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Differences between sexually abused children with and without intellectual disabilities

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Abstract
The risk of being sexually abused is 4.6 times greater among children with intellectual disabilities than among typically developing children, while the global prevalence of intellectual disabilities is only 1%. No study has yet included a representative sample of sexually abused children with intellectual disabilities reported to child protection services and a control group of children without intellectual disabilities also reported being sexually abused in the province of Quebec (Canada). This study concerns children whose reports of sexual abuse were deemed founded after the protection services investigation (n = 102). Descriptive (percentages, means, standard deviations) and comparative (logistics regressions) analyses were used to describe and compare the victims with intellectual disabilities (n = 10) and those without intellectual disabilities (n = 92), regarding socio-demographic and caregiver characteristics, child protection services, sexual abuse suffered and difficulties presented by the children and the parents. Overall, the results indicate that children with intellectual disabilities are characterized by more adverse associated factors than typically developing children, including physical disabilities, more self-destructive behaviors, multiple runaways, a greater average number of past protection services files. The results are discussed in terms of the issues raised to better protect this vulnerable population.
Key-Words : Intellectual disabilities; Children; Child sexual abuse; Child welfare; Child protection services, Maltreatment.

Différences entre les enfants agressés sexuellement présentant ou non une déficience intellectuelle
Résumé
Le risque d'être agressé sexuellement est 4,6 fois plus élevé chez les enfants présentant une déficience intellectuelle que chez ceux au développement typique, alors que la prévalence globale de cette déficience est seulement de 1 %. Aucune étude n'a comparé les enfants présentant ou non une déficience intellectuelle dans un échantillon représentatif d'enfants signalés aux services de protection de l'enfance comme victimes d'agression sexuelle au Québec. Cette étude porte sur 102 enfants dans cette situation pour qui les services de protection ont jugé le signalement fondé. Des analyses ont été utilisées pour décrire (pourcentages, moyennes, écarts-types) et comparer (régressions logistiques) 10 victimes présentant une déficience intellectuelle et 92 n'en présentant pas, relativement aux caractéristiques sociodémographiques, aux donneurs de soins, aux services de protection de l'enfance, aux agressions sexuelles subies et aux difficultés présentées par les enfants et les parents. Généralement, les résultats indiquent que les enfants ayant une déficience intellectuelle présentent plus de facteurs associés adverses que ceux au développement typique, incluant une déficience physique, plus de comportements autodestructeurs, des fugues multiples ou un plus grand nombre moyen de dossiers antérieurs de protection de l'enfance. La discussion porte sur les enjeux soulevés pour mieux protéger cette population vulnérable. **Mots-clés:** Déficience intellectuelle; Enfants; Agression sexuelle dans l'enfance; Bien-être de l'enfance; Services de protection de l'enfance; Maltraitance.

Child sexual abuse (SA), of which 12% of children are victims, is a relatively widespread form of violence throughout the world (Stoltenborgh, van IJzendoorn, Euser, & Bakermans-Kranenburg, 2011). Its high prevalence rates in the majority of countries should serve as a call for research and action, particularly for children with intellectual disabilities (ID), who are even more vulnerable to SA (Dion, Paquette, Tremblay, Cyr, & Dionne, 2013; Wissink, van Vught, Moonen, Stams, & Hendriks, 2015). In fact, a pooled estimate from a meta-regression analysis shows the risk of sexual violence to be 4.6 times greater among children with mental disabilities or ID than among those with other disabilities (Jones et al., 2012). While the global prevalence of ID is only 1% (Maulik, Mascarenhas, Mathers, Dua, & Saxena, 2011), it is important to know which factors are associated with ID in sexually abused children, because children with ID may be overrepresented in child protection services (CPS).

Empirical background and theoretical explanations

Characteristics of sexually abused children with ID

From an epidemiological perspective, between 16% and 20% of SA victims are girls, and between 7% and 9% are boys (Stoltenborgh et al., 2011). Indeed, girls are 2 to 3 times more at risk than boys of being sexually abused (Stoltenborgh et al., 2011). Yet, the proportion of boys having been sexually abused is higher among children with ID than among those without ID (Hershkowitz, Horowitz, & Lamb, 2007; Kvam, 2000; Randall, Parrila, & Sobsey, 2000; Sobsey, Randall, & Parrila, 1997). This may be due to the higher prevalence of ID among boys than among girls (Sobsey et al., 1997).
Certain factors may explain the vulnerability to SA of children with ID. These children often live separated, isolated or even excluded from their family and their community (Griffiths, Richards, Fedoroff, & Watson, 2002; Mansell & Sobsey, 2001). Indeed, their condition can require institutional care or residential placement. Children with ID are far more dependent on others to meet their basic needs (food, hygiene, etc.) (Kim, 2010; Petersilia, 2001). This dependence leads to a need for continuous interaction with their caregivers (Kim, 2010). Frequenting atypical social settings, as designated by Sobsey (1994), is associated with the social isolation and rejection suffered by children with ID (Dion, Bouchard, Gaudreault, & Mercier, 2012). This isolation and rejection can increase the need for attention and affection, as well as the desire to please, placing children with ID at a greater risk of being sexually abused (Boat & Sites, 2001; Petersilia, 2001).

Characteristics of SA of children with ID

Children with ID generally suffer more severe SA than typically developing (TD) children: it occurs more frequently, is more spread out over time and involves the use of force or threats as well as more intrusive behaviors (Hershkowitz et al., 2007; Mansell & Sobsey, 2001; Reiter, Bryen, & Shachar, 2007; Sullivan & Knutson, 2000). Many types of perpetrators have been identified, although SA is generally committed by a male and someone known to the child, such as a family member or a caregiver (Akbas et al., 2009; Reiter et al., 2007; Sobsey & Doe, 1991).

After-effects of SA suffered by children with ID

Sequeira and Hollins (2003) reviewed the literature on SA after-effects among persons with ID and found only five studies pertaining to children. Nevertheless, the consequences of SA, notably post-traumatic stress, low self-esteem and behavior problems, are believed to resemble those suffered by TD children (Gorman-Smith & Matson, 1992; Mansell, Dick, & Moskal, 1998; Sequeira & Hollins, 2003). Only two studies compared children who had been sexually abused according to whether they had ID or not (Akbas et al., 2009: n = 20 in each group; Mansell et al., 1998: n = 43 in each group). The results of these two studies show that most of the after-effects of SA, such as several diagnoses of mental health problems, low self-esteem, nightmares, aggressive behaviors and anger, are similar in the two groups. Finally, studies conducted with sexual delinquents show that a larger proportion of sexual delinquents with ID, than of those without ID, were sexually abused as children (Hayes, 2009). Children with ID who are sexually abused may be at a greater risk than TD children of becoming abusers (Dion et al., 2012).

Limitations of studies on sexually abused children with ID

In sum, there are few studies on sexually abused children with ID, and the majority date back 15 years or more (Dion et al., 2012; Horner-Johnson & Drum, 2006; Wissink et al., 2015). These studies used convenience

samples, making the results difficult to generalize to the population under study (Horner-Johnson & Drum, 2006). Similarly, because only two studies included a control group of sexually abused children without ID (Akbas et al., 2009; Mansell et al., 1998), it is difficult to identify characteristics specific to those with ID. Finally, no study has looked at the population of children with ID reported to CPS.

Relevance and objective of the study

This study compares sexually abused children with ID to those without ID in terms of socio-demographic characteristics, CPS, SA suffered and difficulties presented by the children and caregivers. As few studies exist on sexually abused children with ID, more research is needed in this field (Dion et al., 2013). Our study used a representative sample of sexually abused children and included a control group of children without ID. A better knowledge of the characteristics of the founded reports of SA and of the difficulties specific to children with ID whom these reports concern would enable CPS to better adapt their interventions and provide more appropriate services for this child population.

Methodology

Study context

This study used secondary data from the Étude québécoise sur les situations évaluées en protection de la jeunesse en 2008 [Quebec Incidence Study of Reported Child Abuse and Neglect] (see Hélie, Turcotte, Trocmé, & Tourigny, 2012, for more information). The random sample used in this extensive study consisted of 50% of all reports of child maltreatment or serious behavioral problems investigated by the CPS for children aged 0 to 17 years from October 1 to December 31, 2008. All child protection centers in the jurisdiction of the province of Quebec (Canada) participated in the study.

Overview of Quebec's child protection system

Reports made to the CPS are investigated to determine whether they will be retained or not. The investigations involve a brief analysis of various elements in the report and may include complementary data collection. Reports that are retained, like those in our study, are assigned a priority code for a more in-depth investigation, which will lead to a decision on whether the allegations are well founded or not and whether the child's development or safety is compromised or not. Once the investigation completed, if the child's safety and development are deemed compromised, child protection measures are implemented to end the situation. When the child's safety and development are deemed not compromised, the child and his or her family are redirected to the appropriate community resources.

Sample

For this study, the only children included in the sample (n = 102) are those for whom the report of SA was deemed founded and for whom a decision regarding their safety and development was rendered. The children's primary caregivers were predominantly Caucasian (86.3%) and their mother tongue was most often French (78.9%). Of the sample, 25.5% were boys and 74.5% were girls, and the average age was 11.71 years (SD = 3.36)

Measurement instrument and data collection procedures

The measurement instrument was an electronic form examining various parameters concerning the families, children and cases, including demographic information on the household, profile of the child's caregivers, source of the report, results of the investigation for each child, nature of the abuse, duration of the maltreatment, etc.

Data from the electronic form were collected from each participating child protection center. The forms were programmed to extract data from the automated client information system for one fourth of the items in the measurement instrument. The other three fourths were filled out, in about fifteen minutes, by the practitioner investigating the report. For each child's or caregiver's problem, the practitioner noted whether the problem was corroborated by a professional diagnosis or whether the practitioner handling the case was suspicious enough to mention it in a written evaluation or file summary intended for a colleague.

Dependent variable

The suspected or corroborated ID in the reported child was recorded by the practitioner investigating the report. Among the sexually abused children (n = 102) included in the sample, 10 (9.8%) were identified as having ID and 92 (90.2%) were not.

Independent variables

The independent variables (see Table 1 for a complete list) were grouped into three categories inspired by Bronfenbrenner's ecological model (1979). The first and second groups consisted of ontological or microsystemic variables and the last one concerned CPS-related variables.

Analysis strategy

First, a descriptive analysis was conducted for each variable studied, i.e., percentages or means for children with ID and without ID were examined. Second, because of the small size of the group of children with ID, simple logistic regressions were conducted to identify variables that distinguish the sexually abused children according to whether they did or did not have ID. The alpha threshold was set at .05, but marginally significant results ($p \leq .10$) were also noted. Finally, a qualitative descriptive analysis was conducted to better understand the context surrounding the reports of SA of children with ID using a brief description of the report and the investigation results available in each file.

Results

Descriptive and univariate analyses

The results of the descriptive analysis and the univariate analyses intended to compare children with ID and those without ID are presented in Table 1. Regarding the ontological variables, caseworkers noted that sexually abused children with ID presented self-destructive behaviors, multiple runaways and physical disabilities more often than they did for sexually abused children without ID. However, for the other ontological variables studied, no significant difference was found, even for the sex of the children. A marginally significant result was observed concerning attachment problems: more of these problems were detected in children with ID. Concerning the microsystemic variables, caseworkers noted that sexually abused children with ID lived less often in a family whose income derived from work rather than other sources (e.g., employment insurance, or social assistance). One marginally significant result was observed for the type of family. In fact, caseworkers found that children with ID were less likely to live in a two-parent family than children without ID. Nonetheless, caseworkers did not detect more mental health or intellectual disability problems among children with ID than among those without ID. Regarding the characteristics of the SA suffered, no significant, or even marginally significant, result emerged between the groups. Finally, concerning the CPS variables, children with ID are more likely to see their safety or development deemed not compromised by the situation.Yet, children with ID differ significantly in that they have an average of 2.6 past CPS investigations, compared with 0.91 for children without ID

Description of the context of reports of SA of children with ID

As seen in Table 2, the SA occurred either within the family (n = 5) or in their placement environment (n = 4). All the children with ID were abused by male abusers. SA occurring in the family was perpetrated by an adult, who was either a parental figure (father or mother's spouse) or a brother. In placement settings, they were abused by other minors.

Reading the caseworkers' notes for child no. 2 and no. 8 helps to better understand the clinical reasoning behind the CPS practitioners' assessment of whether these children's safety and development was compromised or not. In case no. 2, the fact that the child was no longer in contact with the abuser appears to be the determining factor. However, the wording in the report does not specify whether the mother is still allowed contact with her child, whether she has a new spouse or whether these contacts are supervised or not. In case no. 8, the child appears to have been sent back temporarily to his father's for some respite following the incident and was receiving counselling. The staff appears to have increased their supervision. Nevertheless, it is not known whether the abuser still lives in the same placement resource as the victim. Nowhere do the notes describing the reports or investigation results mention an assessment of the consequences.

Discussion

The aim of this study was to compare founded allegations of SA of children with ID and those without ID in terms of ontological, microsystemic and CPS characteristics. Overall, the results indicate that sexually abused children with ID present a more adverse individual and family profile than TD children.
First, regarding the ontological variables, like children without ID, those with ID suffered a wide range of psychological difficulties, such as inappropriate sexual behaviors, depression symptoms, and aggression toward others. These findings are also similar to those from previous studies in both groups of children (e.g., see Sequeira & Hollins, 2003 literature review).

Our current results further indicate that children with ID present self-destructive behaviors, multiple runaways, physical disability, and attachment problems (marginally significant) more frequently than children without ID. It should be noted that, since the likelihood of mental health problems in youth with ID is from 2.8 to 4.5 times higher than in the general population (Einfeld, Ellis, & Emerson, 2011), it is difficult to disentangle symptoms and behaviors that may be a consequence of abuse from ID-related problems. Furthermore, some of the consequences could go undiagnosed due to the lesser ability of youth with ID to explain such abstract concepts as their emotions and psychological state (Dion et al., 2013). It is also possible that the after-effects of the SA do not begin to show at the time of the investigation, when the SA is still relatively recent. The fact remains that regardless of the source of the problems detected in children with ID, the vulnerability suggested by their clinical portrait seems to demand a multidisciplinary investigation and intervention.

Second, concerning the microsystemic variables, children with ID more rarely have working parents and more often live with only one parent or in a placement setting (marginally significant). In fact, Emerson (2003) remarked that families of children with ID more commonly present low socio-economic levels, which would have a major negative impact on their lives. Moreover, they are more frequently placed, and their parents are most likely to separate (Emerson, 2003). These results may suggest that the family contexts of children with ID can place them in adverse situations and thus increase their vulnerability to SA. However, the results of our study also indicate that caseworkers do not identify mental health problems or ID more often in parents of children with ID.

Third, investigations into founded reports of SA conclude that the child's safety or development is not compromised more often in cases involving children with ID than those without ID. Yet, children with ID present more problems (e.g., runaways, self-destructive behaviors) than children without ID. Additionally, they accumulate a larger number of past CPS investigations.

This thus means that children with ID evaluated for founded allegations of SA are often already known to the CPS, or even in their care in an associated institution. For a portion of them, the SA occurs within the placement environment, corresponding to the atypical contexts and settings identified by Sobsey (1994). This result also concurs with previous research indicating that these children are at a greater risk of being sexually abused in these locations, not by caregivers as mentioned by Akbas et al. (2009) or Reiter et al. (2007), but rather by other minors living in the same location.

In our study, no sex difference was found between the two groups, contrary to previous research indicating that the percentage of male victims is higher among youth with ID than in the general population (Hershkowitz et al., 2007; Kvam, 2000; Randall et al., 2000; Sobsey et al., 1997). Sobsey et al. (1997) argue that this may be due to the greater percentage of boys with ID compared to girls. Our result may be explained by the small sample size of children with ID or the low percentage of boys in our study, or both. Our results further indicate that SA was not more common and did not include more intrusive touching, such as penetration, which also differs from previous research (e.g., Akbas et al., 2009; Reiter et al., 2007). However, as Wissink et al. (2015) mentioned in their literature review, no reliable conclusions can be drawn concerning the SA characteristics, as results differ from one study to the next.

Although non-significant, 90.0% of the cases involving well-founded allegations of SA of children with ID were reported by a professional (compared to 73.9% for children without ID). Given that children with ID have more past CPS investigation files and considering the report descriptions (e.g., receiving counselling, and staff increasing supervision), it is worrisome to observe that CPS practitioners deem the child's development or safety not compromised more often in cases of children with ID, compared to children without ID. Other studies on child protection practices indicate that children with disabilities are more likely to be referred again to child protection (Connell, Bergeron, Katz, Saunders, & Tebes, 2007), as seems to be the case as well for Quebec's sexually abused children with ID. These results suggest that these children may not receive the same level of protection

as other children (Dion, Matte-Gagné, Tourigny, & Gaudreault, 2011). The fact that they had been already been taken into care within the previous five years could indicate a chronic problem within the family and may suggest that the youth centers' interventions did not adequately address these families' problems (Dion et al., 2011). Moreover, our study revealed that children with ID are often sexually abused in the residences where they are placed. This calls into question the social management of these children. Are they safe in these environments? Kendall-Tackett, Lyon, Taliaferro and Little (2005) mention that child protection workers should be specially trained to investigate situations involving children with disabilities, including ID. In fact, Orelove, Hollahan and Myles (2000) report that many child protection workers admit that they lack knowledge of how to screen for maltreatment suffered by children with a disability and how to intervene.

Strengths and limitations of the study

The present study has helped increase our knowledge of the individual, family and CPS-related characteristics with respect to sexually abused children with ID. The strengths of this study include notably a representative sample of Quebec children reported and investigated by CPS, recruited over a three-month period. The data collected rest on the judgment of caseworkers called to intervene with these children. Regarding the limitations of the study, it should be noted that some relevant variables could not be considered in the analyses (e.g., the child's age when the SA occurred, the post-traumatic stress symptoms, the protective measures implemented when the case was referred). Furthermore, the small number of children with ID (n = 10) limits the scope of our results and also had a negative effect on the statistical power. It is possible that some differences were not detected. Nevertheless, it should be noted that the prevalence of ID in our sample (9.8%) is at least nine times higher than that found in the general population (1% according to Maulik et al., 2011). Moreover, the problems indicated, notably for ID, were detected by the caseworkers and are not necessarily diagnoses. However, studying cases of children whose ID may have been identified based on a caseworker's clinical judgment is also a strength of this study in terms of ecological validity, since these children were considered to have ID in a real world situation. Future studies are thus needed to better understand the characteristics of children with ID reported to CPS for SA compared with other reported children (Kendall-Tackett et al., 2005). These studies should include a specific assessment of both the ID and the other associated variables measured, using validated tools. Finally, adding a third control group comprised of children with ID, but who were not sexually abused, would make it possible to check if specific consequences and risk factors are associated with sexual victimization in children with ID.

Conclusion and practical recommendations

The results of this study provide a first Quebec portrait of the characteristics of children with ID reported to CPS for SA. Considering that children with ID are at a greater risk than TD children of being sexually abused and that they live with this trauma for years without divulging it and without it being detected or treated (McEachern, 2012), it is important to pursue research in this area. Regarding investigations of SA situations involving children with ID, it is important to take more time to develop a relationship with the child and to proceed with short interview sessions (Dion et al., 2013). A trusted person can help children express themselves orally and emotionally. The surroundings may contribute to the evaluation of the consequences by specifically documenting pre-abuse functioning. SA suffered by children with ID must be identified, and the aftereffects, where applicable, must be treated. Interventions must target the children, the significant actors in their environment, and the consequences of the SA, but also the competencies they should develop to better protect themselves, such as ensuring their personal safety, defending and asserting themselves, as well as recognizing and reporting an SA situation (Dion et al., 2013). Using visual supports during the sessions (books, videos) and repeating the content are necessary adaptations (Dion et al., 2013).

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Table 1: Descriptive analysis and univariate logistic regression comparison analysis between children with and without ID

Variables	Without ID (n = 92)	With ID (n = 10)	B (SE)	OR	[95% CI]
Ontological variables					
Child's sex	♀ = 76.1%	♀ = 60.0%	0.75 (0.69)	2.12	[0.55-8.21]
Child's age (in years)	X=11.62 (SD=3.41)	$\bar{X}$ =12.50 (SD=2.92)	0.08 (0.10)	1.08	[0.89-1.33]
Depression	30.4%	30.0%	-0.02 (0.73)	0.98	[0.24-4.07]
Self-destructive behaviors	27.2%	70.0%	1.83 (0.73)*	6.25	[1.50-26.09]
Attachment issues	15.2%	40.0%	1.31 (0.71)[t]	3.71	[0.93-14.87]
Aggression	22.8%	30.0%	0.37 (0.73)	1.45	[0.34-6.10]
Multiple runaways	6.5%	30.0%	1.82 (0.81)*	6.14	[1.26-29.99]
Inappropriate sexual behaviors	21.7%	30.0%	0.43 (0.74)	1.54	[0.37-6.51]
Physical disability	1.1%	20.0%	3.13 (1.28)*	22.75	[1.86-279.07][a]
Microsystemic variables					
Two-caregiver family	42.4%	10.0%	-1.89 (1.08)[t]	0.15	[0.02-1.24]
Family work income	63.0%	20.0%	-1.92 (0.82)*	0.15	[0.03-0.73]
One of the caregivers has an intellectual disability	2.2%	10.0%	1.61 (1.27)	5.00	[0.41-60.69]
One of the caregivers has a mental health problem	13.0%	10.0%	-0.30 (1.10)	0.74	[0.09-6.38]
The reporting person is a professional	73.9%	90.0%	1.16 (1.08)	3.18	[0.38-26.40]
SA with, or with attempted, penetration	25.0%	30.0%	0.25 (0.73)	1.29	[0.31-5.39]
Oral or sexual touching	71.7%	90.0%	1.27 (1.08)	3.55	[0.43-29.40]
Multiple episodes of SA	28.3%	40.0%	0.53 (0.69)	1.69	[0.44-6.49]

Variables	Without ID (n=92)	With ID (n = 10)	B (SE)	OR	[95% CI]
Service variables					
Safety/development not compromised	48.9%	90.0%	2.24 (1.08)*	9.40	[1.14-77.28][a]
Number of past CPS investigations	X=0.91 (SD=1.24)	X=2.60 (SD=1.43)	0.84 (0.26)***	2.32	[1.40-3.87]

* p ≤ .05; *** p ≤ .001; *t*: p ≤ .10

X: mean; SD: standard deviation; B: B coefficient; SE: standard error; OR: odds ratio; [95% CI]: lower and upper values of the confidence interval at 95%

[a:] because of the large interval, the OR must be interpret with caution.

Table 2: Description of reports and investigation results for sexually abused children with ID

Child	Perpetrator	Description	Decision
1	Father	Reporting person notifies us of SA by the father.	SDNC
2	Mother's spouse	The child disclosed having been sexually abused by one of her mother's boyfriends, about 6 months ago. He would have touched her body (breasts and private area) and would have penetrated her vagina with his fingers. Although the mother was present, she did not notice anything. Allegations deemed founded but safety and development not compromised as youth resides with her maternal grandparents (youth court order until age of majority) and no longer has contact with the perpetrator. A CPS case file had already been opened and measures had been taken due to neglect concerns (mother is intellectually impaired).	SDNC
3	Mother's spouse	SA investigation, since the mother's spouse turned himself in further to a police investigation concerning another child. The mother was advised and is being protective.	SDNC
4	Mother's spouse	SA by the mother's spouse. It should be noted that the youth was already in a foster home before this incident, which occurred during contact with the mother.	SDC
5	Sibling	The child reports being sexually abused by his brother.	SDNC

Child	Perpetrator	Description	Decision
6	Other minor in the foster home	Another child living in the same foster home revealed that he had masturbated in front of the reported child. When questioned, the reported child admitted to doing the same thing and even to masturbating the other child twice and that the last time, it had happened in the kitchen of the residence.	SDNC
7	Other minor in a group home	While living in a group home, the youth was sexually abused by another 10-year-old youth also living in the group home, in the same unit.	SDNC
8	Other minor in the group home	Allegations were of SA. The child was allegedly sexually abused on two different occasions by a resident in the group home where he lived. The SA included the resident performing fellatio on the victim. The victim has a developmental delay and lived in a group home when the abuse occurred (founded). Protective measures were put in place by staff to increase supervision; the youth moved back home with his father for respite and is receiving counselling, thus safety and development not compromised.	SDNC
9	Minor neighbor of the foster home	Child reported being sexually abused while visiting the home of a neighbor. She was in foster care at the time of the incident. The investigation revealed that there was sexual contact between the child and another child of the same age who also lived in the foster home. At the time of the report, the child was no longer in contact with the other child.	SDNC
10	Other	Sexual abuse by another person	SDNC

SDNC: safety or development not compromised
SDC: safety or development compromised