# Variables Associated with the Nature of Sexual Abuse to Minors

José Cantón Duarte<sup>1</sup>, Ma Rosario Cortés Arboleda<sup>1</sup>, and David Cantón-Cortés<sup>2</sup>

<sup>1</sup>Universidad de Granada (Spain) <sup>2</sup>Universidad de Málaga (Spain)

This study analyzes the prevalence and characteristics of childhood and adolescence sexual abuse suffered by a sample of university students, as well as the variables associated with the nature of abuse. Participants anonymously completed the *Questionnaire on Child Sexual Abuse*, in order to obtain information about experience of sexual abuse. Of a total of 2,375 students, 289 (12.2%) declared having suffered sexual abuse before the age of 18. The invasiveness, continuity, and severity of abuse was related to the location where the abuse took place (the more severe cases were committed in the homes of the victim and perpetrator) and to the circumstances of abuse (relationships with partners/at a party or while caring for a child predicted more severe abuse). The age of the victim (preschool) and an intrafamilial relationship between victim and perpetrator were also related to more invasive, continuous, and severe sexual abuse. The knowledge of characteristics of perpetrator and victim and the context in which sexual abuse occurs can help to better comprehend the nature and correlates of sexual abuse. The results of the present study may contribute to the design of programs for the prevention of sexual abuse to minors.

Keywords: child sexual abuse, prevalence, severity of sexual abuse, perpetrators, victims.

El estudio analiza la prevalencia y características del abuso sexual infantil y adolescente en una muestra de estudiantes universitarios, así como las variables relacionadas con la naturaleza del abuso. Los participantes contestaron de forma anónima al *Cuestionario sobre Abuso Sexual Infantil* para obtener información sobre la experiencia de abuso sexual. De un total de 2.375 estudiantes, 289 (12,2%) manifestaron haber sufrido abuso sexual antes de los 18 años. La invasividad, continuidad y gravedad del abuso se relacionaban con el lugar donde se había producido (los casos más graves fueron los cometidos tanto en el hogar de la víctima como del perpetrador) y con las circunstancias del abuso (relaciones con parejas/en una fiesta o mientras se cuida el niño predecían los abusos más graves). La edad de la víctima (preescolar) y la relación intrafamiliar entre víctima y perpetrador también se relacionaban con un abuso sexual más invasivo, continuado y grave. El conocimiento de las características del perpetrador y de la víctima y el contexto en el que ocurre el abuso sexual pueden ayudar a comprender mejor la naturaleza y los correlatos del abuso sexual. Los resultados de esta investigación pueden contribuir al diseño de programas para la prevención del abuso sexual a menores.

Palabras clave: abuso sexual infantil, prevalencia, gravedad del abuso sexual, perpetradores, víctimas.

Correspondence concerning this article should be addressed to José Cantón Duarte. Departamento de Psicología Evolutiva y de la Educación, Facultad de Psicología, Universidad de Granada. Campus de Cartuja s/n, 18071 Granada (Spain). Phone: +34-958240674 / +34-958243738. Fax: +34-958249017. E-mail: jcanton@ugr.es

The sexual abuse of children is common to all societies, and studies have reported high rates (between 3-36%) among the general population, suffered by approximately 20% of females and 7.4% of males (Fanslow, Robinson, Crengle, & Perese, 2007; Pereda, Guilera, Forns, & Gómez-Benito, 2009). However, the prevalence rate of CSA (Child Sexual Abuse) found in different countries and cultures vary considerably (Briere & Elliott, 2003; Gault-Sherman, Silver, & Sigfúsdóttir, 2009; Pereda et al., 2009; Priebe & Svedin, 2009; Speizer, Goodwin, Whittle, Clyde, & Rogers, 2008; Ulibarri, Ulloa, & Camacho, 2009).

The prevalence in Spain (López, Carpintero, Hernández, Martín, & Fuertes, 1995) has been reported to be 18% in the total population, with 15.2% in males and 22.5% in females, figures very similar to those of other western countries in the case of women, though higher in the case of men. More recently, Pereda and Forns (2007), in a study carried out with students from the University of Barcelona, reported a prevalence rate of 15.5% of males and 19% of females. These percentages were higher than those of a previous investigation with Basque students (De Paúl, Milner, & Múgica, 1995), in which rates of 9.7% of males and 14.8% of females were reported.

The results of prior studies indicate that the majority of survivors of CSA have experienced some form of sexual abuse involving physical contact, with genital touching being the most common (between 54-69%) (e.g., Leahy, Pretty, & Tenenbaum, 2004; Oaksford & Frude, 2001; Priebe & Svedin, 2008, 2009). The rates of CSA among women involving touching range from 9-14% (Chen, Dunne, & Han, 2004; Kendler, Kuhn, & Prescott, 2004), while the most serious cases involving penetration range from 1-8% (Chen et al., 2004; Kendler et al., 2004) and could be as high as 10-30% of all cases of sexual abuse (Leahy et al., 2004; Oaksford & Frude, 2001; Priebe & Svedin, 2008; Ulibarri et al., 2009).

About half of all CSA cases are limited to one or 2 incidents and most frequently take place within the home of the aggressor or of the victim (Fanslow et al, 2007; Oaksford & Frude, 2001; Ulibarri et al., 2009). Conversely, a study of CSA committed by strangers (Gallagher, Bradford, & Pease, 2008) indicated that almost 2/3rds of the incidents took place in streets or parks while the victim was among other children.

The perpetrator in the majority of CSA cases is male (Gallagher et al., 2008; Oaksford & Frude, 2001). However, some authors suggest that CSA committed by women may be underrepresented (Gannon & Rose, 2008; NSPCC, 2007; Pereda et al., 2009). Additionally, adolescent aggressors are frequently implicated in CSA (Gallagher et al., 2008; Oaksford & Frude, 2001; Oliver, 2007; Ulibarri et al., 2009).

The majority and most serious cases of CSA are committed by family members or people known to the family (Briere & Elliott, 2003; Fanslow et al., 2007; Finkelhor, Ormrod, Turner, & Hamby, 2005; Leahy et al., 2004; Pereda & Forns, 2007; Speizer et al., 2008; Whitaker et al., 2008). The rate of abuse committed by strangers is relatively low (Gallagher *et al.*, 2008; Speizer et al., 2008; Ulibarri et al., 2009).

In the majority of sexual abuse cases committed by males, there is one individual perpetrator implicated (Fanslow et al., 2007; Gallagher et al., 2008; Priebe & Svedin, 2009) while the presence of more than one perpetrator on the occasion of the first abuse was reported by 9.1% of respondents in one study (Priebe & Svedin, 2009).

In general, prior studies indicate that the risk of CSA is two to three times greater for females than males (Briere & Elliott, 2003; Chen et al., 2004; Gallagher et al., 2008; Gault-Sherman et al., 2009; Pereda et al., 2009; Priebe & Svedin, 2009). Results of studies on the differences between males and females in the type of abuse suffered and the age of abuse onset have varied (e.g., Gault-Sherman et al., 2009; Priebe & Svedin, 2009).

A high percentage of victims suffer sexual abuse during preadolescence; the average age at onset of CSA being situated between 9 and 11 years old (Briere & Elliott, 2003; Chen et al., 2004; Fanslow et al., 2007; Oaksford & Frude, 2001; Pereda & Forns, 2007; Pereda et al., 2009; Speizer et al., 2008). Priebe and Svedin (2009) found that for both male and female victims the mean age of CSA onset was lowest in cases where there was no contact. The mean age for female victims was highest when penetration was involved, while the mean age of male victims was highest in a contact CSA group.

Finally, some studies have concluded that the absence of a biological parent or parents at a low socioeconomic status places a child at higher risk for CSA. For example, Priebe and Svedin (2009) found that students reporting CSA, especially penetration, lived with only one parent and were at a lower socioeconomic range. However, Rickert, Wiemann, Vaughan, and White (2004) found no association between CSA and the presence or absence of biological parents.

The objective of the present study was to analyze the relationship of the characteristics of the sexual abuse suffered, perpetrator and victim characteristics (as retrospectively reported by CSA survivors) with the nature of the abuse suffered during childhood and adolescence. It was hypothesized that the nature of sexual abuse (invasiveness, continuity, and severity) would be associated with the place and circumstance in which the abuse occurred, the characteristics of the perpetrator (age, relationship with the victim, abuse of other children, and number of perpetrators) and the characteristics of the victim (gender, age at abuse onset, re-victimization and the later transformation of victim into perpetrator).

#### Method

# **Participants**

The sample consisted of 2,375 college students from the University of Granada; 385 men (15.9%) and 1,990 women (83.8%). The participant ages ranged from 18 to 50 years of age. However, 93.1% of participants were 24 years old or younger. Present age mean was 21.25 (SD = 4.38).

# Child Sexual Abuse Questionnaire

A questionnaire was developed to anonymously collect the socio-demographical data of the participants (age and gender of the participant, profession and education level of the parents, structure of the home and number and gender of siblings) and the characteristics of sexual abuse suffered before 18 years of age. The questionnaire provided a conceptual definition of sexual abuse as follows: "the contact and sexual interaction between a minor and an adult or between minors if there exists a difference in five years of age between them or if the child/adolescent aggressor is in a position of power or control over the victim, even though there is no age difference". Participants were asked to indicate if they had experienced sexual abuse as defined above during childhood or adolescence and if they had, they were to indicate which type(s) of sexual activity they had suffer by selecting from a list of experiences grouped according to invasiveness.

Participants who reported abuse then described abuse characteristics, such as: type of the sexual activity (without contact, touching in erogenous places, oral/penetration), continuity (one isolated incident, various incidents, repeated abuses), frequency and duration of abuse, and location(s) in which abuse occurred, characteristics of the perpetrators (sex, age, relation to the victim, and whether the perpetrator acted alone or not); and, finally, the characteristics of the victim (sex, age of CSA onset and age at end of abuse, and re-victimization).

#### Procedure

Between the academic years 2000-2001 and 2008-2009 students at the University of Granada voluntarily participated in a study of risk situations during childhood and adolescence and their current psychological adjustment. During a 1-hour anonymous session they completed the CSA questionnaire. The confidentiality of the data was guaranteed through numeric codes printed on the cover of the questionnaires, which were handed out randomly. Each code was introduced into the computer with corresponding data from each participant for statistical analysis.

With the goal of guaranteeing maximum confidentiality, and consequently increasing honest responses from the participants, the session was conducted simultaneously in various classrooms, so that privacy was ensured by providing adequate space between participants as they filled out the questionnaires. In addition, participants who had not experienced CSA completed questionnaires about a different significant negative experience, so that victims could not be identified. After finishing the study, counseling was offered to participants. Approval of study methods was obtained from the Ethics Committee of the Universidad de Granada. Participants provided informed consent and were told that they were free to end their involvement in the study at any time.

## Data analysis

Statistical analyses were performed using SPSS (Statistical Package for the Social Sciences) version 15.0. Chi-square contingency tables and odds ratio (OR), Kruskal-Wallis, and Mann-Whitney nonparametric analyses were used to assess significant differences. A p value of < .05 was considered statistically significant.

#### Results

# Prevalence of sexual abuse to minors

The following percentages refer to the sample of victims followed in brackets by percentages referring to the entire sample (Oaksford & Frude, 2001). Of the 2,375 university students that participated in the study, 289 [12.2%] declared having suffered sexual abuse before 18 years of age. Of those suffering abuse before the age of 18, 33 were men (11.4% [1.4%]) and 256 were women (88.6% [10.8%]). The male victims of abuse represented 8.6% of the total male sample, and female victims represented 12.9% of the total female sample. The present age mean was 21.21 for women (SD = 4.52) and 21.52 for men (SD = 3.18).

## Nature of Sexual abuse

# Type

Type of sexual abuse was categorized by levels of invasiveness (abuse without contact, abuse with contact but no penetration, or abuse with contact and penetration). There were 38 (6 males and 32 females) cases of sexual abuse without physical contact (13.1% [1.6%]), 182 (17 males and 165 females) cases (63 % [7.6%]), of abuse with touching but no penetration and finally, 69 victims (10 males and 59 females) (23.9% [2.9%]), suffered abuse that included oral sex and/or penetration. Twenty-seven of the victims performed oral sex on the perpetrator. The differences in the frequencies of the three types of sexual abuse were statistically significant ( $\chi^2$  [2, n = 289] = 119.260, p < .001).

## Continuity and duration

There were 146 cases (50.5% [6.1%]) in which one isolated incidence of sexual abuse occurred, while there were 69 cases (23.9% [2.9%]) in which the abuse was suffered on various occasions (two or three times), and 74 cases (25.6% [3.1%]) that were characterized by continuity (abuse taking place on more than 3 occasions). On the other hand, according to the Jonckheere-Terpstra test, there was a significant relationship between continuity and type (invasiveness) of sexual abuse suffered (J-T typified statistic (3) = 3.668, p < .001). Oral sex/penetration occurred in 32.2% of cases in continuous abuse *versus* 15.8% in incidental abuse (Pearson  $\chi^2$  [1, n = 289] = 10.71, p < .001; OR = 2.54, 1.39 < OR < 4.65).

The average duration of abuse that occurred more than once (those on various occasions and continuous abuse) was 2.6 years, while analysis of continuous abuse cases only showed an average duration of 3.5 years. In addition, the Jonckheere-Terpstra test found no significant differences in duration among the types (invasiveness) of continuous sexual abuse (J-T typified statistic (3) = 0.549, p = .583).

# Severity

The combination of the type (invasiveness) of the sexual abuse with the level of continuity was used as an index of severity. Table 1 displays the distribution of this measure of severity among the 289 cases of abuse. Thirty-eight cases (13.1%) were ranked at a low level of severity, 182 (63%) at a medium level of severity and 69 (23.9%) at a high level of severity ( $\chi^2$  [2, n = 289] = 119.26, p < .001). The results of the Mann-Whitney test indicated that there were

no significant differences between the duration of abuse at the different levels of severity (J-T typified statistic (3) = 0.549, p = .58).

Predictor variables of the nature of the Child Sexual Abuse

#### Places and circumstances

The frequencies and percentages of the places and circumstances in which sexual abuse occurred are presented in Table 2. The results of the Mann-Whitney test indicated that localization of sexual abuse in the home of the victim and/or perpetrator (*versus* any other place) was related to the invasiveness of the sexual abuse (mean ranks = 152.06 and 129.64, respectively, n = 289; Z = -2.47, p = .013). Twenty-seven percent of the sexual abuse that occurred in the home of the victim and/or perpetrator consisted of oral sex/penetration *versus* 16.5% that occurred in other locations (Pearson  $\chi^2$  [1, n = 289] = 4.00, p = .046; OR = 1.90, .97 < OR < 3.78).

The location of abuse was also significantly related to the continuity (mean rank = 163.3 and 105.77, n = 289; Mann-Whitney test, Z = -5.90, p < .001) and the severity of the abuse (mean rank = 160.34 and 111.63, n = 289; Mann-Whitney test, Z = -4.71, p < .001). Abuse committed in the home of the victim and/or perpetrator was more likely to be continuous (occur on more than 3 occasions) than abuse committed in other locations (61.1% *versus* 24.2%, respectively) (Pearson  $\chi^2$  [1, n = 289] = 34.02, p < .001; OR = 4.93, 2.73 < OR < 8.97). Abuse committed in the home of the victim and/or perpetrator was also more likely to score higher on our measure of severity than when abuse

Table 1
Severity (type and continuity) of sexual abuse

G : C 1	CSA sample		M	Male		male	Percent of total	
Severity of abuse	n	%	n	%	n	%	sample ( $n = 2375$ )	
No contact								
Single incident	24	8.3	2	6.1	22	8.6	1.0	
Various incidents	11	3.8	3	9.1	8	3.1	0.5	
Continued	3	1.0	1	3.0	2	0.8	0.1	
Touching								
Single incident	99	34.3	10	30.3	89	34.8	4.2	
Various incidents	38	13.1	5	15.2	33	12.9	1.6	
Continued	45	15.6	2	6.1	43	16.8	1.9	
Oral/penetration								
Single incident	23	8.0	4	12.1	19	7.4	1.0	
Various incidents	20	6.9	4	12.1	16	6.3	0.8	
Continued	26	9.0	2	6.1	24	9.4	1.1	
Total	289	100	33	100	256	100	12.2	

Table 2			
Frequency and percentages	of the locations and circums	stances in which sexual abuse occurre	d

Locations	n	%	Circumstances	n	%
The victim's home or shared with the perpetrator	86	29.8	While taking care of the child	47	16.3
The perpetrator's home	87	30.1	While sharing the same room or house	53	18.3
Victim and perpetrator's home	25	8.7	Victims play/take part in activity with the perpetrator	43	14.9
Family member's home or home of victim's friend	20	6.9	During visits	70	24.2
Place of perpetrator's job	10	3.5	The perpetrator leads the victim in a class, teaches an activity or takes advantage of their profession	18	6.2
Neighborhood spaces, school or means of transportation	18	6.2	Trips/excursions or taking part in an activity in a public place	41	14.2
Hidden street or open space, park, beach, camping	43	14.9	Dates, romantic relationships, parties or get-togethers of peers	17	5.9
Total	289	100	Total	289	100

occurred in a different location (47% *versus* 23.1%, respectively) (Pearson  $\chi^2$  [1, n = 289] = 14.90, p = .001; OR = 2.95, 1.63 < OR < 5.39).

Continuity was greater when the abuse was committed simultaneously in both the home of the victim and the home of the perpetrator (*versus* only in the home of the victim or the perpetrator) (Kruskal-Wallis test,  $\chi^2$  [2, n = 198] = 11.85, p = .003). Severity of abuse was also affected by whether abuse occurred simultaneously in both homes or in either the home of the perpetrator or the victim (Kruskal-Wallis test,  $\chi^2$  [2, n = 198] = 7.31, p = .026). Simultaneous sexual abuse in both homes was more severe than that committed just in the home of the victim (Mann-Whitney test, mean ranks = 70.14 and 51.89, n = 111; Z = -2.53, p = .011) or just in the home of the perpetrator (Mann-Whitney test, mean ranks = 69.50 and 52.76, n = 112; Z = -2.31, p = .021).

The circumstance in which the sexual abuse occurred was related to the measures of invasiveness ( $\chi^2$  [6, n = 289] = 36.81, p < .001), continuity ( $\chi^2$  [6, n = 289] = 31.28, p < .001), and severity ( $\chi^2$  [6, n = 289] = 38.66, p < .001). Using the Mann-Whitney test, pair-wise comparisons of the different circumstances with regard to the three characteristics of sexual abuse were performed (see table 3).

Sexual abuse committed during dates, romantic relationships, parties or get-togethers of peers (category 7) had a higher average level of invasiveness than those committed in other circumstances, including that of taking care of the child (category 1). The invasiveness of the abuse in category 1, however, was greater than that of the abuse committed during visits (category 4) and during trips/excursions/activities to public places (category 6).

The sexual abuse committed while taking care of the child (category 1), in a shared room/living space (category 2), during a game/activity (category 3), during visits (category 4), and during teaching or while taking advantage of one's profession (category 5), were more continuous than those

carried out in public places (category 6) or during dates, romantic relationships, parties or get-togethers of peers (category 7). Finally, abuse committed while caring for a child (category 1) and during dates, romantic relationships, parties or get-togethers of peers (category 7) was more severe than abuse committed in other circumstances.

## Characteristics of the perpetrator

Gender and age. The following data regarding the interaction between the gender of the perpetrator, his/her age group, and the relationship to the victim are presented in Table 4. The majority of perpetrators were male (n = 276, 95.5%). Only 13 cases of sexual abuse were committed by females. In all but two cases, the female perpetrator was a minor and in all cases the victims of female perpetrators were female. With regard to age, 131 perpetrators (45.3%) were minors (27 were children 5-11 years old and 104 were adolescents 12-17 years old) and 158 (54.7%) were 18 years old or older. There were no significant differences between abuse committed by adults and minors in terms of the invasiveness of abuse (Mann-Whitney test, Z = -0.761, p = .447), continuity (Z = -.471, p = .638), or severity (Z = -.412, p = .680).

Relationship with the victim. In 154 cases (53.3% [6.5%]) the perpetrator of the abuse was a family member and in the remaining 135 cases (46.7% [5.7%]) was someone outside the victim's family. Only 9% of all sexual abuse was committed by strangers, representing 19.3% of the extra-familial abuse. The results of the Mann-Whitney test indicated that the abuse committed by family members was more severe in level of invasiveness (mean ranks = 152.91 and 135.97, n = 289, Z = -2.006, p = .045), continuity (mean ranks = 171.17 and 115.15, n = 289, Z = -6.200, p < .001), duration of continued abuse (mean ranks = 79.25 and 53.98, n = 143, Z = -3.459, p < .001) and severity (mean ranks = 164.01 and 123.31, n = 289, Z = -6.200

Table 3
Results of the Mann-Whitney test of the relationship between the circumstances of the sexual abuse (categories described below) and the nature (invasiveness), continuity and severity of abuse

	CIRCUMSTANCES						
	1	2	3	4	5	6	7
NATURE							
1 mean rank z				66.19 vs 54.17 -2.302*		53.20 vs 34.52 -3.835****	29.41 vs 41.03 -2.492*
				(n = 117)		(n = 88)	(n = 64)
6 mean rank z	34.52 vs 53.20 -3.835****	40.24 vs 53.11 -2.600**	36.22 vs 48.49 -2.643**	46.55 vs 61.54 -2.891***			23.48 vs 44.03 -4.569****
	(n = 88)	(n = 94)	(n = 84)	(n = 111)			(n = 58)
7 mean rank z	41.03 vs 29.41 -2.492* (n = 64)	49.24 <i>vs</i> 31.09 -3.607**** ( <i>n</i> = 70)	41.41 vs 26.19 -3,437**** (n = 60)	64.09 vs 39.12 -4.417**** (n = 87)	23.29 vs 13.00 -3.307**** (n = 35)	44.03 vs 23.48 -4.569**** (n = 58)	
CONTINUITY							
1 mean rank z				66.04 vs 54.27 -1.962* (n = 117)		56.26 vs 31.02 -5.126**** (n = 88)	36.31 vs 21.97 -2.927*** (n = 64)
6 mean rank z	31.02 vs 56.26 -5.126**** (n = 88)	37.04 <i>vs</i> 55.59 -3.775**** ( <i>n</i> = 94)	34.46 vs 50.16 -3.473**** (n = 84)	42.20 vs 64.09 -3.933**** (n = 111)	26.83 vs 37.22 -2.745** (n = 59)		
7 mean rank z	21.97 vs 36.31 -2.927*** (n = 64)	28.15 vs 37.86 -1.883 (n = 70)		34.24 vs 46.37 -1.947* (n = 87)			
SEVERITY							
1 mean rank z				68.70 vs 52.49 -2.594** (n = 117)		57.06 vs 30.10 -5.051**** (n = 88)	
6 mean rank z	30.10 vs 57.06 -5.051**** (n = 88)	36.51 vs 56.00 -3.560**** (n = 94)	32.96 vs 51.59 -3.625**** (n = 84)	40.91 vs 64.84 -3.931**** (n = 111)	26.94 <i>vs</i> 36.97 -2.178* ( <i>n</i> = 59)		23.74  vs  43.38 $-4.220****$ $(n = 58)$
7 mean Rank z		45.44 <i>vs</i> 32.31 -2.367* ( <i>n</i> = 70)	38.59 vs 27.30 -2.308* (n = 60)	58.44 <i>vs</i> 40.49 -2.704*** ( <i>n</i> = 87)	22.38 vs 13.86 -2.535** (n = 35)	43.38 vs 23.74 -4.220**** (n = 58)	

Note. Only significant results are reported. Each cell shows mean ranks followed by z score.

l= while they care for, put to bed, or bath the victim; 2= share room or house and are left alone; 3= victims play/take part in activity with the perpetrator or they go together to the house of one or the other; 4= during visits; 5= the perpetrator teaches the victim in a class, teaches an activity or takes advantage of their profession; 6= trips/excursions or taking part in an activity in a public place; 7= dates, romantic relationships, parties or get-togethers of peers.

<sup>\*</sup> p < .05; \*\* p < .01; \*\*\* p < .005; \*\*\*\* p < .001

Table 4	
Age range of the perpetrators as a function of gender and relationship with the vid	ctim

Deletie melio de estation	Age of perpetrator								
Relationship to victim	$\leq$ 5 years (preschooler) $n$ (%)	6-11 years n (%)	12-17 years n (%)	$\geq$ 18 years $n$ (%)	Total n (%)				
Non-familial									
Male	0 (0.0)	6 (4.7)	42 (32.8)	80 (62.5)	128 (100.0)				
Female	2 (28.6)	1 (14.2)	2 (28.6)	2 (28.6)	7 (100.0)				
Total	2 (1.5)	7 (5.2)	44 (32.6)	82 (60.7)	135 (100.0)				
Familial									
Male	0 (0.0)	16 (10.8)	56 (37.8)	76 (51.3)	148 (100.0)				
Female	1 (16.7)	1 (16.7)	4 (66.6)	0 (0.0)	6 (100.0)				
Total	1 (0.6)	17 (11.0)	60 (39.0)	76 (49.4)	154 (100.0)				

4.232, p < .001). There was no longer a significant difference in invasiveness when only sexual abuse with physical contact was analyzed (mean ranks = 123.16 and 128.25, n = 289, Z = -.714, p = .475). However, although there were no significant differences regarding penetration ( $\chi^2$  (1, 251) = 2.88, p = .089), sexual abuse committed by family members was more likely to involve oral sex ( $\chi^2$  (1, 251) = 6.46, p = .011; OR = 2.64, 1.16 < OR < 6.12).

Abuse of other children by the perpetrator. There were 44 victims (15.2% [1.9%]) who declared that the perpetrator had also abused other children, especially females (84.1%), sisters (35.7%), friends (23.8%) or cousins (16.7%) of the victim who were of an age similar to that of the victim. The results of the Mann-Whitney test indicated that when the perpetrator had also abused other children it was more likely that the sexual abuse was continuous (Z = -2.53, p = .011).

## Multiple perpetrators

Only 7 victims (2.4% [0.3%]) stated being abused by more than one perpetrator. All 7 of these victims were female (1 was abused before the age of 6, while 6 were abused between the ages of 6 and 11). The multiple perpetrators were males, except in one case in which one adolescent boy and one adolescent girl participated. Four of the cases in which more than one perpetrator participated were continuous abuses and 3 of them took place within the family.

# Characteristics of the victim

*Gender*. Regardless of the type of abuse suffered, the majority of the victims were female (88.6%). Females were the victims in 84.2% of abuse cases involving no contact, 90.7% of the cases of abuse with touching and 85.5% of the cases of abuse involving oral sex/penetration. According to the Mann-Whitney test, there were no significant differences between male and female victims regarding invasiveness (mean ranks = 147.53 and 144.67, n = 289,

Z = -0.216, p = .829), continuity (mean ranks = 139.71 and 145.68, respectively, n = 289; Z = -0.421, p = .674), duration (mean ranks = 63.00 and 73.21, respectively, n = 289; Z = -1.001, p = .317), or severity of the sexual abuse (mean ranks = 142.27 and 145.35, respectively, n = 289; Z = -0.204, p = .838). However, when oral sex and penetration were analyzed separately, oral sex was more frequent among male victims (25.9%) than among female victims (8.6%) ( $\chi^2$  [1, n = 237] = 7.64, p < .006; Fisher's exact test, p = .015; OR = 3.73, 1.24 < OR < 11.00), while there were no significant differences between male and female victims in the involvement of penetration.

Age at onset. The average age at onset was 8.9 years. The average age of continuous abuse victims was 8 years old and of one single abusive episode was 9.9 years (Mann-Whitney test, Z = -4.98, p < .001). The average age at the conclusion of continued abuse was 10.2 years. Concerning the developmental level at the occurrence of the episode of sexual abuse or the beginning of the continuous abuse, 45 (15.6% [1.9%]) were preschoolers, 171 (59.2% [7.2%]) were children (6-11 years of age) and 73 (25.3% [3%]) were adolescents. There was a statistically significant difference between the percentages of age groups ( $\chi^2$  [2, n = 289] = 90.879, p < .001). No significant differences were found between male and female victims regarding the age of onset of isolated or continued abuse (Mann-Whitney test, Z = -0.365, p = .715).

According to the results of the Kruskal-Wallis test, the three age groups differed significantly with regard to the invasiveness (mean ranks = 176.91, 138.28, and 141.07;  $\chi^2$  [2, n = 289] = 10.660, p < .005), continuity (mean ranks = 178.54, 146.59, and 120.60;  $\chi^2$  [2, n = 289] = 16.102, p < .001), and severity (mean ranks = 189.02, 140.55, and 128.28;  $\chi^2$  (2, n = 289) = 16.684, p < .001) of the sexual abuse. Cases of abuse starting in pre-school, compared with those starting in primary school (6-11 years), were more likely to involve oral sex (Mann-Whitney test, Z = -2.10, p < .035), to be continuous (Mann-Whitney test, Z = -2.47, p < .014), to be of a greater severity (Mann-Whitney test,

Z = -3.58, p = .001), and were less likely to consist of abuse without physical contact (Mann-Whitney test, Z = -2.66, p < .008). There were no significant differences between age groups in sexual touching, penetration or duration of continued abuse. In addition, cases of abuse starting in pre-school, compared to cases of abuse starting in adolescence, were more likely to involve oral sex (Mann-Whitney test, Z = -2.20, p < .028), to be continuous (Mann-Whitney test, Z = -3.97, p < .001), have a longer duration of continued abuse (Mann-Whitney test, Z = -2.51, p <.012) and were of a higher severity (Mann-Whitney test, Z = -3.82, p < .001), and were less likely to be without physical contact (Mann-Whitney test, Z = -3.12, p < .002). These 2 age groups (pre-school and adolescence) did not significantly differ in touching or penetration. Finally, abuse starting in primary school, compared to abuse starting in adolescence, was more likely to be continuous (Mann-Whitney test, Z = -2.48, p < .013) and to be of a prolonged duration (Mann-Whitney test, Z = -2.05, p < .040), while abuse starting in adolescence were more likely to involve penetration (Mann-Whitney test, Z = -2.25, p < .025).

#### Structure of the home

The majority of the victims lived with their biological fathers and mothers at the time when the sexual abuse occurred (n=257; 88.9%), while 27 resided in a single-parent home (9.3%), and 5 victims lived with their mothers in stepfamilies (1.7%). The distinct types of home structures did not correlate with either the invasiveness of sexual abuse (Kruskal-Wallis test,  $\chi^2$  [3, n=288] = 0.652, p=.884), the continuity of abuse (Kruskal-Wallis test,  $\chi^2$  [3, n=288] = 3.520, p=.318) or the severity of abuse (Kruskal-Wallis test,  $\chi^2$  [3, n=288] = 0.670, p=.880). The results of the Mann-Whitney test also did not find significant differences between intact homes *versus* single-parent/stepfamily homes in invasiveness (Z=-0.22, p=.827), continuity (Z=-0.54, p=.592) or severity (Z=-0.44, p=.662).

## Re-victimization

There were 31 victims (10.7% [1.3%]), of which 29 were female and 2 were male, that suffered sexual abuse by a different (another) perpetrator before the age of 18. Fifty three percent of these victims were between 5-10 years old when the re-victimization occurred. The revictimization consisted of touching in 86.7% of abuse cases and 71.0% were committed by someone outside of the family. In all but one case the perpetrators were male. Significant differences were not found in invasiveness (Mann-Whitney test Z = -1.18, p = .238), continuity (Z = -1.16, p = .245) or severity (Z = -1.47, p = .141) of abuse between the subjects that were re-victimized before 18 years of age and those that were not.

#### From victim to perpetrator

When asked about becoming the perpetrator of abuse, 7.4% of the victims in the study declared having committed some type of sexual abuse against other children. All except one of those admitting to committing abuse were female. The average age at the time of committing sexual abuse was 10.7 years. In 84.6% of the cases, the victims were female with an average age of 7.5 years, and 75% of the victims were family members. No significant differences were found between the victims that later became perpetrators of abuse and those who did not, with respect to invasiveness (Mann-Whitney test Z = -0.43, p = .664), continuity (Z = -1.54, p = .124) or severity (Z = -0.99, p = .321) of the sexual abuse suffered.

## Discussion

The results from the present study indicate that 8.6% of the male participants and 12.9% of the female participants suffered some form of sexual abuse before the age of 18. This result agrees with the prevalence rate of CSA in other studies done with students (e.g., De Paúl, Milner, & Múgica, 1995; Gault-Sherman et al., 2009; Kenny & McEachern, 2007; Oaksford & Frude, 2001). Moreover, the most frequent type of sexual abuse was touching in erogenous zones (63% of all cases), while 23.9% suffered oral sex and/or penetration, findings similar to rates found in other studies (e.g., Oaksford & Frude, 2001; Priebe & Svedin, 2008; Ulibarri et al., 2009).

The continuity of abuse found in the present study also is in agreement with prior studies (e.g., Fanslow et al., 2007; Kenny & McEachern, 2007; Oaksford & Frude, 2001; Priebe & Svedin, 2009; Ulibarri et al., 2009). It was found that approximately half of the victims suffered one incident of sexual abuse while the other half suffered abuse that occurred "various times" or continuously. The measure of seriousness of the sexual abuse, resulting from the combination of the type of abuse and its continuity, allowed for a more specific description of the characteristics of abuse. For example, 9.3% of the victims in our study were subjugated in a continuous manner to sexual activities which included oral sex/penetration (the most serious level of abuse).

The present results agree with those of Gallagher et al. (2008) in that more than two-thirds of sexual abuse cases committed by strangers occurred in "the street" and in "parks and fields". In terms of the circumstances, approximately half of the abuse cases occurred in a close relationship which permitted the perpetrator to carry out a series of activities with the victim (bathe him/her, bathe together, put him/her to bed, share a room) or during "visits".

Coincident with previous studies (e.g., Briere & Elliott, 2003; Gallagher et al., 2008; Oaksford & Frude, 2001), it was found that the great majority of abuse (95.2 %) was

committed by males. The present results also confirm the elevated rates of adolescent and child perpetrators of sexual abuse (45.3%), similar to the findings of Gallagher et al. (2008) and Oliver (2007). In agreement with Priebe and Svedin (2009), most of the female perpetrators in the present study were minors (below the age of 18). However, contrary to Priebe and Svedin (2009) who found that the majority of the victims of female perpetrators were male, it was found that in all cases of female perpetrators the victims were female.

The results corroborate prior research findings (Finkelhor et al., 2005; Speizer et al., 2008; Whitaker et al., 2008) that the majority of sexual abuse cases are committed by relatives or acquaintances of the family. A little more than half of the sexual abuse cases (52.9%) were committed by relatives, mostly extended family (e.g., cousins, uncles) or members of the nuclear family (brothers, father, or stepfather), data similar to that of Briere and Elliott (2003) and Pereda and Forns (2007). In disagreement with results reported by Gault-Sherman et al. (2009), we found that the rate of abuse committed by relatives was similar between male and female victims. The rate of perpetrators that were unknown to the victims in the present study was 9.3% which is slightly higher than that of the Gallagher's et al. (2008) study, and slightly lower than the 14% found by Ulibarri et al. (2009).

In the great majority of cases (84.4%) the perpetrators abused one lone victim. In only 12.4% of cases the abuse was committed in the presence of a third person that was not also a victim. Furthermore, 97.6% of the perpetrators acted alone, a percentage somewhat higher than the 90.9% reported by Priebe and Svedin (2009) and the 85% described by other authors (Fanslow et al., 2007; Gallagher et al., 2008).

The results of the investigation indicate that the majority of sexual abuse occurred between the ages of 8-12, and that the rates are lower before the age of 8 and during adolescence (Pereda & Forns, 2007; Pereda et al., 2009). In the present study, 59.2% of abuse took place between the ages of 6-11, with an average initial age of 9. These results are very similar to those obtained by Fanslow et al. (2007) and Kenny and McEachern (2007), but lower than rates found in other studies that indicated pre-pubescence was the most prevalent age for sexual abuse (e.g., Chen et al., 2004; Speizer et al., 2008). In disagreement with results reported by Priebe and Svedin (2009), it was found that the age of onset of abuse, both isolated and continuous, was similar between male and female victims.

There was a rate of re-victimization of 1.3%, which was lower than in other studies (e.g., Gallagher et al., 2008; Pereda & Forns, 2007). Given that, as found in the preliminary investigation (e.g., Finkelhor, Ormrod, & Turner, 2007a; Finkelhor, Ormrod, & Turner, 2007b), this revictimization also seems to be related to other types of abuse, it is necessary to continue research in this area, in order to confirm this hypothesis of poly-victimization as a risk factor for re-victimization and other psychopathological

implications. No relationship between the occurrence of sexual abuse and family structure was found, a finding similar to that of Rickert et al. (2004) but differing from the results reported by Priebe and Svedin (2009).

The present study differs from earlier investigations in that it is a comprehensive analysis that has taken into consideration the role of a collection of variables related to the perpetrator, the victim and the sexual abuse itself in the invasiveness, continuity and severity of abuse suffered. This study is also unique in that the measure of severity of the abuse was not only a function of its invasiveness, but also took into account continuity. Moreover, this research not only analyzed the association between several variables and the nature of the sexual abuse, but we also compared the relative importance of those variables in the nature of abuse.

The results of this study emphasize the importance of taking into consideration both the place in which the sexual abuse is committed and the circumstances around the abuse in the study of the nature of abuse. There existed a greater risk of invasiveness, continuity and severity when abuse took place in the intimacy of the home of the victim/perpetrator, when the abuse occurred in a dating/romantic relationship or while the perpetrator was caring for the child.

In agreement with the majority of previous studies (Briere & Elliott, 2003; Fanslow et al., 2007; Finkelhor et al. 2005; Pereda & Forns, 2007; Speizer et al., 2008; Whitaker et al., 2008), but in opposition to some studies (e.g., Priebe & Svedin, 2009), the present data indicate that abuse committed by family members is more severe than abuse committed by unrelated perpetrators. First, abuse committed by family members was more likely to include physical contact. Second, while there were no significant differences in regard to penetration, it was more likely that abuse committed by relatives involved oral sex. And finally, abuse committed by family members was more likely to be continuous and of a longer duration. One possible explanation for the greater severity of abuse committed by family members is the intimate and confident nature of the relationship between victim and perpetrator. This relationship may facilitate the use of bribes/privileges and threats directed against the victim's loved ones or against the stability of the family system. Moreover, intra-familial abuse was initiated at an earlier age, which, in turn, was related to a higher severity of abuse.

Results of this research may explain contradictory data from previous studies regarding the relationship between the gender of the victims and the invasiveness of the abuse. In agreement with Priebe and Svedin (2009), it was not found a relationship between the gender of the victims and the invasiveness of the abuse. However, when oral sex and penetration were analyzed separately, oral sex was more frequent in male victims. These results partially confirm the result reported by Gault-Sherman et al. (2009), that male victims suffer abuse involving greater invasiveness.

Preschoolers (versus primary school-aged children and adolescents) were the age group most at risk of having suffered oral sex, and abuse of a more continuous and of a more serious nature. These results were not surprising, considering that the young age of the victim may have facilitated the impunity to commit more invasive abuse and maintain secrecy for longer, however, they contradict results from prior studies (e.g., Priebe & Svedin, 2009). Abuse beginning in pre-school aged children was more likely to be continuous and to be of a longer duration than abuse beginning in adolescence, possibly explaining the higher risk of oral sex in combination with the lack of a significant difference in penetration. The early age of onset of continuous abuse victims may facilitate the performance of certain types of sexual activities such as oral sex, to a greater extent than abuse starting during adolescence. Likewise, the continuity of abuse may facilitate the progression in the measure of invasiveness, ultimately reaching penetration. This could explain the lack of a difference found in abuse including penetration between abuse started on pre-school age children and abuse starting in adolescence. Finally, the higher probability of oral sex and the greater continuity of abuse with an onset in pre-school age children may explain a higher index of abuse severity suffered by this age group compared to abuse onset in primary school or in adolescence. There were no significant differences found between the two latter age groups in severity, most likely due to the higher probability of penetration in the adolescent age group counteracted by the higher probability of continuous abuse suffered by the primary school age group.

The present study has some limitations. The retrospective nature of the study can produce a risk of bias in the memory of participants. Nevertheless, diverse studies support the validity of retrospective self-reports of CSA including the possible benefits (Edwards, Kearns, Calhoun, & Gidycz, 2009). Although anonymity was guaranteed, there may have been more cases of sexual abuse than reported by the participants. Furthermore, the participants were university students, the majority of them female, and therefore, caution must be taken when generalizing to the population at large. In spite of these limitations, previous studies of CSA indicate that the prevalence rates of sexual abuse do not vary significantly between surveys (Chen et al., 2004). The aforementioned limitations notwithstanding, the results of the present study will be beneficial in the development of programs directed at the detection and prevention of sexual abuse to minors.

#### References

Briere, J., & Elliott, D. M. (2003). Prevalence and psychological sequelae of self-reported childhood physical and sexual abuse in a general population sample of men and women. *Child Abuse & Neglect*, *27*, 1205–1222. http://dx.doi.org/10.1016/j.chiabu.2003.09.008

- Chen, J. Q., Dunne, M. P., & Han, P. (2004). Child sexual abuse in China: A study of adolescents in four provinces. *Child Abuse & Neglect*, 28, 1171–1186. http://dx.doi.org/10.1016/j.chiabu.2004.07.003
- De Paúl, J., Milner, J. S., & Múgica, P. (1995). Childhood maltreatment, childhood social support, and child abuse potential in a Basque sample. *Child Abuse & Neglect*, 19, 907–920. http://dx.doi.org/10.1016/0145-2134(95)00053-B
- Edwards, K. M., Kearns, M. C., Calhoun, K. S., & Gidycz, C. A. (2009). College women's reactions to sexual assault research participation: Is it distressing? *Psychology of Women Quarterly*, 33, 225–234. http://dx.doi.org/10.1111/j.1471-6402.2009.01492.x
- Fanslow, J. L., Robinson E. M., Crengle, S., & Perese, L. (2007).
  Prevalence of child sexual abuse reported by a cross-sectional sample of New Zealand women. *Child Abuse & Neglect*, 31, 935–945. http://dx.doi.org/10.1016/j.chiabu.2007.02.009
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007a). Polyvictimization: A neglected component in child victimization. Child Abuse & Neglect, 31, 7–26. http://dx.doi.org/10.1016/j.chiabu.2006.06.008
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007b). Revictimization patterns in a national longitudinal sample of children and youth. *Child Abuse & Neglect*, *31*, 479–502. http://dx.doi.org/10.1016/j.chiabu.2006.03.012
- Finkelhor, D., Ormrod, R., Turner, H., & Hamby, S. L. (2005). The victimization of children and youth: A comprehensive, national survey. *Child Maltreatment*, 10, 5–25. http://dx.doi.org/10.1177/1077559504271287
- Gallagher, B., Bradford, M., & Pease, K. (2008). Attempted and completed incidents of stranger-perpetrated child sexual abuse and abduction. *Child Abuse & Neglect*, 32, 517–528. http://dx.doi.org/10.1016/j.chiabu.2008.02.002
- Gannon, T. A., & Rose, M. R. (2008). Female child sexual offenders: Towards integrating theory and practice. *Aggression and Violent Behavior*, 13, 442–461. http://dx.doi.org/10.1016/j.avb.2008.07.002
- Gault-Sherman, M., Silver, E., & Sigfúsdóttir, I. D. (2009). Gender and the associated impairments of childhood sexual abuse: A national study of Icelandic youth. *Social Science & Medicine*, 69, 1515–1522. http://dx.doi.org/10.1016/j.socscimed.2009.08.037
- Kendler, K. S., Kuhn, J. W., & Prescott, C. A. (2004). Childhood sexual abuse, stressful life events and risk for major depression in women. *Psychological Medicine*, 34, 1475–1482. http://dx.doi.org/10.1017/S003329170400265X
- Kenny, M. C., & McEachern, A. G. (2007). Family environment in Hispanic college females with a history of childhood sexual abuse. *Journal of Child Sexual Abuse*, 16, 19–40. http://dx.doi.org/10.1300/J070v16n03 02
- Leahy, T., Pretty, G., & Tenenbaum, G. (2004). Perpetrator methodology as a predictor of traumatic symptomatology in adult survivors of childhood sexual abuse. *Journal of Interpersonal Violence*, 19, 521–540. http://dx.doi.org/10.1177/ 0886260504262963
- López, F., Carpintero, E., Hernández, A., Martín, M. J., & Fuertes, A. (1995). Prevalencia y consecuencias del abuso sexual al menor en España [Prevalence and consequences of sexual

- abuse to minors in Spain]. *Child Abuse & Neglect*, *19*, 1039–1050. http://dx.doi.org/10.1016/0145-2134(95)00066-H
- NSPCC (2009). Calls to ChildLine about sexual abuse. ChildLine case notes. Retrieved from http://www.nspcc.org.uk/Inform/publications/casenotes/clcasenotessexualabuse wdf48189.pd
- Oaksford, K. L., & Frude, N. (2001). The prevalence and nature of child sexual abuse: Evidence from a female university sample in the UK. *Child Abuse Review*, 10, 49–59. http://dx.doi.org/10.1002/car.663
- Oliver, B. E. (2007). Three steps to reducing child molestation by adolescents. *Child Abuse & Neglect*, *31*, 683–689. http://dx.doi.org/10.1016/j.chiabu.2006.09.008
- Pereda, N., & Forns, M. (2007). Prevalencia y características del abuso sexual infantil en estudiantes universitarios españoles [Prevalence and characteristics of child sexual abuse in Spanish university students]. *Child Abuse & Neglect*, 31, 417–426. http://dx.doi.org/10.1016/j.chiabu.2006.08.010
- Pereda, N., Guilera, G., Forns, M., & Gómez-Benito, J. (2009). The prevalence of child sexual abuse in community and student samples: A meta-analysis. *Clinical Psychology Review*, *29*, 328–338. http://dx.doi.org/10.1016/j.cpr.2009.02.007
- Priebe, G., & Svedin, C. G. (2008). Child sexual abuse is largely hidden from the adult society: An epidemiological study of adolescents' disclosures. *Child Abuse & Neglect*, 32, 1095– 1108. http://dx.doi.org/10.1016/j.chiabu.2008.04.001
- Priebe, G., & Svedin, C. G. (2009). Prevalence, characteristics, and associations of sexual abuse with sociodemographics and

- consensual sex in a population-based sample of Swedish adolescents. *Journal of Child Sexual Abuse*, *18*, 19–39. http://dx.doi.org/10.1080/10538710802584635
- Rickert, V. I., Wiemann, C. M., Vaughan, R. D., & White, J. W. (2004). Rates and risk factors for sexual violence among an ethnically diverse sample of adolescents. *Archives of Pediatrics & Adolescent Medicine*, 158, 1132–1139. http://dx.doi.org/10.1001/archpedi.158.12.1132
- Speizer, I. S., Goodwin, M., Whittle, L., Clyde, M., & Rogers, J. (2008). Dimensions of child sexual abuse before age 15 in three Central American countries: Honduras, El Salvador, and Guatemala. *Child Abuse & Neglect*, 32, 455–462. http://dx.doi.org/10.1016/j.chiabu.2007.03.026
- Ulibarri, M. D., Ulloa, E. C., & Camacho, L. (2009). Prevalence of sexually abusive experiences in childhood and adolescence among a community sample of Latinas: A descriptive study. *Journal of Child Sexual Abuse*, 18, 405–421. http://dx.doi.org/ 10.1080/10538710903051088
- Whitaker, D. J., Lea, B., Hanson, R. K., Baker, Ch. K., McMahon, P. M., Ryan, G., ... Rice, D. D. (2008). Risk factors for the perpetration of child sexual abuse: A review and meta-analysis. *Child Abuse & Neglect*, 32, 529–548. http://dx.doi.org/ 10.1016/j.chiabu.2007.08.005

Received September 3, 2010 Revision received May 22, 2011 Accepted June 9, 2011