issues, few social supports, victim of domestic violence, perpetrator of domestic violence, and history of foster care/group home. Caregiver functioning variables were dichotomous variables with a suspected or confirmed concern coded as 'noted' and no and unknown coded as 'not noted'. The two most noted concerns for the primary caregiver are described. At least one concern is included in the logistic regression.
Single parent household	Dichotomous variable Two Caregiver (1) Single Caregiver (0)	Worker noted whether there were 2 caregivers in the household
Child age	Continuous	Workers noted 0–15 years of age.
Child sex	Males (1); Females (0)	Workers indicated the sex of the investigated child
Child functioning	Six dichotomous variables Suspected or confirmed concern (1) No or unknown (0)	Workers could note up to eighteen functioning concerns for the investigated child, indicating whether the concern had been confirmed, suspected, was not present or it was unknown to the worker. For this analysis, these functioning concerns included: attachment issues, intellectual/developmental disability, failure to meet developmental milestones, FAS/FAE, positive toxicology at birth, and physical disability. The six child functioning concerns most noted for sexual abuse investigations are described.
Previous opening	Dichotomous variable: Previous opening (1) No Previous opening (0)	Workers noted whether this child had been previously opened for an investigation.

Data Analyses

A first set of descriptive bivariate analyses were conducted to explore the differences in the characteristics of sexual abuse investigations involving girls and boys. Bivariate analyses were also used to determine the relationship between the outcome variable (transfers to ongoing services) and each theoretically relevant predictor variable. An independent t-test was conducted for child age.

Logistic regression was used to predict the outcome variable of ongoing service provision. Logistic regression is suited to the type of data that is consistently found in social and behavioural research, where many of the dependent variables of interest are dichotomous and the relationships among the independent and dependent variables are not necessary linear (Walsh and Ollenburger 2001). Logistic regression uses maximum likelihood estimation after the dependent variable has been transformed into a logit variable. The logit variable is the log of the odds of the dependent variable occurring. Through these b means, logistic regression can estimate the probability of an event occurring (Walsh and Ollenburger 2001). In a marginal model, the regression of the outcome on the predictor variables is estimated separately from the within-level correlations and the variances of the regression coefficients.

A two-step analysis procedure was utilized. All analyses were conducted using SPSS, version 22.0. Only significant predictor variables at the bivariate level ($p < .05$) were included in the multivariate model. The choice of cut-off point for the decision to provide ongoing services was set at 0.25 which reflects the proportion of investigations transferred to ongoing services for

this population. From the first model were extracted predictors with a significant relationship ($p < .05$) to the decision to transfer the case to ongoing child welfare services. The model was then run with this smaller set of predictors, only retaining significantly associated predictors ($p < .05$). There is no universal strategy to dealing with missing data (Menard 2002). In this analysis, missing data was not included in the bivariate or multivariate analysis.

Results

Table 2 presents the proportion of substantiated maltreatment investigations by primary maltreatment typology. In Ontario in 2013, sexual abuse investigations comprised 4 % of the maltreatment investigations conducted and 2 % of all substantiated child maltreatment investigations. Investigations involving exposure to intimate partner violence were the most likely to be investigated (32 % of all investigations) and comprised nearly half (48 %) of all substantiated child maltreatment investigations.

As shown in Table 3, sexual abuse investigations were the least likely to be substantiated of any type of maltreatment but there were differences in substantiation rates by subtype of sexual abuse. Sexual abuse investigations involving non-contact had the highest rate of substantiation (36 % of all non-contact sexual abuse investigations were substantiated). Investigations focusing on other sexual abuse allegations (the child was referred to a child protection agency for a concern of sexual abuse as a result of their behaviour or contact with a known perpetrator) were the least likely to result in a substantiated finding; only 8 % of these investigations were substantiated.

Table 4 presents characteristics of investigations involving an allegation of sexual abuse for males and females. Physical harm was so rarely noted for either gender that the estimate was too low to report. Other important differences emerged when examining these characteristics by gender. Boys were more likely to be investigated for a concern of non-contact sexual abuse (21 % versus 10 % for girls). Investigations involving boys were less likely to document emotional harm than investigations involving girls. However, investigations involving boys were more likely to note a functioning concern for depression/self-harm, ADD/ADHD (25 % versus 15 %), poor attachment (11 % versus 7 %), aggression (25 % versus 4 %), intellectual disability (25 % versus 10 %) and academic difficulties (25 % versus 10 %). Investigations involving boys also were more likely to note a functioning concern for the primary caregiver, to take place in a single parent household and to have been previously investigated. Boys were less likely to be substantiated than girls (15 % of investigations versus 25 % of investigations) but more likely to be opened for services at the conclusion of an investigation (25 % of investigations versus 15 %).

Table 5 depicts the final model predicting the decision to transfer a case to ongoing services. With the exception of the child's previous referral to a child protection agency, each of the predictors was related to the decision to provide ongoing services when controlling for all the clinical concerns of the investigation. Investigations were over five times more likely to be transferred to ongoing services when emotional harm was noted (OR 5.4). Investigations involving a concern for aggression (OR 3.1) and depression (OR 4.1) were also more likely to be transferred to ongoing services. Gender of the child remained highly significant when controlling for the clinical characteristics of the investigation; boys were over two and half times more likely to be transferred to ongoing services (OR 2.6). The predictors in the final model explained 38 % of the variance in the decision to substantiate risk, and the model had an overall classification rate of 76 %.

Table 2 Primary typology of investigated and substantiated maltreatment in Ontario in 2013

	Investigations	%	Substantiated investigations	%
Physical abuse	25,030	25.6	5,770	13.4
Sexual abuse	4,261	4.4	848	2.0
Neglect	26,767	27.3	10,386	24.1
Emotional maltreatment	10,592	10.8	5,620	13.0
Exposure to IPV	31,300	32.0	20,443	47.5
Total	97,951	100.0	43,067	100.0

Discussion

This study used a representative sample of children identified to a child protection system for alleged sexual abuse in order to examine differences in the clinical characteristics noted during the investigation and to determine whether the gender of the child influenced the decision to transfer a case to ongoing services at the conclusion of the investigation. Several important findings emerged. Sexual abuse investigations constituted 4 % of all maltreatment investigations conducted in Ontario in 2013 and only 2 % of all substantiated abuse investigations. Sexual abuse investigations were rarely substantiated by the investigating worker, particularly when they were conducted with children who were identified to the child welfare system because they were symptomatic. Investigations involving non-contact forms of sexual abuse were the most likely to result in a finding of substantiation.

Table 3 Level of substantiation by sub-type of sexual abuse

	Unfounded	%	Suspected	%	Substantiated	%	Total	%
Penetration / Attempted penetration / Oral sex / Fondling	945	61 %	157	10 %	448	29 %	1550	100 %
Sex talk / Voyeurism / Exhibitionism / Exploitation	353	56 %	50	8 %	223	36 %	626	100 %
Other sexual abuse	1776	85 %	133	6 %	177	8 %	2086	100 %
Total	3074	72 %	340	8 %	848	20 %	4262	100 %

Important gender differences were noted when comparing the clinical concerns arising from the investigation. The rate of investigation was significantly higher for girls as compared to boys. This is consistent with the literature on sexual abuse which finds that females are more likely to be identified as potential victims than males (Gault-Sherman et al. 2009; Walker et al. 2004). However, boys were twice as likely to be investigated for a concern of non-contact sexual abuse than females. Females were more likely to be investigated for contact sexual abuse than males. This is a finding that is also consistent with literature that has noted differences in the type of sexual abuse experienced by males and females (Edinburgh et al. 2006; Tzeng and Schwarzin 1990). However, males and females were equally likely to be investigated for other kinds of sexual abuse.

Workers were instructed to distinguish between concerns about child functioning in the past 6 months and the emotional harm that was caused by the investigated

Table 4 Sexual abuse investigations by sex of child in Ontario in 2013

	Female		Male		Total		
Investigations	2,496	59 %	1,765	41 %	4,261	100 %	
Age	9.42 (4.2)		8.10 (3.-5)				t = 11.07***
Rate per 1,000	2.179		1.465				X^2
Form							112.423***
Penetration / Attempted penetration / Oral sex / Fondling	1,021	41 %	528	30 %	1,549	36 %	
Sex talk / Voyeurism / Exhibitionism / Exploitation	257	10 %	368	21 %	625	15 %	
Other sexual abuse	1,216	49 %	869	49 %	2,085	49 %	
Physical and emotional harm							
Emotional harm	477	19 %	291	16 %	768	18 %	87.759***
Physical harm	NR		NR		NR		0.36
Primary caregiver functioning concerns							
Mental health	222	9 %	258	15 %	480	11 %	33.801***
Victim of domestic violence	181	7 %	165	9 %	346	8 %	6.093*
At least one primary caregiver functioning concern	611	24 %	513	29 %	1,124	26 %	11.197***
Case characteristics							
Single caregiver household	718	29 %	713	40 %	1,431	34 %	36.351***
Child previously investigated	1,191	48 %	968	55 %	2,159	51 %	37.829***
Child functioning issues							
Depression / Suicidal harm / Self harm	676	27 %	556	32 %	1,232	29 %	11.725**
ADD / ADHD	123	5 %	439	25 %	562	13 %	436.101***
Attachment	163	7 %	196	11 %	359	8 %	28.040***
Aggression	104	4 %	434	25 %	538	13 %	390.558***
Intellectual disability	121	5 %	270	15 %	391	9 %	135.463***
Academic difficulties	243	10 %	445	25 %	688	16 %	182.672***
Dispositions							
Transfers	365	15 %	437	25 %	802	19 %	85.875***
Substantiation	635	25 %	213	12 %	848	20 %	119.081***

Table 5 Predictors of transfers to ongoing services for investigations involving a primary concern of sexual abuse ($n = 4{,}261$)

	B	S.E.	O.R.
Child level			
Age**	−.039	.013	.961
Male***	.958	.111	2.605
Depression***	1.416	.145	4.119
Attachment issues*	−.484	.201	.616
Aggression***	1.104	.168	3.017
Academic difficulties***	−.973	.154	.378
Caregiver			
At least one primary caregiver functioning concern***	.587	.114	1.798
Single caregiver household*	.236	.100	1.266
Maltreatment			
Sexual abuse: contact			
Non contact***	.587	.136	1.798
Other sexual abuse***	−1.019	.119	.361
Emotional harm noted***	1.703	.128	5.492
Child previously investigated	.019	.113	1.019
2 Log likelihood			2903.416
Nagelkerke R Square			0.384

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

Classification 76 %

maltreatment. The measurement of emotional harm is at the 30 day point in the investigation: meaning that there are children who are symptomatic are likely to be captured using this definition. Workers noted more emotional harm for girls than boys but investigations involving boys noted concerns for depression, ADD/ADHD, attachment, aggression, intellectual disability and academic difficulties at higher rates than investigations involving girls. Boys were also more likely to have been previously identified to the child protection system and to come from a single caregiver household. These findings suggest that boys and girls are perceived by workers as facing distinct challenges, with male victims identified as accumulating risk factors beyond the sexual abuse under investigation and its associated emotional harm. Indeed, in addition to being investigated for CSA, male victims display a range of concerning mental health and behavioural difficulties, live with only one of their parents, and have been subjected to previous maltreatment that was brought to the attention of the authorities.

The multivariate results show a complex response by the child welfare system to the differences in the clinical presentation of investigations involving boys and girls. The literature on the transfer to ongoing services clearly demonstrates that the substantiation finding is strongly correlated to the decision to transfer to ongoing services (Jud et al. 2012). Given that investigations involving girls were also more likely to note emotional harm it would be expected that girls would have a higher rate of transfer to ongoing services than would boys. In contrast, in this study, boys were less likely to be substantiated than girls (12 % versus 25 %) *and* yet more likely to be transferred to ongoing services (25 % versus 15 %).

When controlling for the clinical concerns of the investigation, boys were over two and half times more likely to be transferred to ongoing services. Indeed the characteristics of the child (age, gender, and functioning) explain almost 25 % of the variance in the decision to provide ongoing services. The characteristics of the maltreatment (form of sexual abuse and emotional harm) explain 10 % of the variance in the decision to transfer an investigation to ongoing services, which would suggest that workers are placing emphasis on the symptomology of the child. Boys who are struggling in the community with academics, present behavioural issues, and have a caregiver who is also coping with several functioning issues without the support of an additional caregiver are triaged for services in this representative child welfare sample.

Altogether, these findings suggest that referrals to ongoing services are decided by workers on the basis of issues that go beyond the CSA experience under investigation and that are interfering with the overall child's functioning. In a fiscally-constrained child welfare service environment, it would be important to further examine the

decision-making process in child protection systems to ensure that emotional harm in CSA cases is considered a valid reason to transfer children to ongoing services. The current research was also unable to track referrals to external or community-based services, which may be more likely to take place when children are presenting issues that are limited to the abuse investigated. For instance, specialized Child Advocacy Centers have been deployed in a few Canadian cities and are now part of the continuum of services offered to CSA victims.

Limitations

Caution should be used in interpreting the results of this study. Data from the OIS-2013 are collected directly from the investigating worker and are not independently verified. These data only represent the concerns that presented during an average 6 week investigation period. Additional concerns for the child and the caregiver could arise after the initial investigation. This study used cross sectional data and are not evaluative. In general, a disclosure of sexual abuse may be less likely to occur at the investigation stage of child protection services.

Implications for Policy and Practice

This study used a large, representative sample of children identified to the child welfare system for a concern that they may have been sexually abused to examine the differences between genders on both the clincial presentation of the investigation and the resulting disposition towards ongoing services. The clinicial variations that emerged between genders have implications for policy and practice. The fact that cases involving boys are less likely to be confirmed than those of girls may be influenced by variations in types of CSA experienced by both genders, but it may also be indicative of the need for further training of child protection workers to ensure gender-neutral investigation and decision-making processes. The provision of ongoing child protection services appears to be driven by behavioural concerns and other family and social risk factors that boys are more likely to present, which may indicate that emotional harm may be underestimated as a reason for referral to ongoing services in child protection systems, for both genders. The success of the system's response to a child who has been sexually abused depends on the degree to which the intervention is tailored to the specific needs of the child. The findings of this study suggest that decision-making processes in child protection systems must be better understood to ensure that interventions address the specific needs of sexually abused boys and girls.

Acknowledgments We acknowledge the support of the Social Sciences and Humanities Research Council (#950-231186).

Compliance with Ethical Standards

Ethical Standards and Informed Consent This paper is a secondary analysis of the Ontario Incidence of Reported Child Abuse and Neglect - 2013, ethics Protocol Reference #: 28580, Health Sciences Research Ethics Board, University of Toronto.

Disclosure of Interest All authors declare no conflict of interest.

References

Alaggia, R. (2004). Many ways of telling: expanding conceptualizations of child sexual abuse disclosure. *Child Abuse and Neglect, 28*, 1213–1227.

Alaggia, R. (2005). Disclosing the trauma of child sexual abuse: A gender analysis [Electronic version]. *Journal of Loss and Trauma, 10*, 453–470. doi:10.1080/15325020500193895.

Alaggia, R., & Kirshenbaum, S. (2005). Speaking the unspeakable: exploring the impact of family dynamics on child sexual abuse disclosures. *Families in Society, 86*, 227–234.

Alaggia, R., & Millington, G. (2008). Male child sexual abuse: a phenomenology of betrayal. *Clinical Social Work Journal, 36*(3), 265–275. doi:10.1007/s10615-007-0144-y.

Chen, L., Murad, M. H., Paras, M. L., & Zirakzadeh, A. (2010). Sexual abuse and lifetime diagnosis of psychiatric disorders: systematic review and meta-analysis. *Mayo Clinic Proceedings, 85*, 618–629.

Collin-Vézina, D., Hélie, S., & Trocmé, N. (2010). Is child sexual abuse declining in Canada? An analysis of child welfare data. *Child Abuse & Neglect, 34*, 807–812.

Collin-Vézina, D., Daigneault, I., & Hébert, M. (2013). Lessons learned from child sexual abuse research: Magnitude, aftermath, and prevention strategies. *Child and Adolescent Psychiatry and Mental Health, 7*(23), 1–9.

Collin-Vézina, D., De la Sablonnière, M., Palmer, A., & Milne, L. (2015). A preliminary mapping of individual, relational, and social factors that impede disclosure of childhood sexual abuse. *Child Abuse & Neglect, 43*, 1123–1134.

Coohey, C. (2010). Gender differences in internalizing problems among sexually abused early adolescents. *Child Abuse & Neglect, 34*, 856–862.

DePanfilis, D., & Zuravin, S. (1999). Epidemiology of child maltreatment recurrences. *Social Service Review, 73*(2), 218–225.

Depanfilis, D., & Zuravin, S. (2001). Assessing risk to determine the need for services. *Children and Youth Services Review, 23*(1), 3–20.

Dube, S. R., Anda, R. F., Whitfield, C. L., Brown, D. W., Felitti, V. J., Dong, M., & Giles, W. H. (2005). Long-term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventive Medicine, 28*(5), 430–438.

Edinburgh, L., Saewyc, E., & Levitt, C. (2006). Gender differences in extrafamilial sexual abuse experiences among young teens [Electronic version]. *The Journal of School Nursing, 22*(5), 278–284.

English, D. J., Marshall, D. B., Brummel, S., & Orme, M. (1999) Characteristics of repeated referrals to child protective services in Washington State. *Child Maltreatment, 4*(4), 297–307.

Fallon, B., Ma, J., Black, T., & Wekerle, C. (2011). Characteristics of young parents investigated and opened for ongoing services in child welfare. *International Journal of Mental Health and Addiction, 9*, 365–381.

Fallon, B., Ma, J., Allan, K., Trocmé, N., & Jud, A. (2013a). Child maltreatment-related investigations involving infants: opportunities for resilience? *International Journal of Child and Adolescent Resilience, 1*, 35–47.

Fallon, B., Ma, J., Allan, K., Trocmé, N., & Jud, A. (2013b). Opportunities for prevention and intervention with young children: lessons from the Canadian incidence study of reported child abuse and neglect. *Child & Adolescent Psychiatry & Mental Health, 7*, 1–13.

Fallon, B., Van Wert, M., Trocmé, N., MacLaurin, B., Sinha, V., Lefebvre, R., et al. (2015). *Ontario incidence study of reported child abuse and neglect 2013: Major findings*. Child Welfare Research Portal.

Fast, E., Trocmé, N., Fallon, B., & Ma, J. (2014). A troubled group? Adolescents in a Canadian child welfare sample. *Children and Youth Services Review, 46*, 47–54.

Fergusson, D. M., McLeod, G. F., & Horwood, L. J. (2013). Childhood sexual abuse and adult developmental outcomes: findings from a 30-year longitudinal study in New Zealand. *Child Abuse & Neglect, 37*(9), 664–674.

Finkelhor, D. (1984). *Child sexual abuse: New theory and research*. New York: Free Press.

Finkelhor, D., Ormrod, R., Turner, H., & Hamby, S. L. (2005). The victimization of children and youth: a comprehensive, national Survey. *Child Maltreatment, 10*(1), 5–25. doi:10.1177/1077559504271287.

Finkelhor, D., Saito, K., & Jones, L. M. (2015). *Updated trends in child maltreatment, 2013*. Durham, NH: Crimes against Children Research Center.

Freeman, J., Levine, M., & Doueck, H. (1996). Child age and caseworker attention in child protection service investigations. *Child Abuse & Neglect, 20*(10), 907–920.

Gagnier, C., & Collin-Vézina, D. (2016). Male experiences with sexual abuse disclosure. *Journal of Child Sexual Abuse.*

Gagnier, C., & Collin-Vézina, D. (in press). The disclosure experiences of male child sexual abuse survivors. *Journal of Child Sexual Abuse.*

Gault-Sherman, M., Silver, E., & Sigfúsdóttir, I. D. (2009). Gender and the associated impairments of childhood sexual abuse: a national study of Icelandic youth \[Electronic version]. *Social Science & Medicine, 69*, 1515–1522.

Goodman, G. S., Ghetti, S., Quas, J. A., Edelstein, R. S., Alexander, K. W., Redlich, A. D., et al. (2003). A prospective study of memory for child sexual abuse: new findings relevant to the repressed/lost memory controversy. *Psychological Science, 14*, 113–118.

Goodman-Brown, T. B., Edelstein, R. S., Goodman, G. S., Jones, D. P. H., & Gordon, D. S. (2003). Why children tell: a model of children's disclosure of sexual abuse. *Child Abuse and Neglect, 27*, 525–540.

Gries, L. T., Goh, D. S., & Cavanaugh, J. (1996). Factors associated with disclosure during child sexual abuse assessment. *Journal of Child Sexual Abuse, 5*, 1–19.

Hébert, M., Tourigny, M., Cyr, M., McDuff, P., & Joly, J. (2009). Prevalence of childhood sexual abuse and timing of disclosure in a representative sample of adults from the province of Quebec. *Canadian Journal of Psychiatry, 54*, 631–636.

Humphries, R. L., Debowska, A., Boduszek, D., & Mattison, M. (2016). Gender differences in psychosocial predictors of attitudes toward reporting child sexual abuse in the United Kingdom. *Journal of Child Sexual Abuse, 25*, 293–309.

Jonson-Reid, M. (2002). Exploring the relationship between child welfare intervention and juvenile corrections involvement. *American Journal of Orthopsychiatry, 72*(4), 559.

Jud, A., Fallon, B., & Trocmé, N. (2012). Who gets services and who does not? multi-level approach to the decision for ongoing child welfare or referral to specialized services. *Children and Youth Services Review, 34*, 983–988.

London, K., Bruck, M., Wright, D. B., & Ceci, S. J. (2008). Review of the contemporary literature on how children report sexual abuse to others: findings, methodological issues, and implications for forensic interviewers. *Memory, 16*, 29–47.

Lyon, T. D. (2007). False denials: Overcoming methodological biases in abuse disclosure research. In M.-E. Pipe, M. E. Lamb, Y. Orbach, & A.C. Cederborg (Eds.), *Child sexual abuse: Disclosure, delay, and denial*. Psychology Press.

MacMillan, H. L., Fleming, J. E., Streiner, D. L., Lin, E., Boyle, M. H., Jamieson, E., & Duku, E. K. (2001). Childhood abuse and lifetime psychopathology in a community sample. *The American Journal of Psychiatry, 158*(11), 1878–1883.

Maikovich, A. K., Koenen, K. C., & Jaffee, S. R. (2009). Posttraumatic stress symptoms and trajectories in child sexual abuse victims: an analysis of sex differences using the national survey of child and adolescent well-being. *Journal of Abnormal Child Psychology, 37*, 727–737.

Maikovich-Fong, A. K., & Jaffee, S. R. (2010). Sex differences in childhood sexual abuse characteristics and victims' emotional and behavioral problems: findings from a national sample of youth. *Child Abuse & Neglect, 34*(6), 429–437. doi:10.1016/j.chiabu.2009.10.006.

Maniglio, R. (2009). The impact of child sexual abuse on health: a systematic review of reviews. *Clinical Psychology Review, 29*(7), 647–657.

Menard, S. W. (2002). Applied logistic regression analysis. Thousand Oaks, CA: Sage Publications.

Molnar, B. E., Buka, S. L., & Kessler, R. C. (2001). Child sexual abuse and subsequent psychopathology: results from the National Comorbidity Survey. *American Journal of Public Health, 91*(5), 753–760.

Paine, M. L., & Hansen, D. J. (2002). Factors influencing children to self-disclose sexual abuse. *Clinical Psychology Review, 22*, 271–295.

Pereda, N., Guilera, G., Forns, M., & Gòmez-Benito, J. (2009). The international epidemiology of child sexual abuse: a continuation of Finkelhor (1994). *Child Abuse & Neglect, 33*, 331–342.

Public Health Agency of Canada (2010). *Canadian incidence study of reported child abuse and neglect – 2008: Major findings.* Ottawa.

Putnam, F. W. (2003). Ten-year research update review: child sexual abuse. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*(3), 269–278.

Reitsema, A. M., & Grietens, H. (2016). Is anybody listening? The literature on the dialogical process of child sexual abuse disclosure reviewed. *Trauma, Violence & Abuse, 17*, 330–340.

Rhodes, A. E., Boyle, M. H., Tonmyr, L., Wekerle, C., Goodman, D., Leslie, B., & Manion, I. (2011). Sex differences in childhood sexual abuse and suicide-related behaviors. *Suicide & Life-Threatening Behavior, 41*(3), 235–254.

Smith, D., Letourneau, E. J., Saunders, B. E., Kilpatrick, D. G., Resnick, H. S., & Best, C. L. (2000). Delay in disclosure of childhood rape: results from a national survey. *Child Abuse & Neglect, 24*, 273–287.

Stoltenborgh, M., van IJzendoorn, M. H., Euser, E. M., & Bakermans-Kranenburg, M. J. (2011). A global perspective on child sexual abuse: meta-analysis of prevalence around the world. *Child Maltreatment, 16*, 79–101.

Tzeng, O., & Schwarzin, H. (1990). Gender and race differences in child sexual abuse correlates. *International Journal of Intercultural Relations, 14*, 135–161.

Van Roode, T., Dickson, N., Herbison, P., & Paul, C. (2009). Child sexual abuse and persistence of risky sexual behaviors and negative sexual outcomes over adulthood: findings from a birth cohort. *Child Abuse & Neglect, 33*(3), 161–172.

Walker, J. L., Carey, P. D., Mohr, N., Stein, D. J., & Seedat, S. (2004). Gender differences in the prevalence of childhood sexual abuse and in the development of paediatric PTSD [Electronic version]. *Archives of Women's Mental Health, 7*, 111–121. doi:10.1007/s00737-003-0039-z.

Walsh, A., & Ollenburger, J. (2001). Essential statistics for the social and behavioral sciences. Upper Saddle River, NJ: Prentice-Hall.

World Health Organization (1999). *Report of the Consultation on Child Abuse Prevention*. Geneva: World Health Organization. Retrieved from http://www.who.int/iris/handle/10665/65900.