Leclerc, B. & Wortley, R. (2015). Predictors of victim disclosure in child sexual abuse: Additional evidence from a sample of incarcerated adult sex offenders. *Child Abuse & Neglect*, 43, 104-111. DOI: [10.1016/j.chiabu.2015.03.003](https://doi.org/10.1016/j.chiabu.2015.03.003)

Abstract

The under-reporting of child sexual abuse by victims is a serious problem that may prolong the suffering of victims and leave perpetrators free to continue offending. Yet empirical evidence indicates that victim disclosure rates are low. In this study, we perform regression analysis with a sample of 369 adult child sexual offenders to examine potential predictors of victim disclosure. Specifically, we extend the range of previously examined potential predictors of victim disclosure and investigate interaction effects in order to better capture under which circumstances victim disclosure is more likely. The current study differs from previous studies in that it examines the impact of victim and offense variables on victim disclosure from the perspective of the offender. In line with previous studies, we found that disclosure increased with the age of the victim and if penetration had occurred. In addition, we found that disclosure increased when the victim came from a non-dysfunctional family and resisted the abuse. The presence of an interaction effect highlighted the impact of the situation on victim disclosure. This effect indicated that as victims get older, they are more likely to disclose the abuse when they are not living with the offender at the time of abuse, but less likely to do so when they are living with the offender at the time of abuse. These findings are discussed in relation to previous studies and the need to facilitate victim disclosure.

Keywords: Child sexual offenses, child sexual abuse, victim disclosure

Introduction

The under-reporting of child sexual abuse by victims is a serious problem that may prolong the suffering of victims and leave perpetrators free to continue offending. In a review of the research, London, Bruck, Ceci & Shuman (2005) found that the modal rate of disclosure by child sexual abuse victims during childhood was 33%, and even then the reporting may have occurred months or even years after the event. Among 104 participants who had disclosed the abuse, Lam (2014) found that 70% of them had disclosed it within one month and 63% of them had disclosed the abuse to 2 to 5 people, most often to friends. Sauzier (1989) indicated that almost half of reported child sexual abuse cases come to light through discovery by an adult.

Moreover, increased *fear* of disclosure plays an important role in shaping the behaviour of offenders and potentially preventing abuse. The risk of getting caught is likely to be a significant consideration for many offenders. A number of studies have found that, when asked what victims could do to better protect themselves, offenders advised that children should be taught to tell someone else if they are sexually abused (Budin & Johnson, 1990; Elliott, Browne & Kilcoyne, 1995). Leclerc, Wortley and Smallbone (2011) found that around a third of offenders reported that their victim was able to avoid incidents of abuse by saying that they would tell someone else about the abuse. Increasing disclosure rates by victims would assist in the detection and arrest of offenders.

However, disclosure of sexual abuse is not a simple process for victims. The victim must first recognise the incident as sexual abuse and then find a trusted adult to whom to report. The child may have difficulty distinguishing sexual abuse from the legitimate exercise of adult authority or care-giving behaviour, or may be reluctant to report abuse because of pre-existing emotional ties and loyalty to the offender (Berliner & Conte, 1990; Smallbone, Marshall &

Wortley, 2008). Offenders may also take measures after the abuse to minimise the chance of disclosure, such as saying he (the offender) would go to jail if the child told anyone, or giving the child special treats or privileges (Leclerc, Proulx & MicKibben, 2005; Smallbone & Wortley, 2000). The low rates of victim disclosure indicate the need to investigate the factors that facilitate victim disclosure, and this is the objective of the current study. Specifically, with a sample of incarcerated adult sexual offenders, potential predictors of victim disclosure including victim and offense-related variables are examined as well as interaction effects between these variables.

Previous Empirical Research on Children Disclosure of Sexual Abuse

The predictors of victim disclosure have been studied by a number of scholars (see a review by London et al., 2005). The most common variables included in these studies were victim characteristics (age and gender), offender-victim relationship, family support, and variables measuring the severity of abuse. However, this body of work is characterised by inconsistent and contradictory findings. Gender and age of the victim and the offender-victim relationship have been the most investigated predictors of victim disclosure. With regard to the gender of the victim, some studies have reported that boys were less willing to disclose the abuse than girls at forensic interview (e.g., DeVoe & Faller, 1999; Hershkowitz et al., 2005; Lippert et al., 2009) but other studies found no differences (e.g., Goodman-Brown et al., 2003; Keary & Fitzpatrick, 1994; Lam, 2014). The evidence is also mixed in relation to the age of the victim. Kogan (2004) found that younger girls may be more likely to disclose the abuse at the onset than older girls while Bottoms, Rudnicki and Epstein (2007) and Lam (2014) found no relationship between age and disclosure and a recent study by Lippert et al. (2009) found that victims are more likely to disclose the abuse as they get older. The evidence is also mixed when using the

age of the victim at the forensic interview as a potential predictor of victim disclosure (see Lippert et al., 2009). As for the offender-victim relationship, the evidence is again mixed. Some studies have reported that victim disclosure is more likely when the victim is not related to the offender because the caregiver would be more supportive of the offender in these cases (e.g., Lippert et al., 2009; London et al., 2005). However, Lippert et al. (2009) or Lam (2014) did not find any association at the multivariate level between offender-victim relationship and victim disclosure. No relationship was found either between whether the victim was living with the offender at the time of abuse and victim disclosure.

The investigation of offense variables as potential predictors of victim disclosure has mostly focused on the severity of abuse. Paine and Hansen (2002) found that victims who suffered penetration and physical aggression by the offender were less likely to disclose the abuse, possibly because they were more likely to fear retaliation from the offender. In their review, London et al. (2005) reported either the opposite or no relationship. Using a severity ranking (the highest the score the more severe the sexual activities), Lam (2014) recently found that severity was predictive of victim disclosure. She explained this relationship by indicating that the worry of what might happen if one would tell does not have the same impact on maintaining silence because the real negative consequences of the abuse outweigh the perceived negative consequences of disclosing in this context (see also Lippert et al., 2009). The evidence is mixed in regards to the relationship between duration of abuse and victim disclosure (Paine & Hansen, 2002). In the recent study completed by Lippert et al. (2009), no relationship was found between duration of abuse or penetration by the offender and victim disclosure at a multivariate level even though penetration was significant at a bivariate level. Lam (2014) did not find an association between duration and victim disclosure.

It is difficult to know what to make of these previous findings because of their inconsistency across studies. As reviewed out by London et al. (2005), there are number of methodological issues that can explain the contradictory nature of these findings, such as the various definitions of child sexual abuse adopted in the literature. Related to this point is how the predictors examined in these studies were operationalised. In particular, different measures have been used to measure the severity of abuse. Lippert et al.'s (2009) measure of severity consisted of whether or not penile penetration was performed on the victim whereas Lam (2014) constructed a severity ranking. London et al. (2005) reviewed a number of studies that have used method of coercion as a measure of severity of abuse. Paine and Hansen (2002) indicated that both physical aggression and penetration were used to measure the severity of abuse.

The inconsistency in previous findings argues for the need of further research in the area. The current study re-examines traditional predictors of disclosure but also makes three important contributions to the existing literature. Our first contribution is that we extend the range of potential predictors of victim disclosure beyond those covered in previous research. With respect to victim-related variables, we investigate the effect on disclosure of whether the victim was from a dysfunctional background and whether s/he resisted the offender during the offense. These new variables may be especially relevant to predict victim disclosure because they specify the circumstances under which the victim was sexually abused. Furthermore, we include offense variables, such as whether the offender forced the victim to perform sexual behaviors and whether the offender adopted a non-persuasive strategy (i.e., acted on the spur of the moment) to commit the offense, neither of which have been considered in previous studies. We believe that these variables may assist in understanding and explaining victim disclosure because they are likely to shape how the victim reacts following the completion of the offense. Apart from the

studies on victim disclosure reviewed above, the introduction of these variables is supported by empirical literature suggesting the important role of victim attributes, offense characteristics and/or circumstances and their interplay to further understand the dynamic of sexual offenses (e.g., Beauregard, Leclerc & Lussier, 2012; Leclerc & Cale, 2012; Leclerc, Proulx, Lussier & Allaire, 2009; Leclerc, Smallbone & Wortley, 2013; Mieczkowski & Beauregard, 2010; Wortley & Smallbone, 2006). We have been particularly careful in using clearly defined offense variables to avoid any confusion as to which offense variables are predictive or not of victim disclosure (see London et al., 2005).

Our second contribution is the investigation of interaction effects in order to better capture under which circumstances victim disclosure is more likely. To our knowledge, no study has investigated the presence of interaction effects to predict victim disclosure. The examination of interaction effects is crucial to better understand victim disclosure. One variable may be predictive of victim disclosure only under certain conditions. This assumption is also supported by empirical studies that have detected interaction effects between victim characteristics and offender behaviors during the offense in explaining the severity of child sexual abuse (e.g., Leclerc et al., 2009). In addition, interaction effects are important because they may help elucidate why certain variables are predictive of victim disclosure in certain studies but not in other studies.

Finally, the current study differs from many previous studies in that it examines the impact of victim and offense variables on victim disclosure from the perspective of the offender, rather from that of the victim. Offender perceptions of the factors governing victim disclosure are important because they represent the reality as far as the offender is concerned and thus may provide important information for the development of self-protection programmes and other

prevention initiatives (e.g., Budin & Johnson, 1989; Elliott, Browne & Kilcoyne, 1995).

Although limitations exist in regards to offender self-report (e.g., poor memory recall, cognitive distortions to either minimise or exaggerate certain aspects of offending, inability to understand questions), it can be argued that offenders are best placed to provide details on their offending behaviors because they are the ones committing crimes and therefore, able to advise on which prevention initiatives may work and which may not (Jacques & Bonobo, submitted), and there is a large body of work supporting this argument especially in ethnographic research of offenders and their offending patterns (e.g., Bennett & Wright, 1984; Copes & Cherbonneau; Jacques & Wright, 2011; see also Leclerc & Wortley, 2013; Van Gelder, Elffers, Reynald & Nagin, 2013).

Building on past research, and with no particular hypotheses in mind, we are interested in addressing the following questions from the perspective of offenders:

1- What are the victim and offense related variables that help explain victim disclosure to someone in child sexual abuse?

2- Are there any interaction effects between victim and offense related variables in explaining victim disclosure to someone?

Method

Sample

The sample consisted of 369 adult males who had been convicted of a sexual offense against a child aged between 1 and 17 years old. These participants were assessed at the Regional Reception Centre of Ste-Anne-des-Plaines, Québec, a maximum-security institution of the Correctional Service of Canada, where they underwent a six-week assessment of risk level and treatment needs prior to transfer to another institution. During this assessment, a semi-structured

interview was completed with each participant for research purposes. The research protocols were conducted according to the ethical guidelines stipulated by the Research Ethics Board of the Université de Montréal during the time period in which the participants were interviewed. The majority of participants were Caucasian (89%) and most had less than a high school education (87%). A total of 38% of participants were single at the time of the offense and only 42% were employed. The average age of participants at the time of assessment was 43 years old ($SD=12.35$).

Procedure

All data used in this study were gathered through a semi-structured interview conducted with each participant using the QIDS (St-Yves, Proulx, and McKibben, 1994), which is a computerized questionnaire for sexual offenders. All interviewers were licensed forensic psychologists or criminologists between 1995 and 2000. The quality of data collected from the QIDS was controlled by completing interrater agreement. Interrater agreement was measured on the basis of 16 interviews conducted jointly by two raters (the principal research assistant and the first author). Ratings were performed independently after these interviews, which were conducted by one interviewer in the presence of the other. The mean kappa was .87, which represents strong agreement.

Participation in this study was strictly voluntary. Each participant was given an information sheet explaining the research project, its purpose and benefits for research, its potential consequences (e.g., emotional stress) on participants, and the contact details of the chief investigators. Each participant signed a consent form, which stated that the information would be

used for research purposes only. No incentives were used, a condition which was made clear to potential participants. In this study, 93% of offenders accepted to participate.

To avoid limitations related to poor memory recall, only the last victim for which participants were convicted was considered. Still, several separate offending events may have occurred between an offender and the victim. Sexual offenses against children often involve a number of incidents over a period of time. Therefore, variables used in this study refer to all events that may have happened with a single victim.

Variables of the Current Study

The variable of interest is victim disclosure of the offense to someone else. Initially, offenders were asked to indicate what led to their arrest. To answer this question, offenders were provided with the following range of options: offender was caught when sexually abusing the victim (n= 7; 1.9%), victim disclosed the abuse to someone (n= 179; 48.5%), family member disclosed the abuse to someone (n= 69; 18.7%), witness disclosed the abuse to someone (n= 9; 2.4%), third party disclosed the abuse to someone (n= 80; 21.7%), police identified the offender through an investigation (n= 14; 3.8%), offender turned himself in to police (n= 10; 2.7%) and other (n= 1; 0.3%). All categories were then collapsed except for victim disclosure in order to isolate this latter category as the one of interest (0=no victim disclosure, 1=victim disclosure). This operation was completed as the purpose of this study is to examine the predictors of victim disclosure from abused children.

The independent variables used in this study consisted of a number of relevant victim and offense related variables (see Table 1). Regarding victim variables, offenders were asked about

the age (between 0-17 years old) and gender of the victim and their relationship with the victim. The relationship with the victim was coded as either intrafamilial or extrafamilial. Extrafamilial relationships included cases for which the offender had no family relationship with the victim (e.g., acquaintances, neighbours, strangers). Intrafamilial relationships included cases for which the offender was related to the victim (e.g., father-daughter, uncle-nephew). Offenders were also asked whether the victim was from a dysfunctional background, living with them at the time of abuse and resisted during the offense. The familial environment of victims that were reported as coming from a dysfunctional background was characterised by the abuse of drugs and/or alcohol, the presence of criminality and/or child maltreatment and abuse. In terms of offense variables, offenders were asked about the duration of abuse, whether they used physical force, adopted a non-persuasive strategy, made the victim perform sexual acts, performed penile penetration on the victim (i.e., anal or vaginal) and physically injured the victim.

The use of a non-persuasive strategy variable was created. Initially, this variable was obtained by asking the following question: “What type of strategy would you use most often to sexually abuse the victim, that is, to involve the victim in sexual activity?” To answer this question, offenders were provided with 8 options, that is, seduction, money and gifts, playing with the victim, trickery, intoxicating the victim with alcohol or drugs, direct action, threats of coercion or violence and physical force. All the categories except for direct action were collapsed together and refer to using a persuasive strategy. Direct action refers to situations during which no specific strategy is used, which refers to non-persuasion. The use of a non-persuasive strategy indicates that the offender acted apparently on the spur of the moment and/or in the absence of any obvious attempts to persuade the victim to comply (see Beauregard,

Proulx, Rossmo, Leclerc & Allaire, 2007; Leclerc, Carpentier & Proulx, 2006; Leclerc et al., 2013).

INSERT TABLE 1

RESULTS

The Bivariate Relationships between Predictors and Victim Disclosure

Table 2 presents the bivariate relationships between potential predictors and victim disclosure. Except for the age of the victim, for which an ANOVA was conducted, a series of chi-square tests was performed to investigate each relationship. Interestingly, the relationship between each victim variable and victim disclosure was statistically significant. These analyses showed that victim disclosure is more likely as the victim gets older. In addition, male victims and victims from a dysfunctional background are less likely to disclose the abuse than female victims and those not coming from a dysfunctional background. Victims who were related to the offender, living with the offender at the time of abuse and who resisted during the offense are more likely to disclose the abuse. On the other hand, except in one case, the relationships between each offense variable and victim disclosure were not significant. Only offenses which involved penetration of the victim were more likely to lead to victim disclosure than those who did not.

INSERT TABLE 2

The Multivariate Models of the Predictors of Victim Disclosure

Table 3 reports the results of a series of logistic regression analyses performed on victim disclosure. Four regression models are presented. The first model includes victim variables only. The second model introduces offense variables. This strategy is adopted in order to differentiate

the impact of victim from offense variables. The third model controls for the use of a non-persuasive strategy. We have included and chosen this variable as a control because we believe that how the offender gets the victim involved in sexual activity may affect the potential effects of victim or other offense variables on victim disclosure. More specifically, we believe that the victim may be less likely to disclose the abuse if the offender uses manipulation (Leclerc et al., 2005). The rationale behind the fourth model was to examine all potential interaction effects between the variables included in this study. Model 4 only presents the interaction effect identified during the analyses. Except for the use of a non-persuasive strategy which was included as a control throughout the analysis, it should be noted that only significant variables at a bivariate level were included in regression analyses. Multicollinearity was not detected before these analyses.

INSERT TABLE 3

Table 3 presents the results of these analyses. As a result of missing values, regression models were performed on 354 cases (15 missing). Model 1 indicates that the age of the victim increases the likelihood of victim disclosure ($\Psi = 1.091$). Victim disclosure is more likely as the victim gets older. In addition, victims coming from a non-dysfunctional background are more likely to disclose the abuse than victims coming from a dysfunctional background ($\Psi = .610$). Victims who resisted during the offense are more likely to disclose the abuse than victim who did not resist ($\Psi = 1.812$). These results remain when penetration of the victim is introduced into Model 2. This later variable is also significant suggesting that victims who suffered penetration by the offender are more likely to disclose the abuse than victims who did not ($\Psi = 1.914$). Model 3 shows that these results are not affected by the introduction of the use of a non-

persuasive strategy by the offender as a control variable. This later variable is not related to victim disclosure either. Finally, Model 4 indicates the presence of a negative interaction effect between age of the victim and whether the victim was living with the offender at the time of abuse and victim disclosure ($\Psi = .863$). This effect suggests that as victims get older, they are more likely to disclose the abuse when they are not living with the offender at the time of abuse, but less likely to do so when they are living with the offender at the time of abuse. The relationships observed in Models 2 and 3 all remain significant.

DISCUSSION

While a number of previous studies have examined the disclosure of sexual abuse by child victims, this body of work is characterised by the limited scope of the analyses and inconsistent findings. In the current study, three contributions were made. First, we investigated the victim and offense related variables that predict victim disclosure, adding potential predictors not previously examined. Second, we examined interaction effects in order to better capture under which circumstances victim disclosure is more likely. To our knowledge, no study had investigated the presence of interaction effects to predict victim disclosure. The examination of interaction effects is crucial because one variable may be predictive of victim disclosure only under particular conditions but not others. Finally, the current study differed from most studies in that it looked at the impact of victim and offense variables on victim disclosure through the eyes of the offender. Offender perceptions of the factors influencing victim disclosure are also important to examine because they may provide important information for the development of self-protection programmes and other prevention initiatives

Previous research has examined the role on disclosure of victim age, victim gender, victim-offender relationship, whether penetration had occurred, whether the offender had used physical force and the duration of abuse, producing mixed findings. In this study in the full multivariate models we found that disclosure increased with the age of the victim and if penetration had occurred. The gender of the victim, whether or not the victim was living with the offender or related to him, whether the offender used force and the duration of the abuse, were not related to disclosure. The new variables we examined were whether the victim came from a dysfunctional family, whether the victim resisted, whether the offender acted impulsively (used a non-persuasive strategy), and whether the offender forced the victim to perform sexual acts on him. We found that disclosure increased when the victim came from a non-dysfunctional family and resisted the abuse; the compliance strategy employed by the offender and forcing the victim to perform sexual acts were not related to disclosure. We also found one significant interaction effect; disclosure was more likely to increase with victim age for victims who do not live with the offender compared with victims who do live with the offender. In general, then, disclosure was related to factors associated with relatively low levels of victim vulnerability (older victims, those coming from more stable families, and those who actively resisted the abuse) and relatively high levels of offense seriousness (cases involving penetration).

The interaction effect showing that being abused by someone within the home, who was therefore in a position to exert direct and ongoing influence over the victim, suppressed the increased empowerment that age provided for victims abused by someone from outside of the home. One explanation perhaps is the difficulty for victims to disclose the abuse to someone within the family regardless of their age (see Lippert et al., 2009; London et al., 2005). It is interesting to note that the offender-victim relationship and whether the offender and the victim

were living together were unrelated to victim disclosure when taking into account other potential predictors. These findings thus indicate that the importance of the context in which the abuse occurs only emerge in interaction with victim age. The usual strategy employed for encouraging disclosure is through personal safety programmes in schools. Victim disclosure, or more specifically, secrecy (not keeping any secret in regards to touch), is a core component of these programmes (see MacIntyre & Carr, 2000) but there is a need to contextualise when and under which circumstances victim disclosure is less likely to occur to assist practitioners to boost up the likelihood of children disclosing abuse.

Undoubtedly, disclosure by victims is a positive step towards ending the current abuse they are experiencing and preventing the offender moving on to new victims, and all efforts at increasing disclosure rates should obviously be encouraged. Our results suggest that special attention in personal safety programmes should also be given to younger children and those from dysfunctional backgrounds. However, it must be noted that evaluations of such programmes have produced mixed results. While there is good evidence that children can readily learn personal safety messages such as telling a trusted adult about inappropriate advances or actual abuse (e.g., Rispens et al., 1997), there is more limited evidence that they actually apply this learning in real-life circumstances (e.g., MacIntyre & Carr, 2000; Finkelhor & Dziuba-Leatherman, 1995). Beyond personal safety programmes, there is a need to invest in family-level interventions to create the environment in which children feel confident to talk about sensitive issues.

It is important to remember that our predictors of disclosure are filtered through the eyes of offenders. This may create some reliability issues for some variables in particular contexts, such as whether or not the victim was coming from a dysfunctional background in stranger cases (e.g., stranger offenders may not be able to report reliable information on this aspect). However,

it is particularly interesting to note that the finding indicating that offenders believe children from dysfunctional homes are less likely to disclose is consistent with previous self-report studies that have found that predatory offenders may explicitly target children who have family problems (e.g., Conte et al, 1989; Elliot et al, 1995). When offenders were asked to provide advice on prevention of child sexual abuse, a common suggestion was to ensure children had a loving home environment that made them to feel confident and secure (Elliott et al, 1995). If we cannot rely on victims to protect themselves by reporting their own abuse then we must strive to develop confident and resilient children (Smallbone et al., 2008) – for example, by providing services and resources to at-risk families (Larner, Stevenson & Behrman, 1998) – who are less vulnerable to the attentions of offenders.

CONCLUSION

To our knowledge, the current study is the first to examine potential predictors of victim disclosure in child sexual abuse from the offenders' perspective. In our analysis we have also included new variables and investigated interaction effects, which provides a fresh look on victim disclosure. We have provided empirical evidence showing that disclosure increased when the victim came from a non-dysfunctional family and resisted the abuse, and that disclosure was more likely to increase with victim age for victims who do not live with the offender compared with victims who do live with the offender. Obviously this study contains common limitations usually associated with offender self-report data (e.g., poor memory recall, cognitive distortions to minimise or exaggerate certain aspects of offending, inability to correctly understand survey questions). For instance, due to poor memory recall, some offenders may have believed that their offense was reported by the victim when in fact it was discovered by authorities in some other

ways. At the same time, offender self-report data provide additional findings in an area of research largely characterised by inconsistent and contradictory findings and thus in need of additional and complementary empirical evidence. Victim disclosure in child sexual abuse is a critical dimension to explore for researchers with many ramifications for the prevention of ongoing sexual abuse. If the likelihood of victim disclosure can be boosted a positive impact on the long-term consequences of repetitive sexual abuse of children may be possible. It is hoped that the current study contributes to existing knowledge in the area and demonstrates the relevance of a rigorous investigation on the context in which the abuse is committed to further understand the dynamics of victim disclosure of child sexual abuse.

REFERENCES

- Beauregard, E., Proulx, J., Rossmo, D.K., Leclerc, B. & Allaire, J.-F. (2007). Script analyses of the hunting process of serial sex offenders. *Criminal Justice and Behavior*, 34, 1069-1084.
- Beauregard, É., Leclerc, B. & Lussier, P. (2012). Decision making in the crime commission process: Comparing rapists, child molesters, and victim-crossover sex offenders. *Criminal Justice and Behavior*, 39, 1275-1295.
- Bennett, T. & Wright, R. (1984). *Burglars on Burglary: Prevention and the Offender*. Aldershot, Hants, UK: Gower.
- Berliner, L. & Conte, J.R. (1990). The process of victimization: The victim's perspective. *Child Abuse & Neglect*, 14, 29-40.
- Bottoms, B.L., Rudnicki, A.G. & Epstein, M.A. (2007). A retrospective study of factors affecting the disclosure of childhood sexual and physical abuse. In M. Pipe, M.E. Lamb, Y. Orbach

- and A. Cederborg (eds), *Child sexual abuse: Disclosure, delay and denial* (pp.175-194). Mahwah, NJ: Lawrence Erlbaum.
- Budin, L. E. & Johnson, C. F. (1989). Sex abuse prevention programs: Offenders' attitudes about their efficacy. *Child Abuse and Neglect*, 13, 77-87.
- Conte, J., Wolfe, S. & Smith, T. (1989). What sexual offenders tell us about prevention strategies. *Child Abuse and Neglect*, 13, 293-302.
- Copes, H. & Cherbonneau, M. (2006). The Key to Auto Theft: Emerging Methods of Auto Theft from the Offenders' Perspective. *British Journal of Criminology*, 46, 917-934.
- DeVoe, E.R. & Faller, K.C. (1999). The characteristics of disclosure among children who may have been sexually abuse. *Child Maltreatment*, 4, 217-227.
- Elliott, M., Browne, K., & Kilcoyne, J. (1995). Child sexual abuse prevention: What offenders tell us. *Child Abuse & Neglect*, 19, 579-594.
- Finkelhor, D. & Dziuba-Leatherman, J. (1995) 'Victimization of children', *American Psychologist*, 49, 173-83.
- 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.
- Hershkowitz, I. Horowitz, D. & Lamb, M. (2005). Trends in children's disclosure of abuse in Israel: A national study. *Child Abuse and Neglect*, 29, 1203-1214.
- Jacques, S. & Bonobo, E. (submitted). Learning from the offenders' perspective on crime prevention. Details preserved for anonymity purposes.

- Jacques, S. & Wright, R. (2011). Informal control and illicit drug trade. *Criminology*, 49; 726-765.
- Keary, K. & Fitzpatrick, C. (1994). Children's disclosure of sexual abuse during formal investigation. *Child Abuse and Neglect*, 18, 543-548.
- Kogan, S.M. (2004). Disclosing unwanted sexual experiences: Results from a national sample of women. *Child Abuse and Neglect*, 28, 147-165.
- Lam, K. I. (2014). Factors Associated with Adolescents' Disclosure of Sexual Abuse Experiences in Hong Kong. *Journal of Child Sexual Abuse*, 23, 768-791.
- Larner, M.B., Stevenson, C.S. & Behrman, R.E. (1998). Protecting children from abuse and neglect: Analysis and recommendations. *The Future of Children*, 8, 4-22.
- Leclerc, B., Carpentier, J. & Proulx, J. (2006). Strategies adopted by sexual offenders to involve children in sexual activity. In R. Wortley and S. Smallbone (eds), *Crime Prevention Studies: Vol. 19. Situational prevention of child sexual abuse*, Monsey, NY: Criminal Justice Press.
- Leclerc, B., Proulx, J., Lussier, P. & Allaire, J-F. (2009). Offender-victim interaction and crime event outcomes: Modus operandi and victim effects on the risk of intrusive sexual offenses against children. *Criminology*, 47, 595-618.
- Leclerc, B. & Wortley, R. (2013). Cognition and crime: Offender decision making and script analyses. Crime Science Series, London, UK: Routledge.
- Leclerc, B., Wortley, R. & Smallbone, S. (2011). Victim resistance in child sexual abuse: A look into the efficacy of self-protection strategies based on the offender's experience. *Journal of Interpersonal Violence*, 26, 1868-1883.

- Leclerc, B. & Cale, J. (2012). Weapon use and sexual abuse outcomes: A multivariate and conjunctive analysis of sexual offenses against women. *Security Journal*. (DOI: 10.1057/sj.2012.42).
- Leclerc, B., Smallbone, S. & Wortley, R. (2013). Interpersonal scripts and victim reaction in child sexual abuse: A quantitative analysis of the offender-victim interchange. In B. Leclerc and R. Wortley (eds), *Cognition and crime: Offender decision making and script analyses*. Crime Science Series. London, UK: Routledge.
- Lippert, T., Cross, T.P., Jones, L. & Walsh, W. (2009). Telling interviewers about sexual abuse: Predictors of child disclosure at forensic interviews. *Child Maltreatment*, 14, 100-113.
- London, K., Bruck, M., Ceci, S.J. & Shuman, D.W. (2005). Disclosure of Child Sexual Abuse: What Does the Research Tell Us About the Ways That Children Tell? *Psychology, Public Policy, and Law*, 11, 194-226.
- MacIntyre, D. & Carr, A. (2000). Prevention of child sexual abuse: Implications of programme evaluation research. *Child Abuse Review*, 9(3):183–199.
- Mieczkowski, T. & Beauregard, E. (2010). Lethal outcome in sexual assault events: A conjunctive analysis. *Justice Quarterly*, 27, 332-361.
- Paine, M.L. & Hansen, D.J. (2002). Factors influencing children to self-disclose sexual abuse. *Clinical Psychology Review*, 22, 271-285.
- Rispens, J., Aleman, A. & Goudena, P. (1997). Prevention of child sexual abuse victimization: A meta-analysis of school programs. *Child Abuse and Neglect*, 21(10): 975–987.

- Sauzier, M. (1989). Disclosure of child sexual abuse: For better or worse. *Psychiatric Clinics of North America*, 12, 455-469.
- Smallbone, S., Marshall, W.L., & Wortley, R.K. (2008). *Preventing child sexual abuse: Evidence, policy and practice*. Cullompton, Devon: Willan Publishing.
- Smallbone, S. W., & Wortley, R. (2000). *Child sexual abuse in Queensland: Offender characteristics and modus operandi*. (Volume 2 of Project Axis). Brisbane: Queensland Crime Commission.
- St-Yves, M., Proulx, J. & McKibben, A. (1994). *Questionnaire informatisé sur les délinquants sexuels*. Unpublished document. Correctional Service of Canada.
- Van Gelder, J-L, Elffers, H., Reynald, D. & Nagin, D. (2013). *Affect and cognition in criminal decision making*. Crime Science Series, London, UK: Routledge.
- Wortley, R. & Smallbone, S. (2006). Applying situational principles to sexual offenses against children. In R. Wortley and S. Smallbone (eds.), *Crime Prevention Studies: Vol. 19. Situational prevention of child sexual abuse*. Monsey, NY: Criminal Justice Press.

Table 1. Descriptive Statistics and Definitions for the Variables Used in this Study ($n=369$)

Variable	Category(ies)	Distributions
Age of the victim	Mean (SD)	9.94 (3.8) (Range=1-17) Base $N = 369$
Victim was male	Percent Yes	26.3 Base $N = 369$
Victim was from dysfunctional environment	Percent Yes	37.4 Base $N = 369$
Victim was related to the offender	Percent Yes	61.9 Base $N = 366$
Victim was living with offender when offense occurred	Percent Yes	41.4 Base $N = 362$
Victim resisted during the offense	Percent Yes	39.5 Base $N = 365$
Offense lasted for more than 15 minutes	Percent Yes	51.5 Base $N = 336$
Offender used a non-persuasive strategy to commit the offense	Percent Yes	42.5 Base $N = 369$
Offender used physical force to commit the offense	Percent Yes	48.5 Base $N = 369$
Offender forced the victim to perform sexual acts	Percent Yes	69.6 Base $N = 365$
Offender performed penetration on the victim	Percent Yes	66.6 Base $N = 365$
Offender physically injured the victim	Percent Yes	14.6 Base $N = 369$
Offense was disclosed by the victim	Percent Yes	48.5 Base $N = 369$

Table 2. Victim and Offense Variables by Victim Disclosure¹

	No victim disclosure	Victim disclosure
<u>Victim variables</u>		
Age of the victim	9.43 (3.715)	10.49 (3.819)**
Victim was male	34.2%	17.9%***
Victim was from dysfunctional Environment	42.6%	31.8%*
Victim was related to the offender	55.8%	66.9%*
Victim was living with offender when offense occurred	36.2%	47.1%*
Victim resisted during the offense	31.6%	47.8%*
<u>Offense variables</u>		
Offense lasted for more than 15 minutes	46.9%	56.5%
Offender used a non persuasive strategy to commit the offense	45.3%	39.7%
Offender used physical force to commit the offense	45.8%	51.4%
Offender forced the victim to perform sexual acts	66.1%	73.3%
Offender performed penetration on the victim	56.7%	77.0%***
Offender physically injured the victim	14.2%	15.1%

1. Mean and standard deviation are presented for the age of the victim variable. Percent of yes is presented for other variables.

Note: * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.

Table 3. Logistic Regression Models of Victim and Offense Variables on Victim Disclosure ($n=354$)

Variable	Model 1 b (S.E.) Ψ (Conf. Int.)	Model 2 b (S.E.) Ψ (Conf. Int.)	Model 3 b (S.E.) Ψ (Conf. Int.)	Model 4 b (S.E.) Ψ (Conf. Int.)
Age of the victim	.087 (.033)** 1.091 (1.023-1.164)	.074 (.033)* 1.077 (1.008-1.149)	.066 (.034)+ 1.069 (.999-1.143)	.128 (.045)** 1.137 (1.040-1.243)
Victim was male	-.494 (.288)+ .610 (.347-1.073)	-.257 (.306) .774 (.424-1.411)	-.276 (.307) .759 (.416-1.386)	-.286 (.310) .752 (.409-1.381)
Victim was from dysfunctional environment	-.478 (.240)* .620 (.387-.991)	-.523 (.243)* .593 (.368-.954)	-.535 (.243)* .586 (.364-.943)	-.529 (.244)* .589 (.365-.952)
Victim was related to the offender	.415 (.301) 1.514 (.839-2.730)	.371 (.304) 1.449 (.799-2.628)	.377 (.305) 1.458 (.803-2.650)	.474 (.316) 1.606 (.865-2.983)
Victim was living with offender when offense occurred	.291 (.278) 1.337 (.775-2.308)	.250 (.281) 1.283 (.740-2.225)	.283 (.284) 1.328 (.761-2.315)	.209 (.288) 1.233 (.702-2.166)
Victim resisted during the offense	.595 (.236)* 1.812 (1.142-2.876)	.547 (.238)* 1.728 (1.084-2.756)	.532 (.239)* 1.702 (1.066-2.717)	.495 (.241)* 1.641 (1.024-2.629)
Offender performed penetration on the victim	-	.649 (.270)* 1.914 (1.127-3.250)	.648 (.271)* 1.912 (1.124-3.251)	.630 (.272)* 1.877 (1.100-3.202)
Offender used a non persuasive strategy to commit the offense	-	-	-.254 (.243) .776 (.482-1.248)	-.197 (.245) .821 (.508-1.327)
Age of the victim by Victim was living with the offender when offense occurred	-	-	-	-.147 (.066)* .863 (.759-.982)
Constant	-.395 (.266)	-.817 (.324)*	-.707 (.341)*	-.810 (.351)*
Nagelkerke R^2	.124	.144	.148	.164

Abbreviations: b = Unstandardized beta; S.E. = Standard error; Ψ = Odds ratio; Conf. Int. = Confidence Interval.

Note: + $p \leq .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.