Correlates of Adolescent Ambiguity in Defining their Experience of Sexual Victimization in Two Large-Scale Croatian Samples

Nicole L. Cohen¹ · Aleksandar Štulhofer²

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Abstract

Adolescents are at increased risk for sexual victimization compared to other age groups and sexual abuse in adolescence is associated with negative health outcomes in adulthood. Sexual experiences are often conceptualized as either consensual or coercive so little is known about adolescents who are unsure whether their negative experience constitutes sexual abuse. The present study used two samples ($n = 2235$, $n = 1253$) of Croatian adolescents to explore the psychosocial characteristics and sexualized behaviors associated with difficulty in defining negative sexual experiences. Multivariate findings suggested that, when compared to non-victimized peers, adolescents who reported sexual victimization were characterized by a higher probability of sexualized behaviors. This was not true when comparing individuals who reported an ambiguous sexual experience to non-victimized peers. However, both groups differed from non-victimized participants in reporting hostile/aggressive family environment. More research on the mechanisms underlying adolescents' difficulty in labeling sexual victimization is needed for sexual abuse education and prevention.

Keywords Adolescents · Sexual abuse · Abuse labeling · Child sexual victimization

Sexual victimization is prevalent among adolescents and findings suggest that adolescents aged 12–17 may be at increased risk for sexual assault compared to all other age groups (Rennison 2003). A review of the literature suggests that 5–15% of adolescent boys and 12–20% of adolescent girls are sexually abused before the age of 17 (Finkelhor et al. 2014). Similar percentages have been reported across ethnicities and cultures (Decker et al. 2015; Jewkes et al. 2001; Ulibarri et al. 2009; Ybarra et al. 2012). Adolescent sexual victimization is of substantial concern because it has been associated with increased substance use, depression, anxiety, disordered eating, and post-traumatic stress disorder (Connors and Morse 1993; Kilpatrick et al. 2003; Silverman et al. 2001).

Furthermore, previous research has demonstrated a nexus between sexual victimization and an increased risk for re-victimization (Smith et al. 2003) and risky sexual and non-sexual behaviors in adulthood (Champion et al. 2004).

Multiple demographic variables, including gender, socioeconomic status, parenting style and hostile family climate have been identified as risk factors for sexual abuse (Breiding et al. 2011). Adolescent women from lower income families have been found at increased risk of sexual abuse (Turner et al. 2006). In addition, research suggests that parenting style plays a crucial role in positive adolescent development and can greatly impact health and well-being (DeVore and Ginsburg 2005). Therefore, it is unsurprising that lower levels of perceived parental attachment and parental monitoring were associated with a higher likelihood of sexual victimization (East and Hokoda 2015; Small and Kerns 1993). Similar results were reported by Leadbeater et al. (2008) who found that higher levels of parental monitoring was a protective factor in the context of dating violence among 149 Canadian female adolescents aged 12–18 years. For adolescents, parental relationship and family environment create a model for relationships outside of the family. When, for example, the family environment is hostile and/or aggressive, adolescents may grow up believing that negative emotions

✉ Nicole L. Cohen
nlcohen24@gmail.com; nlcohen@ku.edu

Aleksandar Štulhofer
astulhof@ffzg.hr

¹ Department of Psychology, University of Kansas, 1415 Jayhawk Blvd., Lawrence, Kansas 66046-7556, USA

² Department Of Sociology, Faculty of Humanities and Social Sciences, University of Zagreb, I. Lucica 3, 10000 Zagreb, Croatia

and aggressive behaviors are common in relationships, thus enhancing their susceptibility to dating abuse (Mumford et al. 2016). Although there is a substantial body of research about the influence of parenting style, and negative family environment on adolescent sexual victimization (Vagi et al. 2013; Vézina and Hébert 2007) less is known about the influence of parenting and family environment on how adolescents define personal experiences of sexual abuse.

Adolescent attitudes and behaviors, embedded in peer networks and social norms disseminated by popular culture, can substantially influence personal acknowledgement of sexual victimization (Bondurant 2001). Pornography often depicts sexual objectification and aggression (Malamuth et al. 2012; Wright et al. 2015), which may normalize these behaviors and increase an individual's susceptibility to rape myths (i.e., false and systematically gender-biased beliefs about rape; Malamuth and Check 1985; Romero-Sánchez et al. 2015). Acceptance of these myths may enhance the likelihood of perpetration of sexual abuse, but also influence an abused person's interpretation of their victimization experience (LeMaire et al. 2016; Wright and Tokunaga 2016). In a literature review, Littleton et al. (2007) found that between 42 and 73% of college women demonstrated unacknowledged rape, which was operationalized as an experience which met legal criteria for rape (i.e., forced sexual penetration without consent of the victim; Department of Justice 2017), but was not defined as such by the person who experienced it. Similar findings were reported by Wilson and Miller (2016) who found that the majority (60.4%) of 5917 women stated that they had not experienced rape when, in fact, their negative sexual experience met the legal definition of rape. Instead, most of these women described the experience as a miscommunication problem. Research suggests that rape scripts (i.e. definitions of rape that an individual holds) differ among unacknowledged and acknowledged rape victims (Kahn et al. 1994).

Research also suggests that individuals who do not acknowledge their experience as sexual abuse may be at a lower risk for post-traumatic stress disorder symptoms and health complaints compared to those who clearly defined their experience as sexual abuse (Conoscenti and McNally 2006; Kahn et al. 2003; Layman et al. 1996). Ambiguity in defining sexual victimization can affect reporting of sexual violence (Hlavka 2014) and create difficulties for prosecution. It may also have negative social consequences such as the normalization of sexual abuse. But some evidence suggests that not defining the experience as sexual abuse may also protect against post-traumatic emotions and cognitions associated with self-blame and lower self-esteem (Arttime and Peterson 2015). One reason for this may be that individuals who perceive the experience as unwanted and nonconsensual are more likely to demonstrate self-blame (Arttime and Peterson 2015). However, some studies suggested that individuals struggling to define

their experience display similar or worse psychological and emotional difficulties compared to individuals who acknowledged their negative experience as sexual abuse (Frazier and Seales 1997; Marx and Soler-Baillo 2005). Given the inconsistent findings it is important to better understand the outcomes associated with ambiguity in labeling sexual abuse, not only in adults, but also in adolescents. This research among adolescents is especially warranted considering adolescence is an intensive and often turbulent developmental period characterized by identity formation and peer pressure (Steinberg and Morris 2001). The conflicting messages about adolescent sexuality (some promoting chastity, others emphasizing sexualized appeal; Epstein and Ward 2008) that young people receive from the media, peers and parents can complicate the topic of sexuality, which may render adolescents more susceptible to ambiguity in defining personal sexual experiences. In a study conducted by Hlavka (2014), an analysis of 100 interviews of girls and adolescent women aged 3 to 17 demonstrated that the majority of participants believed aggression and sexual objectification from boys to be a normal part of life. These beliefs, which often contribute to normalizing sexually abusive behavior, further narrow the criteria for an experience to be clearly labeled as sexual abuse. However, more research is needed to better understand predictors and correlates of ambiguous negative sexual experiences.

Much of the research has conceptualized sexual experiences as either wanted (consensual) or unwanted (Muehlenhard et al. 2016). This dichotomy, however, does not take into account the complex nature of consent (Peterson and Muehlenhard 2007). For example, there are many reasons individuals may agree to unwanted sexual activity, such as enhancing the relationship or avoiding tension, which can further complicate the definition of consent (Conroy et al. 2015). In a study of 194 college students, 80% reported an instance of feeling ambivalent about whether to engage in sexual activity, primarily oral sex or sexual intercourse. Of these participants, 36% eventually agreed to sexual activity, stating reasons such as becoming sexually aroused as sexual activity progressed and/or wanting to provide pleasure to their partner (O'Sullivan and Gaines 1998). A lack of adequate representation of individuals who have, in fact, experienced sexual abuse but do not define it as such is problematic for reporting sexual abuse prevalence rates, as the statistics reported do not include these individuals. An additional difficulty, particularly in the context of research on adolescents, is the fact that the few studies that did examine ambiguity primarily focused on the experience of rape (i.e., forced sexual penetration without consent of the victim; Department of Justice 2017). Considering that rape is only one form of sexual abuse, although usually the most violent and potentially emotionally damaging, other forms of sexual abuse such as any unwanted and nonconsensual sexual act (i.e., that is imposed through the use of deception, coercion, fear, or force)

perpetrated by one or more peers or older individuals are commonly reported among adolescents (Young et al. 2009), a broader assessment of ambiguity over sexual abuse is needed.

Study Aims

To better understand the phenomenon of ambiguity in defining an experience of sexual abuse among adolescents, the present study aimed to examine the psychosocial and family characteristics of adolescents who were unsure how to define their negative sexual experience(s). A second objective of the present study was to explore whether different psychosocial and family characteristics were related to ambiguous negative sexual experience(s) before and after the age of 14.¹ Given the vast developmental differences between children and adolescents and the substantial mental and physical health risks associated with childhood sexual abuse (CSA; Coles et al. 2015; Mullen et al. 1993), the second aim is intended to provide a more thorough examination of possible differences in vulnerability to and the outcomes of childhood vs. adolescent sexual victimization. Taking into account the limited and contradictory nature of the literature (Littleton et al. 2007) and the fact that there is no literature on this topic among Croatian adolescents, the present study was considered exploratory, so no hypotheses were proposed.

Through enhancing knowledge of the difficulties that adolescents may face in discerning sexual abuse and the outcomes associated with this ambiguity, the present study has implications for clinicians, as well as sexuality educators. Comprehensive, evidence-based sexuality education in schools has been shown to increase sexual abuse awareness and reduce the risk of sexual victimization (SIECUS 1996; World Health Organization 2010).

Method

Participants

The present study used data collected from the PROBIOPS research project (for details, see Tomić et al. 2017 and Matković et al. 2018), an ongoing longitudinal assessment of adolescent sexualized material use that was launched in 2015. Participants were high school sophomores from two large Croatian urban centers, Zagreb and Rijeka, who completed the initial survey, which was carried out in April and May 2015 in Zagreb and from December 2015 to January 2016 in

Rijeka. In total, 2235 adolescents ($M_{age} = 16.1$, $SD = .46$; 58.1% women) took part in the Zagreb arm of the study and 1253 ($M_{age} = 15.2$, $SD = .52$; 58.5% women) in Rijeka.

Most participants lived with both parents (77%) and attended 3- or 4-year vocational schools (70%). The rest were gymnasium students. Taking into account that vocational schools prepare students for entering the labor market after graduation, while gymnasium students usually continue their education by enrolling in a college or university program, the type of secondary school is a proxy for students' family socioeconomic status (Matković 2011).

Procedure

Participants in the Zagreb sample were recruited from 69 of 90 high schools in the capital city and surrounding county. For logistic reasons, small private schools, specialized art schools, and several smaller county schools were omitted and 10 of the contacted schools refused to participate. Leaflets with information about the study (for students, as well as their parents), instruction for online registration and a unique personal code, were distributed in classrooms. Prospective participants were asked to register and complete an online survey via the study website. Vouchers of \$8 and \$16 (in local currency equivalent) were awarded to 100 students via lottery as tokens of appreciation.

Due to a substantial attrition observed in the second wave of the Zagreb online panel, classroom-based surveying was chosen for the Rijeka panel. Recruitment in Rijeka included 14 (out of the total of 22) high schools with ≥ 50 s-grade (sophomore) students. Before the initial survey, parents were sent a letter with information about the study. Following informed consent procedure, students completed a paper and pencil questionnaire in the classroom. Portable 50 × 50 cm screens were placed between participants to enhance confidentiality. Since the questionnaire was completed during class time, no incentives were provided to participants in Rijeka.

According to the national guidelines for ethical research in minors, which stipulate that adolescents aged ≥ 14 years can give informed consent, prospective participants' parents were sent a letter informing them about the focus, procedures and goals of the PROBIOPS study prior to the initial survey. Informed consent was asked of all participants at each study wave. The questionnaires used in both samples contained contact information of a national organization that offers support and counseling for children and young people. All procedures were approved by the Ethical Research Committee of the Faculty of Humanities and Social Sciences, University of Zagreb.

¹ Although the age of legal consent in Croatia is 15, here we followed the usual operationalization of preadolescent (0–14 years of age) abuse (cf. Murray et al. 2014).

Measures

Sexual Abuse The history of sexual abuse was assessed with the following question: “Has anyone kissed, touched or did something sexual to you against your will?” Four possible answers were listed: (1) no, (2) yes, (3) don’t know, not sure and (4) don’t want to answer. The indicator was first used in the 2005 national probability study of HIV risks among emerging Croatian adults (Landripet et al. 2011). Responses in the final category were omitted from analyses due to their small number (< 2% in either study arm). The timeframe for this item in the Rijeka questionnaire was lifetime (“Has anyone ever ...”). In the Zagreb questionnaire, the item was included twice—first asking about the experience of sexual abuse *before* and then *after* the age of 14.

Family Environment Negative family environment—that is, the frequency of hostile and/or aggressive behaviors among family members—was assessed by three items that asked about fierce fights, aggressive episodes and family members systematically ignoring each other in the past 12 months. A 5-point scale ranging from 1 (never) to 5 (often) was used to anchor answers. The three items were summed into a composite measure with an acceptable internal consistency (Cronbach’s $\alpha_{\text{Rijeka}} = .72$ and $\alpha_{\text{Zagreb}} = .71$).

Parenting Style Parental engagement was a dichotomous variable, with 0 indicating a lower and 1 a higher parental support and monitoring, that was obtained by clustering 12 parental styles and monitoring items. Eight of these items came from two subscales of the Parental Behavior Questionnaire (PBQ32)—a larger measure that was developed and validated in Croatian children and early adolescents (Keresteš et al. 2012). The two subscales measured parental warmth or emotional support (e.g., “My parents show me love”) and support of autonomy (e.g., “My parents encourage me to think independently”). The final four items, which were developed and validated in the 2005 national study of HIV-related risks among emerging adults (Landripet et al. 2011), assessed parental control (e.g., “My parents always know where I am”). Responses to all 12 items were recorded on a Likert-like scale ranging from 1 (never or almost never) to 5 (always or almost always). Two-step cluster analysis, which has been recommended for large-scale samples (Norusis 2012), produced a two-cluster solution (a higher and a lower parental engagement) in both male and female subsamples. Log-likelihood was selected as the (probability-based) distance measure for clustering, with no pre-set treatment of outliers. The smaller cluster (roughly representing a third of the sample) indicated lower and the larger cluster higher levels of parental engagement. In both Zagreb and Rijeka samples the silhouette measure of cluster solution fit (Kaufman and Rousseeuw 1990), a measure based on the examination of cluster cohesion (or

tightness) and separation, suggested acceptable fit of the two-cluster solution.

Mental Health To address mental health and psychological well-being, we used composite indicators of depression and anxiety, and body image. Both indicators were included only in the Rijeka questionnaire. The Patient Health Questionnaire for Depression and Anxiety (PHQ-4; Kroenke et al. 2009), a brief 4-item screening scale, was used to assess symptoms of depression (2 items) and anxiety (2 items) experienced in the 2 weeks preceding the survey. The symptoms’ frequency was measured on a 4-point scale ranging from 1 (not at all) to 4 (nearly every day). Body image was assessed with the 4-item Body Esteem Scale for Adolescents and Adults Appearance subscale (Mendelson et al. 2001). Answers were recorded on a Likert-like scale ranging from 1 (completely disagree) to 5 (completely agree), with larger scores denoting higher satisfaction with one’s physical appearance. Both indicators had high internal consistency (Cronbach’s $\alpha = 0.85$ and $.83$, respectively).

Sexual Debut In Rijeka, sexual activity was indicated by reporting sexual intercourse. In Zagreb, a different approach was used. Participants were asked about seven different experiences (ranging from French kissing to anal intercourse) including sexual intercourse. Answers (0 = no and 1 = yes) were summed into a composite ordinal variable characterized by high internal consistency (KR-20 = $.87$), which was then used as a composite indicator of sexual activity.

Sexting Sexting was indicated by an additive scale composed of three items asking about the number of times in the past 6 months that the participant has sent a sexual message, sexy photograph or sexy video clip of oneself to someone. A 5-point scale, ranging from 1 (not once) to 5 (6 or more times), was used to anchor responses. The summed measure had acceptable internal consistency in both samples (Cronbach’s $\alpha_{\text{Rijeka}} = .65$ and $\alpha_{\text{Zagreb}} = .70$).

Sexually Explicit Material (SEM) Frequency of SEM use in the past 6 months was measured on a scale ranging from 1 (not once) to 8 (several times a day). In both questionnaires, pornography was defined as *any material which openly (i.e., not censored) depicts sexual activity. Material which shows naked bodies but not sexual intercourse or other sexual activity does not belong to pornography as here defined.*

Analytical Strategy

Patterns of differences between the victimization and the ambiguous experience groups, and the rest of the sample (not victimized as reference category) were explored using multinomial regression analysis. Considering that the small size of

the ambiguous experience group ($n = 105$, 8% of the sample) restricted the number of independent variables in the regression equation (the robustness of logistic regression estimates is affected by the size of the smaller group), three separate models were built—each including up to four (meaningfully grouped) independent variables, including gender as a control. In addition, interactions between gender and independent variables were tested in all models to address possible moderating effects of gender. The interaction terms failed to reach significance. The first regression model explored differences in family structure and socialization, the second focused on psychological well-being, while the third included sexual and/or sexualized behaviors. To address possible cross-domain influences, independent variables that were found significantly associated with the outcome (group membership) in the three separate analyses were joined in the final multinomial regression model.

Associations with lifetime sexual abuse in Rijeka sample were assessed first, followed by explorations of sexual abuse experiences before and after the age of 14 in the Zagreb sample. All analyses were carried out using IBM SPSS v24.

Results

Of the 1253 participants in the Rijeka sample, 160 (13%) reported sexual abuse and 105 (8%) reported that they were unsure how to define their sexual abuse experience. Compared to male adolescents, the proportion of adolescent women was higher in both groups (69%, $n = 110$ and 67% $n = 70$, respectively) and gender was significantly associated with responses to the question about sexual abuse ($\chi^2 = 13.49$, $p < .01$).

The majority of participants in the Zagreb sample (93%, $n = 2079$) reported no childhood sexual abuse (CSA). Only 4 % of students ($n = 82$; 71% females) reported CSA, while 3 % ($n = 76$; 64% females) stated that they were unsure how to define their experience. When asked about sexual abuse after

the age of 14, 163 students (7%) reported victimization and 60 (3%) reported ambiguity about what happened. In both groups, adolescent women constituted a majority (67% $n = 109$ and 58% $n = 35$, respectively). Overall, gender was significantly related to participant responses about CSA ($\chi^2 = 7.22$, $p < .05$). In the case of sexual abuse after the age of 14, the association approached significance ($\chi^2 = 5.74$, $p < .06$).

Correlates of Acknowledged and Unacknowledged Lifetime Sexual Abuse

As shown in Table 1, participants who reported lifetime sexual abuse—compared to those who had never been sexually abused—had a lower probability of being male ($b = -1.39$, $p < .01$) and a higher probability of living in a hostile/aggressive family environment ($b = .14$, $p < .05$). The same two characteristics differentiated the individuals who were ambiguous about their negative experience from those who were never sexually abused ($b = -.81$, $p < .05$ and $b = .14$, $p < .05$, respectively). Sexual and sexualized behaviors distinguished the no-abuse group only from the abused group. Compared to the former, adolescents who reported sexual abuse were characterized by a higher probability of being sexually active ($b = .56$, $p < .05$), frequently using pornography ($b = .21$, $p < .01$) and engaging in sexting ($b = .15$, $p < .01$).

Correlates of Acknowledged and Unacknowledged CSA

The analysis showed a lower probability of reporting CSA among male compared to female adolescents ($b = -.83$, $p < .01$). In addition, compared to the no CSA group, individuals who had experienced CSA had a higher probability of being sexually active ($b = .24$, $p < .01$), and engaging in sexting ($b = .07$, $p < .05$). Ambiguous individuals were distinguished from their peers who reported no CSA by a higher

Table 1 Family environment, psychosocial well-being and sexual/sexualized behaviors as correlates of adolescent sexual victimization (non-victimized group = reference category)

	Sexually abused group ($n = 160$)		Ambivalent group ($n = 105$)	
	b (S.E.)	95% CI ^a	b (S.E.)	95% CI ^a
Male gender	-1.39** (.33)	-2.02--.85	-.81* (.36)	-1.55--.13
Hostile/aggressive family climate	.14* (.06)	.03--.25	.14* (.06)	.01--.25
Lower parental involvement	-.20 (.26)	-.66--.34	-.01 (.28)	-.63--.50
Pornography use	.21** (.07)	.08--.36	.06 (.07)	.07--.21
Sexting	.15** (.04)	.07--.24	.05 (.05)	-.06--.14
Sexual intercourse	.56* (.24)	.11--1.04	.22 (.28)	-.35--.72
Depression and anxiety symptoms	.04 (.03)	-.02--.10	.04 (.03)	-.02--.11

^a Bootstrapped 95% confidence interval; * $p < .05$, ** $p < .01$

probability of reporting hostile/aggressive family environment ($b = .13, p < .05$).

Correlates of Acknowledged and Unacknowledged Sexual Abuse after the Age of 14

Individuals who experienced sexual abuse after the age of 14 had a lower probability of being male ($b = -.65, p < .01$) than those who reported no abuse. In addition, both parental engagement and hostile/aggressive family environment differentiated between the two groups ($b = -.37, p < .05$ and $b = .12, p < .01$, respectively). In addition, adolescents who reported sexual abuse were characterized by a higher probability of being sexually active ($b = .20, p < .01$) and engaging in sexting ($b = .10, p < .01$). No statistically significant differences between the ambiguous and the no abuse groups were observed (Table 2).

Discussion

Using two large-scale samples of urban Croatian adolescents, the present study sought to explore sexualized behaviors, psychosocial outcomes and family characteristics of Croatian adolescents who were unsure whether their negative experience(s) constituted sexual abuse. According to our findings, adolescents who clearly defined their experience as sexual abuse were more likely to engage in sexualized behaviors (e.g. pornography use, sexting and sexual intercourse) than those who had never been sexually abused. Importantly, this was not the case with adolescents who reported ambiguity over what happened to them. These findings were corroborated by

analyses carried out in another sample of adolescents that distinguished between sexual abuse that happened before and after the age of 14.

Previous literature has suggested that adolescents who have experienced CSA and adolescent sexual abuse often report more sexual partners and engage in more risky sexualized behaviors (e.g. lack of condom use) than their peers (Bramsen et al. 2011; Howard et al. 2007). Considering that, in this study, individuals who reported an ambiguous experience did not display more sexualized behaviors than their peers who reported no victimization, the uncertainty may be a protective factor against risky behaviors often associated with sexual abuse. However, a dose-response explanation would also be plausible. It could be that the uncertain individuals experienced milder forms of sexual abuse compared to individuals who clearly defined their experience.

The fact that adolescents who reported ambiguity were not more (or less) likely to watch pornography than their non-victimized peers is important as it suggests that the difficulty with labeling one's negative experience may be unrelated to sexual scripts promoted by SEM (Wright 2016). This is particularly relevant because it suggests a possible difference between adolescents and college students as some studies have shown that college students who watched pornography were more likely to support rape myths (Malamuth & Check 1985), which in turn may affect the defining of sexual abuse (Peterson & Muehlenhard 2007).

Although female adolescents reported a higher frequency of sexual abuse and ambiguity than their male peers, our findings show that sexual victimization and ambiguity are also present in male adolescents. In a culture characterized by the sexual double standard (male sexual activity and assertiveness

Table 2 Family environment and sexual/sexualized behaviors as correlates of sexual victimization before and after the age of 14 (non-victimized group = reference category)

	Sexually abused group		Ambivalent group	
	Before 14 yrs. ($n = 82$) b/S.E. (95% CI ^a)	After 14 yrs. ($n = 163$) b/S.E. (95% CI ^a)	Before 14 yrs. ($n = 76$) b/S.E. (95% CI ^a)	After 14 yrs. ($n = 60$) b/S.E. (95% CI ^a)
Male gender	-.83**/ .25 (-1.33--.40)	-.65**/ .20 (-1.02--.30)	-.41/ .25 (-.93--.07)	-.15/ .29 (-.73--.40)
Hostile/aggressive family climate	.09/ .06 (-.02--.19)	.12**/ .04 (.04--.20)	.13*/ .06 (.02--.24)	.10/ .06 (-.02--.21)
Lower parental involvement	-.028/ .25 (-.78--.23)	-.37*/ .19 (-.75--.01)	-.44/ .28 (-.96--.09)	-.30/ .32 (-.93--.36)
Sexting	.07*/ .04 (-.01--.14)	.10**/ .03 (.04--.17)	.04/ .04 (-.05--.12)	.04/ .05 (-.08--.13)
Sexual intercourse	.24**/ .06 (.13--.36)	.20**/ .04 (.11--.28)	.11/ .06 (-.01--.21)	.12/ .06 (-.01--.23)

^a Bootstrapped 95% confidence interval; * $p < .05$, ** $p < .01$

is promoted and female sexual expression restricted; Crawford and Popp 2003; Lyons et al. 2011), male adolescents may feel pressured to engage in sexual behavior—even when unwanted (Clasen and Brown 1985). Given the stereotypes associated with masculinity (Mahalik et al. 2003), male adolescents often seem to believe that sexual abuse is something that can only happen to women (Easton 2014). This belief is likely strengthened by stronger societal blaming of male compared to female sexual abuse survivors (Davies and Rogers 2006)—which can increase shame in men who have experienced sexual abuse (Spataro et al. 2001)—as well as by a much higher visibility of female sexual abuse in the popular media. Interestingly, the non-significant interactions between gender and the correlates of adolescent victimization and ambiguity suggest that the composition of vulnerability to sexual abuse may be similar among female and male adolescents.

This study's findings demonstrated that adolescents who either reported lifetime sexual abuse or ambiguity in defining a previous negative experience were more likely to live in a hostile and/or aggressive family environment than other students, which is in line with the existing evidence (Vézina and Hébert 2007). Considering that adolescents often model behaviors witnessed in their home (Mihalic and Elliott 1997), some families may contribute to the difficulties in defining sexual abuse by normalizing aggressive behavior between intimate partners (parents). In this context, it may seem surprising that negative family environment was significantly associated with ambiguity in defining negative childhood experience(s) as sexual abuse, but not with clearly defined CSA. Taking into account that effect sizes were comparable, the lack of significance in the CSA group (which was half the size of the uncertain group) may be due to a low statistical power.

The importance of family environment and parenting for adolescent development was also observed in the case of sexual victimization after the age of 14. Although the cross-sectional design used in this study precludes any conclusion about the direction of the observed relationships, there is a strong suggestion that parental support, emotional engagement and monitoring have a protective role in the context of adolescent sexual victimization (cf. East and Hokoda 2015).

Study Limitations

Although the present study has several strengths, such as the use of two independent large-scale samples, a few limitations need to be considered. First, the cross-sectional nature of the study precludes any causal inferences. The direction of the observed associations remains unknown. For example, sexualized behaviors can increase one's vulnerability to sexual victimization, but may also be its consequence—related to coping strategies (Merrill et al. 2003). Second, small numbers of adolescents in the sexual abuse and uncertain groups

affected statistical power and, hence, the robustness of our findings. It should be noted, however, that the relative size of both groups is in line with previous research (Finkelhor et al. 2014). Third, we used a broad indicator of sexual abuse history that allowed for very heterogeneous experiences of sexual abuse (i.e. different levels of severity). We decided to sacrifice precision for the ability to assess a wide range of abusive sexual behaviors, as rape appears to be substantially less prevalent among adolescents compared to other types of sexual abuse and coercion (Beres 2007; Vagi et al. 2013). Finally, the present study did not collect information about perpetrators of sexual abuse. This was a deliberate omission based on the assessment of risks associated with asking adolescents detailed questions about the experience of sexual abuse in non-clinical study (with extremely limited resources for dealing with possible adverse outcomes).

Conclusion

According to this study's findings, ambiguity in defining sexual abuse is a relevant phenomenon in adolescence. Moreover, potential outcomes associated with this ambiguity may differ from the correlates of (clearly defined) sexual abuse. Considering the complexities often associated with defining sexual abuse (Peterson and Muehlenhard 2007), and that adolescents are at increased risk for sexual abuse compared to adult populations (Rennison 2003), prospective studies examining the outcomes associated with adolescent ambiguity in defining negative sexual experiences are needed. Future research should also explore the mechanisms underlying personal labeling of sexual abuse (for example, disinclination to self-disclosure in adolescents with negative family experiences) to inform sexual abuse prevention and sexual health education. These results are relevant not only for individuals who have experienced sexual abuse, but also for perpetrators who may be unaware that their actions constitute sexual abuse. By enhancing the understanding of what constitutes sexual abuse and the awareness of its possible consequences, comprehensive sexuality education programs can play an important role in reducing the vulnerability to sexual aggression and violence (European Expert Group on Sexuality Education 2016).

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Compliance with Ethical Standards

Disclosure of Interest All authors report no financial or personal relationships that may bias this work.

Ethical Standards and Informed Consent All procedures of the present study were in accordance with the ethical standards of the responsible

committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all participants who were included in the study.

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