Arch Sex Behav (2016) 45:1101–1115
DOI 10.1007/s10508-014-0451-7

ORIGINAL PAPER

Vulnerability to Sexual Victimization in Female and Male College Students in Brazil: Cross-Sectional and Prospective Evidence

Lylla Cysne Frota D'Abreu · Barbara Krahé

Received: 25 April 2014 / Revised: 14 November 2014 / Accepted: 24 November 2014 / Published online: 21 March 2015

Abstract Using both cross-sectional and prospective analyses, this study examined vulnerability factors for sexual victimization in 541 female and male Brazilian college students, of whom a subgroup of 250 took part in two measurements 6 months apart. Risk factors for sexual victimization (alcohol consumption, casual sex, and ambiguous communication) in participants' cognitive scripts for consensual sex were linked to sexual victimization via their translation into risky sexual behavior. Pornography use was indirectly linked to sexual victimization through its influence on risky sexual scripts and sexual behavior. Child sexual abuse predicted sexual victimization in the cross-sectional analysis, and victimization since age 14 predicted revictimization in the six months covered by the prospective period. Few gender differences were found. This study is the first prospective investigation of vulnerability factors for sexual victimization in Brazil, and similarities to evidence from North America are discussed.

Keywords Sexual victimization · Brazil · Sexual scripts · Pornography use · Childhood sexual abuse · Risky sexual behavior

L. C. F. D'Abreu · B. Krahé (✉)
Department of Psychology, University of Potsdam,
Karl-Liebknecht-Str. 24-25, 14476 Potsdam, Germany
e-mail: krahe@uni-potsdam.de

Present Address:
L. C. F. D'Abreu
Institute for Population and Social Research, Mahidol University,
Bangkok, Thailand

Introduction

The problem of sexual victimization among university students has been highlighted by studies from different countries around the world. Despite the alarming rates of sexual aggression in Latin America and the recognition of sexual victimization as a serious public health problem (Contreras, Bott, Guedes, & Dartnall, 2010), systematic research on the problem of sexual aggression is only beginning to emerge in this region. The current study was conducted to contribute to this emerging research by examining the role of cognitive scripts for consensual sexual interactions in the context of biographical experiences of childhood abuse to understand their role as vulnerability factors for sexual victimization among female and male college students in Brazil. For the purposes of this analysis, sexual aggression is defined as *behavior carried out with the intent or result of making another person engage in sexual activity despite his or her unwillingness to do so* and can be analyzed from the perpetrator's and/or the victim's perspective (Krahé, Tomaszewska, Kuyper, & Vanwesenbeeck, 2014).

Past research on sexual victimization has focused primarily on women's sexual victimization by men, and indeed, sexual aggression is a gendered phenomenon. Crime statistics across the world reveal that the vast majority of perpetrators of rape and sexual assault are men. Victimization surveys have shown that sexual victimization is more prevalent among women than among men (see Krahé, 2013, for a summary) and mostly committed by male perpetrators (e.g., Breiding et al., 2014). For men, the rate of same-sex victimization is higher than for women, but awareness of male sexual coercion by women has also been growing (Breiding et al., 2014).

Of the limited evidence documenting the prevalence of sexual victimization in Brazil, several studies have provided prevalence rates of sexual victimization among young men and women. In a study that used a single screening question, 17 % of

women and 11 % of men aged between 18 and 24 years indicated that they had been forced to have sex when they did not want to (de Moraes, Cabral, & Heilborn, 2006). Two multinational studies, which used the Sexual Coercion subscale of the Revised Conflict Tactics Scales (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) as a multiple item measure of sexual victimization, yielded data for Brazil. In the first study, Hines (2007) obtained reports of sexual victimization from a small convenience sample of 155 female and 76 male students in São Paulo. Hines found that 39.5 % of female and 29.7 % of male students reported having been sexually victimized in the previous year, with 1.3 % of women and 1.4 % of men reporting victimization through the use of physical force. In the second study, Chan, Straus, Brownridge, Tiwari, and Leung (2008) found victimization rates in dating relationships of 38.5 % for female and 34.5 % for male students in the previous year. Using a modified version of the CTS2, another study found that 9.4 % of female students reported having experienced some form of sexual violence after starting college (Zotareli, Faúndes, Osis, Duarte, & Sousa, 2012). The study did not obtain data on men's sexual victimization. Because the gender of the perpetrator was not specified in these studies, the rates include both opposite-sex and same-sex victimization experiences.

Studies conducted in other Latin American countries have also shown substantial rates of sexual victimization among young people. In a study from Peru, 46 % of women and 20 % of men aged 16–30 reported non-consensual sex by an opposite-sex perpetrator at least once in their lifetime (Cáceres, 2005). In Chile, two studies using the Sexual Experiences Survey (SES) revealed that 31.0 % of female (Lehrer, Lehrer, Lehrer, & Oyarzun, 2007) and 20.4 % of male college students (Lehrer, Lehrer, & Koss, 2013) reported some form of unwanted sexual experience since the age of 14. In the male sample, 68.0 % of the victims reported that their perpetrators had been "women only," 11.5 % "women and men," and 20.5 % "men only." No information about the sex of the perpetrator was provided for the female sample.

The wide variability in the victimization rates obtained in these studies may be attributed at least partly to differences in methodology. The CTS2 adopts a broader definition of sexual coercion than the SES, including behavior such as insistence on sex without a condom, which may explain the higher rates provided by Hines (2007) and Chan et al. (2008). In contrast, the vagueness of terms such as "forced" or "humiliating sexual act" by Zotareli et al. (2012) and the use of a single screening question by de Moraes et al. (2006) may have been less sensitive to the detection of victimization, providing lower rates.

Regarding the identification of correlates of an increased vulnerability to sexual victimization, studies conducted in Brazil have found that low socioeconomic and educational status (e.g., de Moraes et al., 2006), black color of skin, being separated or divorced, having had STDs (Schraiber, D'Oliveira, & Franca Junior, 2008), and a lack of religious commitment (D'Abreu, Krahé, & Bazon, 2013) were associated with a higher probability of reporting sexual victimization among both women and men. In addition, the experience of violence in the family (e.g., Marinheiro, Vieira, & de Souza, 2006), early sexual debut, and a higher number of sexual partners (Schraiber et al., 2008) were associated with a higher probability of sexual victimization among women only.

However, Brazilian research has a number of limitations. All studies are cross-sectional, most focus on socio demographic risk markers, and they provide little insight into the etiology of sexual victimization among college students in particular. The emphasis placed on low socioeconomic status as a risk factor may divert attention away from the fact that sexual victimization is also widely prevalent among the socially privileged group of university students, as shown in research from the United States (Fisher, Daigle, & Cullen, 2010). The college years offer numerous opportunities for heavy drinking (Andrade, Duarte & Oliveira, 2010), meeting new partners, and engaging in casual sex (Caetano et al., 2010). Allied to these factors, the increased consumption of pornography in this age group (Bruzzell, 2005) and the typical impunity for sexual offenders in Latin America (Contreras et al., 2010) create a social context in which sexual victimization may be more likely. Beyond patterns of sexual behavior, cognitive representations of sexuality (e.g., Drieschner & Lange, 1999) and biographical experiences of sexual abuse in childhood (e.g., Roodman & Clum, 2001) contribute to the risk of sexual victimization.

To date, evidence on factors that increase the vulnerability to sexual victimization among college students has been provided primarily by studies from North America and Western Europe, and it is as yet unclear whether the same vulnerabilities can be found in other parts of the world. Therefore, the aim of the present study was to investigate the interplay between cognitive representations of consensual sexuality in the form of sexual scripts and sexual behavior as predictors of sexual victimization, both cross-sectionally and prospectively. Pornography use, defined as the frequency of viewing sexually explicit media, was considered as an input variable into sexual scripts to demonstrate its impact on sexual victimization through shaping cognitive representations of consensual sex. In addition, the experience of childhood sexual abuse was included because it is assumed to be another vulnerability factor that affects sexual victimization through its impact on sexual behavior. This link has been established in numerous studies from the U.S., but there is currently no evidence showing a similar link for Brazil.

Understanding Vulnerability to Sexual Victimization: The Key Role of Sexual Scripts

When speaking about vulnerability factors for sexual victimization, it is important to stress that this line of research seeks to identify factors associated with an increased likelihood that a person may experience sexual victimization. It does not imply that victims are to blame, as the sole responsibility for sexual aggression lies with the perpetrator. Research that has examined

vulnerability factors for sexual aggression has pointed to biographical experiences, such as childhood abuse, relatively stable individual difference variables, such as sexual scripts, and behavior patterns that are enacted in specific situations, such as alcohol use and ambiguous communication strategies (see Krahé, 2013, for a review).

The current study focuses on the role of sexual scripts in terms of cognitive representations of consensual sexual interactions as its theoretical frame of reference. Sexual scripts play an important role in guiding sexual behavior as they contain cognitive representation of prototypical sequences of events and behaviors in sexual interactions (Simon & Gagnon, 1986). Sexual scripts have a cultural dimension in that they are informed by consensually shared cultural norms and traditions about sexuality, and an interpersonal dimension in that they provide the basis for communications about sexuality. The present analysis focuses on a third dimension, namely the role of scripts as reflecting an individual's generalized cognitive schema about the characteristic features, events, and actions of their own sexual interactions as well as their normative evaluation (Krahé, 2000a). Past research has shown that these individual scripts that generalize across situations, but not persons, are more closely linked to sexual behavior than general scripts that reflect an individual's knowledge about the predominant cultural scripts (Krahé, Bieneck, & Scheinberger-Olwig, 2007a).

Our central proposition is that a person's script for consensual sexual interactions (i.e., the cognitive schema of the typical elements that characterize a situation in which the person has consensual sex) holds a clue to understanding vulnerabilities for sexual victimization. When individual scripts for consensual sexual interactions contain, as integral features, behaviors that have been linked to an increased vulnerability to experiencing sexual aggression, the person will be more likely to enact these risk factors in their sexual interactions, which in turn will increase the odds of being victimized. In short, if a person's consensual sexual script contains risky behaviors (with regard to sexual victimization), we propose that the likelihood of sexual victimization will be heightened. We further propose that pornography, which portrays many behavioral risk factors for sexual victimization, such as noncommittal sex with many partners, may inform sexual scripts and thereby indirectly affect the odds of sexual victimization via its impact on sexual scripts and sexual behavior. These cognitive and behavioral risk factors are considered in the context of the biographical risk factor of childhood sexual abuse.

Like any cognitive script (see Huesmann, 1998, for a general discussion), sexual scripts have both descriptive and normative components. The descriptive component reflects the likelihood that a particular feature is included in the situational script, such as drinking alcohol in a sexual encounter. The normative component reflects the person's belief that the behavior in question is acceptable and appropriate, for example that drinking alcohol makes a sexual encounter more enjoyable. The more firmly a particular feature is incorporated in the script and the more normatively accepted it is, the greater the probability that the person will show the respective behavior (e.g., drinking alcohol) in an actual sexual interaction. Although there is no perfect correspondence between sexual scripts as cognitive representations and actual sexual behavior, the stronger (i.e., more stereotyped) the script, the greater the chances that it will be translated into behavior (Abelson, 1981). In a first sexual encounter with a new partner, for example, people are likely to rely on their scripts as generalized social knowledge structures to guide their behavior because they do not have any experience-based information about interacting with the new partner (Rose & Frieze, 1993). In the present study, we focus on the presence of three behavioral risk factors in participants' sexual scripts that have been frequently linked to sexual victimization: (1) engaging in casual sex, (2) drinking alcohol in the context of sexual interactions, and (3) communicating sexual intentions in an ambiguous way. We propose that the extent to which these three risk behaviors are included in students' cognitive scripts of a first consensual sexual encounter with a new partner will predict their prominence in actual sexual behavior, which in turn will predict an increased likelihood of sexual victimization among both men and women.

Engaging in Casual Sex

It has been widely established in the literature that engaging in sexual contacts with partners whom one does not know well increases the vulnerability to sexual victimization (e.g., Krahé, Bieneck, & Scheinberger-Olwig, 2007b). A study by Flack et al. (2007) found that 78 % of unwanted sexual experiences took place in casual sexual encounters. There are several explanations for the link between casual sex and sexual victimization. First, it is a matter of probability: the higher the number of partners and the more frequent the sexual encounters, the higher are the odds of meeting a sexually aggressive partner, precipitating the experience of sexual victimization. Second, in brief and noncommittal relationships, there is less time to develop effective communication patterns for negotiating sexual interests, increasing the probability of misunderstandings that may lead to sexual aggression (Dines, 2010). Because casual relationships have been described as being initiated equally by men and women (Paul & Hayes, 2002), which breaks down traditional sexual scripts, engaging in casual sexual encounters may increase the likelihood of sexual victimization for both sexes compared to committed sexual relationships.

Drinking Alcohol in Sexual Encounters

Sexual victimization often co-occurs with alcohol consumption (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2004). Alcohol is frequently used as a means of sexual conquest (Lindgren, Schacht, Pantoalone, Blayney, & George, 2009) and is strongly associated with casual sex (Flack et al., 2007; Goldstein, Barnett,

Pedalow, & Murphy, 2007). The use of alcohol in sexual interactions increases the vulnerability to sexual victimization through different pathways (Abbey et al., 2004). As a risk factor for perpetration, alcohol disinhibits aggressive behavior and contributes to the misperception of the partner's sexual intents. As a vulnerability factor for sexual victimization, alcohol use may distort risk perception and decrease the ability to physically resist unwanted sexual advances.

Ambiguous Communication of the Willingness to Engage in Sexual Interactions

The third group of risk factors refers to the ambiguous communication of the willingness or unwillingness to engage in sexual activity with another person. The ambiguity arises from a contrast between the person's sexual intentions and the message he or she communicates to the other person, which may take the form of rejecting sexual advances despite the willingness to accept them and the form of complying with sexual demands despite not wanting to engage in sex with the other person. Although ambiguous communication of sexual readiness is frequently used by men and women (O'Sullivan & Allgeier, 1994, 1998), it may lead to misunderstandings in sexual interactions (Lindgren et al., 2009) and provide justifications for ignoring or overriding the partner's signals of nonconsent. A prospective study has shown that the more firmly these communication patterns were rooted in young adults' scripts for consensual sex, the higher the probability of sexual victimization (Krahé et al., 2007b).

Individuals for whom sex with casual partners, alcohol use, and ambiguous sexual communication are integral elements of their cognitive representations of consensual sexual encounters are assumed to be more likely to show patterns of sexual behavior that reflect these scripted representations. The resulting risky sexual behavior patterns, in turn, are likely to increase their vulnerability to sexual victimization.

Pornography Use and Sexual Scripts

In addition to conceptualizing the influence of sexual scripts on sexual behavior and sexual victimization, it is critical to understand how the contents of scripts are shaped. Exposure to pornographic media has been identified as a source of influence on the development of sexual scripts, conveying norms and "values" in sexual interactions (Alksnis, Desmarais, & Wood, 1996). The pervasive availability of pornography has normalized its use among young people in different countries (e.g., Krahé, 2011; Lo & Wei, 2005; Peter & Valkenburg, 2006). Pornography typically shows no pre- and post-coital intimacy and often presents one sex scene after another without any concern to build a story line (Dines, 2010). Pornography erotizes and legitimizes the use of violence and ambiguous communication in sexual interactions (Bridges, Wosnitzer, Scharrer, Sun, & Liberman, 2010) as well as the consumption of alcohol in the context of having sex (World Health Organization, 2005), incorporating factors associated with the risk of sexual victimization.

Until now, studies have concentrated on the impact of pornography consumption on men's sexual aggression against women, because pornography is seen as contributing to female degradation and submission, reinforcing gender stereotypes and the banalization of sexual aggression against women (Dines, 2010). However, pornography may also negatively impact the social construction of masculinity. The readiness to engage in sexual intercourse and the idea that "men can't have enough" or that "men don't say no to sex" are myths that can be particularly reinforced by sexual imagery in the media (Ward, 2003). Many men affirm their masculinity through their sexual experiences (Ricardo & Barker, 2008), since "being sexual" is part of "being a man" (Jozkowski & Peterson, 2013). Therefore, pornography may also be linked to the sexual victimization of males, because men may be afraid of being accused of "not being enough of a man" if they reject a woman's unwanted sexual advances.

The impact of pornography on sexual attitudes and behavior has been shown for both men and women. Male and female pornography users were found to be more accepting of casual sex (Peter & Valkenburg, 2008), to have an earlier sexual debut, engage in a greater variety of sexual activities (Brown & L'Engle, 2009), have a higher number of sexual partners, and a higher level of alcohol use (Braun-Courville & Rojas, 2009; Carroll et al., 2008). Pornography use may be linked to sexual victimization through promoting the introduction of these risk factors into users' sexual scripts and sexual behavior patterns. It serves to normalize the acceptance of, and compliance with, casual sexual activities, alcohol use, and ambiguous communication in sexual interactions. Based on the information processing model (Huesmann, 1998), we assume that these pornographic contents are assimilated into students' sexual scripts and become accepted as normative, making them likely to be enacted in sexual behavior when opportunities arise. According to this model, sexual scripts and the normative acceptance of risks act as mediators that connect the "inputs" of pornographic materials to behavioral "outputs". The higher the use of pornography, the higher the normative acceptance and prominence of risks as part of sexual scripts should be, promoting risky sexual behavior and increasing the vulnerability to sexual victimization.

Prior Victimization as a Vulnerability Factor for Sexual Revictimization

In addition to the cognitive and behavioral antecedents of sexual victimization, the present study sought to replicate, for the first time in a Brazilian sample, the finding from the mainstream literature in the U.S. that sexual abuse in childhood increases the vulnerability to revictimization in adolescence and adulthood. The available research indicates that sexual revictimization is a consistent cross-gender and cross-cultural phenomenon (Hines,

2007). The review by Classen, Palesh, and Aggarwal (2005) showed that experiences of child sexual abuse (CSA) and sexual victimization after the age of 14 increase the risk of sexual revictimization. The association between CSA and sexual victimization in adulthood is also confirmed by research conducted in Latin America (Hines, 2007; Lehrer et al., 2007, 2013). Studies suggest, however, that the pathway from CSA to sexual victimization after the age of 14 is more likely to be indirect and mediated by other variables. Messman-Moore and Long (2000) found that, compared to female college students without a history of CSA, CSA survivors were more likely to have experienced unwanted sexual contact with acquaintances when they used alcohol and drugs, suggesting that substance abuse is a mediator of these processes. In a longitudinal study, Testa, Hoffman, and Livingston (2010) found that both sexual risk behavior (e.g., hookups, great number of partners) and alcohol-related behaviors partially mediated the link between adolescent sexual victimization and revictimization in college. It is well documented that early sexual debut, multiple sexual partners, brief romantic relationships (see Senn, Carey, & Vanable, 2008 for a review), and alcohol abuse (see Sartor, Agrawal, McCutcheon, Duncan, & Lynskey, 2008 for a review) are often shown by CSA survivors. Therefore, we examined the hypothesis that the link between CSA and sexual victimization after the age of 14 would be mediated by risky sexual behavior, indicated by using alcohol and ambiguous communication in sexual interactions, engaging in casual sex, having multiple partners, and younger age of first sexual intercourse. In addition, research suggests that the recency of victimization plays an important role for revictimization: the more recent the victimization, the more strongly it predicts the following victimization. In their review, Classen et al. (2005) found that the relationship between CSA and college sexual victimization was no longer significant when pre-college sexual victimization was included in the analysis. This finding suggests that victimization in adolescence may be a stronger predictor of revictimization in college than CSA.

Although the literature on male sexual victimization is limited, there is some evidence to suggest that the vulnerability factors discussed so far apply in similar ways to both women and men. For example, alcohol use has been identified as a risk factor for male sexual victimization (Palmer, McMahon, Rounsaville, & Ball, 2010). A recent study by Kuyper et al. (2013) found that a higher number of sexual partners and a greater use of token resistance (i.e., saying 'no' to sex one wants to have) were linked to a higher risk of sexual victimization in both men and women. Furthermore, Widom, Czaja, and Dutton (2008) found a significant association between childhood sexual abuse and later sexual victimization, which did not vary by gender. A recent study by French, Tilghman, and Malebranche (2015) with an ethnically diverse sample of men found that men who experienced sexual victimization reported greater alcohol use and were more likely to engage in sexual risk-taking behavior, including a higher number of partners in casual relationships. These findings suggest that the vulnerability factors assumed to predict sexual victimization in women are also linked to sexual victimization in men.

The Current Study

There are only few Brazilian studies on sexual victimization, and they are mostly limited to women. All available evidence is cross-sectional, providing little insight into the causality and etiology of sexual violence in this country. To address these limitations, the current study addressed both male and female college students' experiences of sexual victimization and combined cross-sectional and prospective analyses. The study is composed of two parts. The first part consisted of a cross-sectional analysis of the *cognitive* (sexual scripts and normative acceptance of risk factors), *behavioral* (use of ambiguous communication and alcohol in sexual interactions, number of sexual partners, and early sexual debut), and *biographical* (history of CSA) factors associated with an increased vulnerability to sexual victimization among female and male college students. The second part consisted of a longitudinal analysis replicating the cross-sectional links in a subsample of participants who were available for a second measurement 6 months later. The following hypotheses were proposed for both men and women:

1. The presence and normative acceptance of risk factors for sexual victimization in students' sexual scripts for consensual encounters predict sexual risk behavior. That is, the more the risky behaviors are incorporated in consensual sexual scripts and the more positively they are evaluated, the more likely they will be shown in actual sexual interactions.
2. Risky sexual behavior patterns (i.e., behaviors shown to be linked to sexual victimization) informed by the sexual scripts will be linked to sexual victimization. Sexual behavior is considered to be the strongest predictor of sexual victimization because it is a proximal antecedent of victimization. Sexual behavior is proposed to act as a mediator between more distal vulnerability factors (i.e., sexual scripts, normative acceptance of risk factors, pornography use, and child sexual abuse) and sexual victimization.
3. Pornography consumption promotes the incorporation and normative acceptance of risks into sexual scripts and should therefore be related to risky sexual scripts. It is linked to risky sexual behavior through increasing the normative acceptance and prominence of risks factors in sexual scripts. Moreover, pornography use is linked indirectly to sexual victimization through risky sexual scripts and through engaging in risky sexual behavior.
4. Experiences of childhood sexual abuse predict an increased likelihood of sexual victimization in adolescence (i.e., after the age of 14), mediated by risky sexual behavior.
5. Sexual victimization after the age of 14 is a prospective predictor of sexual victimization in the 6-month period between the two data waves.

Method

Participants

The original sample consisted of 742 first-year college students from 24 different classes of the humanities, natural sciences, and mathematics at the University of São Paulo, Brazil. Participants who reported neither consensual sexual experience (with or without sexual intercourse) nor sexual victimization were excluded ($n = 166$, 3 missing data). This reduced the sample size to 573. A further 11 participants who identified themselves as homosexual were excluded from the sample because this group was too small to be analyzed separately and it would not have been appropriate to merge them with the heterosexual group. In addition, since the focus of the study was on sexual victimization among college-aged young adults in Brazil, only Brazilians nationals aged 29 or younger were included in the sample. The final sample represents a subgroup of a larger sample for which detailed rates of sexual victimization and perpetration since the age of 14 were reported in D'Abreu et al. (2013).

Using these criteria, the full sample for the cross-sectional analyses (T1) consisted of 541 participants (278 women and 263 men). The average age was 20.1 years ($SD = 2.3$), with no significant difference between men and women. A total of 499 participants (254 men and 245 women) had coital experience. At T1, 88.1 % of female participants had a steady partner and 88.1 % had engaged in sexual intercourse. Among men, the corresponding rates were 76.4 and 96.6 %. The average age at first sexual intercourse was 17.1 years ($SD = 1.8$) for women and 16.6 years ($SD = 1.7$) for men, $F(1, 475) = 7.64$, $p < .01$. The mean number of sexual partners was 2.4 ($SD = 2.7$) for women and 7.5 ($SD = 12.5$) for men, $F(1, 473) = 37.50$, $p < .001$.

For the prospective analysis, a subsample of $n = 250$ participants (109 men and 141 women) could be contacted on a second occasion (T2), 6 months after the first assessment. The loss of participants was due to students moving to new courses, as the two data points fell into different study semesters and no permission had been granted to obtain email addresses as a means of contacting T1 participants outside the class sessions. A multivariate analysis including all study variables showed that the men, $F(5, 248) = 1.17$, $p = .33$, and women, $F(5, 235) = 2.04$, $p = .07$, who remained in the sample at T2 did not differ from the group that participated only at T1.

Measures at T1

Sexual Victimization

A Portuguese Version of the short form of the Sexual Experiences Survey (SES-SFV) by Koss et al. (2007) was used to measure sexual victimization, as described in detail in D'Abreu et al. (2013). This instrument contains seven items with behavioral descriptions of unwanted sexual experiences: one item about sexual touch, three about completed sexual acts (vaginal intercourse, anal sex, and oral sex), and three about attempted sexual acts (vaginal intercourse, anal sex, and oral sex). Each item includes five different coercive strategies: two items on verbal pressure, one item on exploitation of the victim's incapacitated state (e.g., following alcohol or substance intoxication) and two items on the use or threat of physical violence. Response options ranged from 0 (*never happened to me*) to 3+ (*happened three or more times*). A further item asked about the gender of the perpetrator: "Did any of the experiences described in this survey happen to you one or more times? If yes, what was the sex of the person or persons who did them to you?" Response options were "male only," "female only," "both male and female," or "I reported no experiences."

Like in the standard version of the SES, sexual victimization was assessed for two time windows: (a) the preceding year and (b) since age 14 up to a year ago. The lower age limit of age 14 corresponds to the legal age of consent in Brazilian Law.

Risk Elements in Sexual Scripts

Participants' sexual scripts were assessed with a measure developed in previous research by Krahé et al. (2007a). Participants were asked to imagine the situation of having sexual intercourse with a new partner for the first time and to indicate the presence of different features that would typically characterize this situation. "*You spend the evening with someone. In the course of the evening, you sleep together for the first time. Please imagine this situation and describe how it might take place. You are not asked to describe one particular situation you have experienced in the past. Rather, we would like to know what you think a situation like this would normally look like for you.*" The risk factors for sexual victimization were measured by two items on casual sex (e.g., "How many times have you met before?"), four items on alcohol consumption/intoxication by self and partner (e.g., "How likely is it that you drink alcohol in that situation?"), and four items on the use and perception of ambiguous communication of sexual intentions (e.g., "How likely is it that in this situation you first say 'no' even though you want to have sex with the other person?"). A five-point response scale was used for each item, ranging from 1 (*long previous acquaintanceship, low probability of alcohol use, or ambiguous communication*) to 5 (*short period of acquaintanceship, high probability of alcohol use, or ambiguous communication*). The higher the score, the more firmly the risk factors were rooted in participants' sexual scripts. The internal consistency for the script measure was $\alpha = .72$.

Normative Acceptance of Risky Script Elements

The normative endorsement of the risk factors in the sexual scripts was measured by a six-item scale also derived from research by Krahé et al. (2007a). Readiness to engage in sexual

contact with a casual partner was assessed by three items (e.g., "It is ok to have sex with someone on the first night out"), ambiguous communication was addressed by two items (e.g., "It is ok to say 'no' at first, even if you want to have sex with the person"), and alcohol consumption was addressed by one item ("It is part of the game to drink alcohol when meeting someone and having sex with him/her"). Responses were made on a five-point scale ranging from 1 (*completely disagree*) to 5 (*completely agree*). The internal consistency for the normative acceptance measure was $\alpha = .78$.

Pornography Use

To measure pornography use, participants were asked: (1)"Have you ever seen images of sexual intercourse…?" and (2) "Have you ever seen images of other sexual acts (e.g., oral sex, masturbation)…?" For each question, they indicated the frequency of exposure in four different types of media: (a) on TV, (b) on the internet, (c) on the cell phone, and (d) in books or magazines. This yielded a measure consisting of eight items. Response options ranged from 1 (*never*) to 5 *(very often*). The scale reliability was $\alpha = .90$.

Sexual Experience

Participants were asked if they had ever had sexual intercourse. Participants with coital experience were presented with six questions assessing risky sexual behavior patterns: (1) what their age was at first sexual intercourse; (2) how many sexual partners they had had; (3) how many times they had drunk alcohol when having sex; (4) how many times their partner had drunk alcohol; (5) how many times they had said "no" to a sexual offer when, in fact, they meant "yes"; and (6) how many times they had said "yes" when actually meaning "no". Responses to the items about age and number of partners were made in an open-ended format, and responses to the remaining items were made on a five-point scale ranging from 1 (*never*) to 5 (*every time*). The internal consistency of this measure was $\alpha = .56$. It should be noted, however, that the behavioral measure is a cumulative index and therefore not required to have high internal consistency.

Childhood Sexual Abuse

Four questions assessed the experience of sexual abuse in childhood (before the age of 14): (a) exposing of genitals (by an adult or by the participant through an adult's demand), (b) touching of genitals (by an adult or by the participant through an adult's demand), (c) attempted penetration, and (d) completed penetration. Responses were made in a dichotomous format, 0 (*no*), 1 (*yes*). The internal consistency of this measure was $\alpha = .70$, although as a cumulative index it was not required to have high internal consistency.

Demographic Background

Information on age, sex, relationship experience (whether they had ever been in a steady relationship), and nationality was assessed at the end of the questionnaire. Information on sexual orientation was also obtained through a 7-point scale ranging from 1 = *Heterosexual* to 7 = *Homosexual*. On the basis of this item, 11 participants who identified themselves as unambiguously homosexual (as reflected in a score of "7") were excluded from the sample, as described above.

T2 Sexual Victimization and Sexual Experience

At T2, the same items from the SES-SFV were used to assess the prevalence of sexual victimization in the six-month period since T1. Participants who had their first sexual intercourse in the period between T1 and T2 were asked to indicate their age at first intercourse and the number of coital partners with and without a steady relationship.

Procedure

Appropriate back translation procedures were used to ensure the accuracy of the Portuguese versions of the instruments. A Brazilian Portuguese native speaker translated the English version of the SES-SFV into Brazilian Portuguese. This first translation was then analyzed and discussed by three further Brazilian native speakers. An American psychologist translated the questionnaire back into English. The few differences were then compared against the original English version and modified where appropriate. For all other measures, which were originally in German, the same translation procedures were conducted, having German native speakers as back-translators. The whole questionnaire (with all instruments included) was then reviewed by ten college students to check for comprehension problems. The final version was reviewed by a Brazilian Portuguese teacher to check grammar, spelling, and punctuation.[1]

The study was approved by the Ethics Committees of the University of São Paulo, Brazil, where the data were collected, and the University of Potsdam, Germany, where the authors were based. At T1 and T2, data collection was conducted during regular classes by a trained female researcher. More details of the procedures are reported in D'Abreu et al. (2013). On both occasions, students were given an information letter that addressed the aims of the study, provided assurance of the anonymity of responses, and emphasized the right to decline or withdraw from participation at any time. Participants had to give active consent to be eligible to participate in the study. No compensation was offered. To address possible needs for psychosocial support,

[1] The final Brazilian Portuguese version of the SES is available from the corresponding author upon request.

all participants received an information sheet listing counseling agencies upon returning the questionnaire.

Data Analysis

To create an index of risky sexual scripts, the mean score of the likelihood ratings for the script items was multiplied by the mean score of the normative acceptance ratings. A mean score of risky behavior was created by computing the mean of the *z*-standardized responses to the six items (reverse coding for age of first sexual intercourse).[2] A mean score of pornography use was created by averaging responses across the eight items. All men and 96.4 % of women reported exposure to pornographic material. A dichotomous index of childhood sexual abuse (0 = "no" response to all four items; 1 = at least one "yes" response) was created. On all measures, higher scores indicated higher risk.

Cross-sectional and prospective path models of the associations between vulnerability factors and sexual victimization specified in the hypotheses were tested with the Mplus 7.2 software. For both T1 and T2, sexual victimization (the outcome variable) was treated as a categorical variable with three levels, as explained below, and the *wls* estimator was used. The bootstrap option ($N = 10000$) of the analysis command was used to obtain bootstrap standard errors for direct and indirect effects. As indicators of model fit, we report χ^2 (ratio of χ^2 to df < 3) and CFI (>.95) (Schreiber, Amaury, Stage, Barlow, & King, 2006). We first fitted models to the full dataset, which were followed up by multigroup analyses for men and women. In the multigroup analyses, we first fitted a model in which the paths were constrained to be equal for men and women and then compared the fit with models in which specific paths were set free.

Results

Prevalence of Sexual Victimization

Combining the two time windows of the T1 survey (the preceding year and since age 14 up to a year ago), 41.4 % of female participants reported at least one experience of sexual victimization since the age of 14. The corresponding rate for the male participants was 30.8 %. In the reduced sample that took part in the T2 survey, 15.7 % of the female participants reported at least one experience of sexual victimization in the preceding six-month period (8.6 % were first-time victims, 7.1 % had already reported sexual victimization at T1). Among the male participants, 13.8 % reported at least one experience of sexual victimization at T2 (3.7 % were first-time victims, 10.1 % had already reported victimization at T1). Of the participants who responded at T1 to the question about the sex of the perpetrator (opposite sex, same-sex, or both, in the case of more than one incident of victimization), the majority reported that the perpetrator had been a member of the opposite sex. Of the male victims, 74 % were victimized only by women, 13 % only by men, and 13 % by both men and women. Of the female victims 96.3 % were assaulted only by men, 1.2 % only by women, and 2.5 % by both male and female perpetrators.

Following the procedure reported by Koss et al. (2008), six-level scores of sexual victimization were computed by classifying participants according to the most severe form of sexual victimization reported at T1 and T2: (0) *No sexual victimization* ("never" responses to all items; T1: 58.6 % of women and 69.2 % of men; T2: 84.3 % of women and 86.2 % of men); (1) *Sexual contact* (at least one unwanted sexual experience, without penetration, through the use of verbal pressure, exploitation of victim's intoxicated state, or threat or use of physical force, but no attempted sexual coercion, attempted rape, and rape; T1: 14 % of women, 17.5 % of men; T2: 3.6 % of women, 6.4 % of men); (2) *Attempted sexual coercion* (at least one experience of attempted oral, vaginal, or anal penetration using verbal pressure, but no sexual coercion, attempted and completed rape; T1: 8.3 % of women, 3 % of men; T2: 4.3 % of women, 0.9 % of men); (3) *Sexual coercion* (at least one experience of completed oral, vaginal, or anal penetration using verbal pressure, but no attempted or completed rape; T1: 7.6 % of women, 1.9 % of men; T2: 2.9 % of women, 0.9 % of men); (4) *Attempted rape* (at least one experience of attempted oral, vaginal, or anal penetration through exploitation of victim's intoxicated state or threat or use of physical force, but no completed rape; T1: 4.3 % of women, 1.5 % of men; T2: 3.6 % of women, 2.8 % of men); and (5) *Completed rape* (at least one experience of completed oral, vaginal, or anal penetration through exploitation of victim's intoxicated state or threat or use of physical force; T1: 7.2 % of women, 6.8 % of men; T2: 1.4 % of women, 2.8 % of men).

Due to the skewed distribution of the six levels, they were condensed into three groups for all further analyses. Group 1, the *no victimization group*, included participants who reported no sexual victimization (T1: 58.6 % of women and 69.2 % of men; T2: 84.3 % of women and 86.2 % of men). Group 2, called the *medium victimization group*, consisted of participants whose victimization experiences fell into the levels 1–3 (non-consensual sexual contact, sexual coercion, or attempted sexual coercion; T1: 29.9 % of women, 22.4 % of men; T2: 10.7 % of women, 8.3 % of men). These forms of sexual aggression are not penalized by Brazilian law. Group 3, called the *severe victimization group*, included participants at levels 4 and 5 (attempted rape and rape), representing forms of sexual aggression that are penalized by Brazilian law (T1: 11.5 % of women, 8.4 % of men; T2: 5.0 % of women, 5.5 % of men).

[2] Twenty participants indicated that they had their first sexual intercourse under the age of 14 (the legal limit for child sexual abuse in Brazil), yet only one of them answered "yes" to the child sex abuse item about completed penetration. To avoid a potential confound between the measures of risky sexual behavior and child sex abuse, age at first intercourse was coded as missing for these participants.

Vulnerability Factors: Descriptive Statistics and Gender Differences

The means of the different vulnerability factors for the total sample and the two gender groups are presented in Table 1. The multivariate effect of participant gender was significant, $F(3, 535) = 154.28, p < .001, \eta^2 = .46$. Men scored significantly higher than did women on the measures of risky sexual scripts and pornography use, women were significantly more likely to report childhood sexual abuse. No gender difference was found on the index of risky behavior.

Table 2 presents the correlations between the vulnerability factors assessed at T1 for men and women. Sexual scripts showed significant positive correlations with risky sexual behavior and pornography use, risky sexual behavior was also positively correlated with pornography use in both genders. In addition, CSA was positively correlated with risky sexual behavior among men and with pornography use among women.

Table 1 Means/percentages and gender differences for the predictors of sexual victimization

Construct (range)	Men *M* (SD) *N* = 263	Women *M* (SD) *N* = 278
Risky sexual scripts (1–25)[1]	8.47[a]	4.42[b]
	(3.62)	(2.23)
Risky sexual behavior[2] (z-scores)[3]	0.02	-0.01
	(0.60)	(0.52)
Pornography use (1–5)	3.03[a]	1.98[b]
	(0.67)	(0.67)
Child sexual abuse (% yes)	3.1[a]	7.2[b]

[1] Multiplicative index of presence (1–5) and normative acceptance (1–5) of risk elements

[2] Only for participants with coital experience at T1 (254 men, 245 women); *z*-scores, $M = 0$, $SD = 1$

[3] Mean of the *z*-standardized responses to the six items: (1) age at first sexual intercourse (reverse coding), (2) number of sexual partners; (3) how many times they had drunk alcohol when they had sex; (4) how many times their partner had drunk alcohol; (5) how many times the participant had said "no" when meaning "yes"; and (6) how many times the participant had said "yes" when meaning "no"

[a,b] Means or percentages with different superscripts differ at least at $p < .05$

Table 2 Correlations between the vulnerability factors assessed at T1

	(1)	(2)	(3)	(4)
(1) Risky sexual scripts	–	.41**	.31**	−.09
(2) Risky sexual behavior[a]	.51**	–	.26**	.16*
(3) Pornography use	.30**	.32**	–	−.02
(4) Childhood sexual abuse	.07	.06	.17**	–

Figures above the diagonal refer to men, figures below the diagonal refer to women

** $p < .01$, * $p < .05$

[a] Only for participants with coital experience at T1 (men: $n = 254$; women: $n = 245$)

Cross-Sectional Associations of Vulnerability Factors and T1 Sexual Victimization

The cross-sectional path model of the associations between vulnerability factors and sexual victimization is presented in Fig. 1. First, a model for the total sample was estimated in which all parameters were freely estimated. This model showed a good fit with the data, $\chi^2(\text{df} = 2, N = 495) = 3.22, p = .20$, CFI = .99. However, because of the gender differences found in the mean scores on scripts, pornography use, and childhood sexual abuse, the potential moderating role of gender was explored further through multigroup analyses. We first tested a multigroup model in which all paths were constrained to be equal for men and women (Multigroup Model 1). This constrained model showed a poor fit with the data, $\chi^2(\text{df} = 11, N = 495) = 28.02, p < .01$, CFI = .91. In the next step, we specified a model in which the path from sexual abuse to risky sexual behavior was set free (Multigroup Model 2). This model fitted the data better, but the fit indices were still not satisfactory, $\chi^2(\text{df} = 10, N = 495) = 19.46, p < .02$, CFI = .95.

Therefore, a third model was estimated in which both the path from sexual abuse to sexual behavior and the path from sexual scripts to sexual behavior were set free (Multigroup Model 3). This model showed a very good fit with the data, $\chi^2(\text{df} = 9, N = 495) = 11.76, p = .23$, CFI = .99. It also fitted significantly better than constrained model, as determined by the χ^2 difference test (diff $\chi^2 = 16.27$, diff df = 2, $p < .001$), and was therefore adopted as the final model. Because the groups are compared based on the unstandardized parameters, the constrained unstandardized path coefficients are identical for men and women. The standardized path coefficients differ somewhat because they take differences in the variance of the model variables in the two groups into account. For ease of interpretation and comparison with other studies, we present the standardized coefficients in Fig. 1. The indirect effects are presented in the top panel of Table 3.

The findings show that the overall pattern of associations was similar for men and women. The path from risky sexual scripts to risky sexual behavior was significant for both men and women, confirming Hypothesis 1. Risky sexual behavior was the strongest predictor of sexual victimization for both men and women, as predicted in Hypothesis 2. Consistent with Hypothesis 3, pornography was linked to risky sexual behavior through the increased normative acceptance and endorsement of risks in sexual scripts. In addition, a significant indirect effect was found from pornography consumption to sexual victimization through risky scripts and sexual behavior. Finally, childhood sexual abuse was a significant predictor of sexual victimization since the age of 14 among women and men, but the indirect path through risky sexual

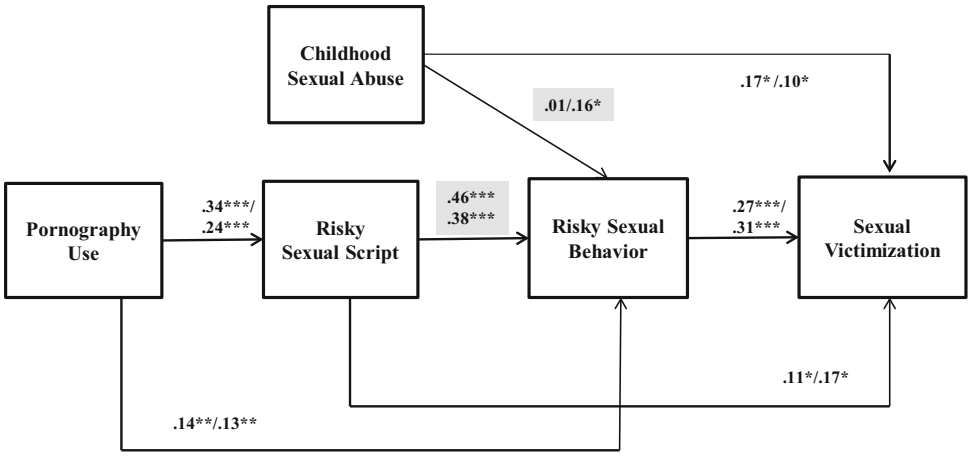

Fig. 1 Cross-sectional correlates of sexual victimization in women and men. ***$p < .001$; **$p < .01$; *$p < .05$; Model fit: χ^2 (df = 9) = 11.76, $p = .23$; CFI = .99. The first coefficients refer to women, the second coefficients refer to men. *Shaded* coefficients are significantly different

Table 3 Significant indirect effects at T1 (top panel) and T2 (bottom panel), bootstrapping analysis

	Women	Men
Indirect effects on T1 victimization		
Pornography use -> risky scripts -> risky behavior -> T1 victimization	.04* (.01, .08)	.03* (.01, .05)
Pornography use -> risky behavior -> T1 victimization	.04* (.01, .09)	.04* (.01, .05)
Pornography use -> risky scripts -> T1 victimization	.04* (.002, .09)	.04* (.002, .09)
Risky scripts -> risky behavior -> T1 victimization	.13* (.06, .21)	.12* (.06, .19)
Childhood sex abuse -> risky behavior -> T1 victimization	.003 (−.03, .05)	.06* (.002, .13)
Pornography use -> risky scripts -> risky behavior	.17* (.10, .25)	.09* (.05, .15)
Indirect effects on T2 victimization		
Pornography use -> risky scripts -> risky behavior -> T1 victimization -> T2 victimization	.004 (−.004, .01)	.03* (.001, .06)
Pornography use -> risky scripts -> risky behavior -> T2 victimization	.04 (−.01, .10)	.03 (.05, .12)
Pornography use -> risky behavior -> T2 victimization	.12* (.01, .27)	.01 (−.04, .07)
Risky scripts -> risky behavior -> T2 victimization	.13* (.03, .27)	.05 (−.10, .25)
Risky scripts -> risky behavior -> T1 victimization -> T2 victimization	.01 (−.01, .04)	.06* (.01, .13)
Risky behavior -> T1 victimization -> T2 victimization	.04 (−.02, .12)	.12* (.03, .25)

5 % confidence intervals presented in parentheses

* Confidence intervals for $p < .05$ do not include zero

behavior was significant only for men. This finding lends qualified support to Hypothesis 4.

Prospective Prediction of T2 Sexual Victimization

A second set of analyses was conducted to test the prospective paths from risky sexual scripts and risky behaviors to sexual victimization at T1 to sexual victimization in the six-month period up to T2. The model we tested is displayed in Fig. 2. CSA, which had already been assessed in the cross-sectional model, was not included again in the prospective model. Instead, based on Hypothesis 5 on the recency of sexual victimization, sexual victimization at T1 was included to test revictimization in the interval between T1 and T2.

The model for the total sample with free parameters showed a good fit with the data, χ^2(df = 2, $N = 226$) = .05, $p = .98$, CFI = 1. However, this model did not address the role of gender. Therefore, to examine gender as a moderator, we conducted a series of multigroup analyses. First, we tested a model in which all paths were constrained to be equal (Multigroup Model 1), which did not fit the data well, χ^2(df = 12, $N = 226$) = 28.70, $p < .005$, CFI = .84. Based on the gender differences on the pre-

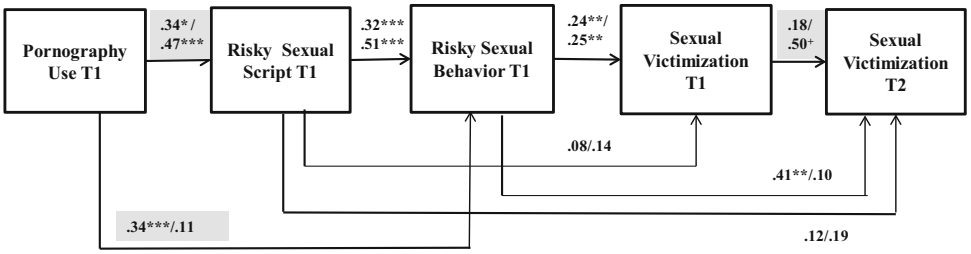

Fig. 2 Longitudinal predictors of sexual victimization in women and men. ***$p < .001$; **$p < .01$; *$p < .05$; $^{+}p < .10$. Model fit: χ^2 (df = 8) = 9.01, $p = .34$, CFI = .99. The first coefficients refer to women, the second coefficients refer to men. The coefficients shaded in *gray* were significantly different between men and women

dictors, we then fitted a model in which the paths from pornography use to sexual scripts and sexual behavior were freed (Multigroup Model 2). Fit for this model was significantly improved, $p < .01$ as tested by χ^2 difference test, but not yet satisfactory, $\chi^2(\text{df} = 10, N = 226) = 16.76, p = .08, \text{CFI} = .93$. Next, we tested a model in which the path from risky behavior to T2 victimization was set free (Multigroup Model 3), which did not result in a significant improvement of model fit relative to Model 2, $\chi^2(\text{df} = 9, N = 226) = 14.39$, $p = .11$, CFI = .95. In Multigroup Model 4, the path from T1 to T2 victimization was additionally set free, which resulted in a good model fit, $\chi^2(\text{df} = 8, N = 226) = 9.01, p = .34$, CFI = .99 and a significant improvement relative to Model 2 (diff $\chi^2 = 7.75$, diff df = 2, $p < .001$. Therefore, this model was adopted as the final model.

The standardized path coefficients are shown in Fig. 2, and the indirect effects are presented in the bottom panel of Table 3. A marginally significant direct path from T1 sexual victimization to T2 victimization was found for men, as predicted in Hypothesis 5. For women, a significant direct path was found from risky behavior at T1 to sexual victimization at T2. For men, indirect paths were found from pornography use via risky scripts, risky behavior, and T1 victimization to sexual victimization at T2. For women, indirect paths were found from pornography use via risky scripts and risky behavior to T2 victimization. Thus, the main difference between the models for men and women was that any indirect paths through T1 victimization were limited to the male sample.

Discussion

Based on previous North American and European research, this study sought to identify vulnerability factors for sexual victimization among college students in Brazil who had ever had sexual contact with a partner of the opposite sex. Both women and men were included in the study, which focused on cognitive representations of sexuality, sexual behavior patterns, and previous victimization as contributory factors to sexual victimization among college students. The present data are the first from Brazil to examine the joint contribution of cognitive, behavioral, and biographical variables in predicting sexual victimization both cross-sectionally (total sample, 541) and prospectively over a 6-month period (reduced sample, 250). The results revealed substantial rates of sexual victimization among both female and male college students in Brazil, confirming international data on the scale of the problem in student populations. At T1, 41.4 % of the female participants and 30.8 % of the male participants reported at least one experience of unwanted sexual contact since the age of 14, with 11.5 % of women and 8.4 % of men reporting experiences covered by legal definitions of sexual assault in Brazil. The relatively high rate of male sexual victimization is consistent with a study by French et al. (2015), who found a victimization rate of 43 % (in 95 % of these incidents, the perpetrator had been a woman).

In the period between the two data waves, 15.7 % of women and 13.8 % of men experienced at least one incident of sexual victimization. Given that these figures cover a 6-month time window, they are roughly in line with the 12-month rates of 38.5 % for women and 34.5 % reported by Chan et al. (2008). Their somewhat higher rates are at least partly attributable to the fact that the CTS they used as a measure of sexual victimization is broader in scope than the SES, including items such as "made my partner have sex without a condom" and "insisted on sex when my partner did not want to (but did not use physical force)".

The proposed links between the vulnerability factors and sexual victimization were examined in two path models. The direct and indirect associations of the vulnerability factors with sexual victimization were confirmed by the good fit of the multigroup path models, indicating that the predictors of sexual victimization investigated in our study were similar for men and women. A focus of the study was on the role of risk factors for sexual victimization in the cognitive scripts for consensual sexual encounters and their normative acceptance as predictors of sexual victimization. The results showed that in both male and female students, the presence of established risk factors for sexual victimization in the scripts for consensual sexual encounters was linked to corresponding patterns of risky sexual behavior which, in turn, predicted sexual victimization, both in the cross-sectional and the prospective analyses. These results confirm the relevance of cognitive representations of sexuality as guidelines for sexual behavior.

The extent to which risky sexual behavior patterns were part and parcel of young adults' sexual scripts for consensual sexual interactions could be linked to the use of pornographic media contents. In line with the cognitive processing model (Huesmann, 1998), it was hypothesized that the messages about sexual interactions conveyed through pornography are assimilated and normatively accepted as part of students' sexual scripts, contributing indirectly to the likelihood of sexual victimization by promoting risky sexual behavior. Both the cross-sectional and the prospective models showed a path from pornography use as an input variable to sexual behavior as an output, mediated through sexual scripts. Furthermore, the present findings demonstrated that pornography use was linked not only to sexual aggression, as shown in previous studies (e.g., Bonino, Ciairano, Rabaglietti, & Cattelino, 2006; Ybarra, Mitchell, Hamburger, Diener-West, & Leaf, 2011), but also to experiences of sexual victimization. As predicted, risky sexual behavior as a proximal predictor was found to be most closely related to sexual victimization at T1. The results also indicated that risky sexual behavior acted as mediator between the more distal factors included in the model (i.e., sexual scripts, normative acceptance of risk factors, pornography consumption, and prior sexual victimization in childhood or adolescence) and sexual victimization at both T1 and T2.

The significance of child sexual abuse as a vulnerability factor for revictimization in adolescence was also supported in the present study, consistent with a large body of previous evidence (Classen et al., 2005). For both men and women, childhood sexual abuse was directly linked to sexual victimization since the age of 14, as assessed at T1. The proposed mediating role of risky sexual behavior, indicated by readiness to engage in casual sex, multiple partners, younger age of first sexual intercourse, and alcohol consumption in sexual interactions, was found only for men. This finding suggests that for female victims of childhood sexual abuse in the present sample, the underlying processes that may explain an increased vulnerability to sexual victimization in adolescence do not seem to lie in their sexual behavior patterns, which is at odds with a large body of literature on sexual revictimization as an adverse consequence of childhood sexual abuse of girls (e.g., Bramsen et al., 2013). Research using more fine-grained measures of sexual behavior and including additional sequelae of childhood sexual abuse, such as reduced sexual self-efficacy or sexual self-esteem, is needed to replicate and explain this gender difference (Krahé, 2000b).

A further gender difference related to revictimization was found in the path from sexual victimization at T1 to sexual victimization at T2, which was marginally significant for men, but not for women. The proposed indirect pathway from pornography use, risky sexual scripts, sexual behavior, and T1 sexual victimization to T2 sexual victimization was also found only for men. Among women, the indirect link from sexual scripts to T2 victimization was mediated by risky sexual behavior, but not by T1 victimization. This difference may be due to the fact that among women there were significantly more new cases of sexual victimization between T1 and T2 than among men, which attenuated the stability of victimization experiences over time for the female gender group as a whole. In trying to explain why the number of first-time victims in the period between T1 and T2 was higher among women compared to men, it is worth noting that women were significantly older when they had their first sexual intercourse, which may indicate a later onset of risky sexual behavior patterns among women compared to men. This possibility is supported by the finding that the direct path from T1 risk behavior to T2 victimization was significant for women, whereas for men only the indirect path via T1 victimization was significant.

Limitations

Although the findings are largely consistent with our predictions, several limitations of the study must be noted. First, although participants who took part in both data waves did not differ significantly from those who were only present at T1, the reduction in sample size at T2 resulted in a decrease in statistical power for the prospective model. Second, participants represented a convenience sample from a specific region of Brazil, and the generality of the results for other regions of this large country needs to be established in future studies. Third, the data were based on retrospective reports and may have been affected by memory distortions, particularly at T1 when participants were asked to recollect childhood abuse before the age of 14 and unwanted sexual experiences since the age of 14. Fourth, pornography use was broadly operationalized as images of sexual intercourse or other sexual acts in different types of media, which may have left room for interpretation. We were unable to include a detailed measure of the type of pornographic contents and the context in which pornography was used (e.g., by whom it was initiated). Future research should use more specific measures to investigate which aspects of pornography exposure particularly inform young people's sexual scripts.

Finally, the validity of the SES-SFV still remains to be tested in a larger body of evidence. The use of gender-neutral language allows researchers to avoid gender bias when posing a question (Anthony & Cook, 2012), but does not address the complexity of gender issues, including possible qualitative differences in the interpretation of the items. Although data show that men's and women's reports of sexual victimization share many similarities in terms of age, time and location, resistance, and number of offenders (Weiss, 2010), studies suggest that survey questions may have differential validity for men and women in reporting partner violence (Hamby, 2005). The use of behaviorally specific questions may go some way toward reducing problems of understanding and interpretation, but gender comparisons of prevalence rates should be made with caution.

Contribution of the Study

Despite these limitations, the present findings make a contribution to the international knowledge base about variables linked to an increased vulnerability to sexual victimization. First, the study recognizes both women and men as potential victims, following recommendations for gender-sensitive research (Leduc, 2009). Although a growing body of international research shows that male victimization is more common than previously believed, it is only since 2009 that men are recognized as potential victims of rape in Brazilian law (Brasil, 2009). The present rate for severe victimization among men at T1 (8.4 %) was slightly lower than the rates of 10 % for rape and attempts and 14 % for sexual assault reported by Spitzberg (1999) in a meta-analysis. Among women, the present rates for severe victimization (11.5 %) were even lower than those provided by the same meta-analysis, which were around 30 % for rape and attempts and 22 % for sexual assault. However, Spitzberg considered life-time prevalence rates, which included cases under the age of 14 that were excluded from the present study.

Second, although men had more risky sexual scripts and a higher rate of pornography consumption compared to women, the pathways to victimization were similar in both gender groups. The present findings demonstrate a link between cognitive representations of consensual sexuality and sexual victimization, which is mediated by sexual behavior patterns informed by the cognitive scripts. Studying how sexual scripts are conceptualized, what risks factors for sexual victimization they contain, what behavior is considered appropriate, and how pornography feeds into sexual scripts may hold a clue to understanding the antecedents of sexual victimization. Studies show that interventions that promote safer sex require a good understanding of how sexual behavior is scripted (Wight & Abraham, 2000). Sexual scripts, although relatively stable, are changeable. Reflecting on social norms and generating alternative and protective responses may promote changes in young people's sexual scripts and more conscious decision making about sexual behavior (Dworkin, Beckford, & Ehrhardt, 2007). The same principles may be applied in prevention programs addressing sexual victimization. Our findings suggest that challenging scripts for consensual sex that contain vulnerability factors to sexual victimization and promoting change in attitudes toward pornography may be effective strategies for the prevention of sexual victimization.

Third, the current study is also in line with recommendations of Contreras et al. (2010) for future research on sexual aggression in Latin America and the Caribbean. According to Contreras et al., research should (a) measure sexual aggression in a more rigorous way in settings where little information is available, and (b) investigate potential factors that underlie the phenomenon of sexual aggression, which may help to change attitudes and behavior especially among young people who are the main focus of prevention programs. The present study meets these recommendations in several respects. First, a widely used instrument, the *Sexual Experiences Survey*, was used as a measure of sexual victimization. Second, the sample consisted of college students, including males, a group that has rarely been considered in studies on sexual victimization in Brazil. Third, the study is the first of its kind in Brazil to investigate the joint contribution of cognitive and behavioral vulnerability factors, including pornography use, and childhood sexual abuse as predictors of sexual victimization. It proposed and tested a model of direct and indirect paths to sexual victimization, demonstrating correspondence between Brazilian findings and evidence from the North American research literature. Showing that vulnerability factors are similar in different cultural contexts also implies that successful prevention and intervention programs developed in mainstream sexual aggression research may provide useful starting points for intervention programs in Brazil, contributing to the fight against sexual aggression as a global problem.

Acknowledgments The first author is grateful to the Konrad-Adenauer-Foundation for the scholarship that facilitated the completion of this study. The authors also gratefully acknowledge the support of Marina Rezende Bazon. They thank Gracielle Farah, Lia Freitas, Matthias Kiepsch, Myrelle Mirasyedi, Henning Suhr, and Jonathan Tudge for their support in creating the Portuguese measures and Rachel Marinho and Juliana Martins for their help in the data collection phase

References

Abbey, A., Zawacki, T., Buck, P. O., Clinton, A. M., & McAuslan, P. (2004). Sexual assault and alcohol consumption: What do we know about their relationship and what types of research are still needed? *Aggression and Violent Behavior, 9*, 271–303. doi:10.1016/S1359-1789(03)00011-9.

Abelson, R. P. (1981). Psychological status of the script concept. *American Psychologist, 36*, 715–729. doi:10.1037//0003-066X.36.7.715.

Alksnis, C., Desmarais, S., & Wood, E. (1996). Gender differences in scripts for different types of dates. *Sex Roles, 34*, 499–509. doi:10.1007/BF01547805.

Andrade, A. G., Duarte, P. C. A. V., & Oliveira, L. C. (2010). *I Levantamento Nacional sobre o uso de álcool, tabaco e outras drogas entre universitários das 27 capitais brasileiras* [1st National Survey on use of alcohol, tobacco and other drugs among college students from 27 state capitals]. Brasilia, Brazil: SENAD. Retrieved January 2, 2013, from: http://www.grea.org.br/I_levantamento/I_levantamento_nacional.pdf.

Anthony, E. R., & Cook, S. L. (2012). Assessing the impact of gender-neutral language on disclosure of sexual violence. *Psychology of Violence, 2*, 297–307. doi:10.1037/a0028562.

Bonino, S., Ciairano, S., Rabaglietti, E., & Cattelino, E. (2006). Use of pornography and self-reported engagement in sexual violence among adolescents. *European Journal of Developmental Psychology, 3*, 265–288. doi:10.1080/17405620600562359.

Bramsen, R. H., Lasgaard, M., Koss, M. P., Dhevlin, M., Elkit, A., & Banner, J. (2013). Testing a multiple mediator model of the effect of childhood sexual abuse on adolescent sexual victimization. *American Journal of Orthopsychiatry, 83*, 47–54. doi:10.1111/ajop.12011.

Brasil. (2009). LEI N° 12.015, DE 7 DE AGOSTO DE 2009. *Código Penal Brasileiro* [Law Number 12.015, August 7, 2009. Brazilian Penal Code]. Retrieved October 10, 2013, from: http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2009/Lei/L12015.htm#art2.

Braun-Courville, D. K., & Rojas, M. (2009). Exposure to sexually explicit web sites and adolescent sexual attitudes and behavior. *Journal of Adolescent Health, 45*, 156–162. doi:10.1016/j.jadohealth.2008.12.004.

Breiding, M., J., Smith, S. G., Basile, K. C., Walters, M. L., Chen, J., & Merrick, M. T. (2014). *Prevalence and characteristics of sexual violence, stalking, and intimate partner violence victimization: National Intimate Partner and Sexual Violence Survey, United States, 2011*. Atlanta: Centers for Disease Control. Retrieved September 10, 2014, from: http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6308a1.htm.

Bridges, A. J., Wosnitzer, R., Scharrer, E., Sun, C., & Liberman, R. (2010). Aggression and sexual behavior in best-selling pornography videos: A content analysis update. *Violence Against Women, 16*, 1065–1085. doi:10.1177/1077801210382866.

Brown, J. D., & L'Engle, K. L. (2009). X-rated. Sexual attitudes and behaviors associated with U.S. early adolescents' exposure to sexually explicit media. *Communication Research, 36*, 129–151. doi:10.1177/0093650208326465.

Bruzzell, T. (2005). The effect of sophistication, access, and monitoring on use of pornography in three technological contexts. *Deviant Behavior, 26*, 109–132. doi:10.1080/01639620590518988.

Cáceres, C. F. (2005). Assessing young people's non-consensual sexual experiences: Lessons from Peru. In S. J. Jejeebho, I. Shah, & S. Thapa (Eds.), *Sex without consent. Young people in developing countries* (pp. 127–138). London: Zed Books.

Caetano, M. E., Linhares, I. M., Pinotti, J. A., Maggio da Fonseca, A., Wojitani, M. D., & Giraldo, P. C. (2010). Sexual behavior and knowledge of sexually transmitted infections among university students in Sao Paulo, Brazil. *International Journal of Gynecology and Obstetrics, 110*, 43–46. doi:10.1016/j.ijgo.2010.02.012.

Carroll, J. S., Padilla-Walker, L. M., Nelson, L. J., Olson, C. D., Barry, C. M., & Madsen, S. D. (2008). Generation XXX: Pornography acceptance and use among emerging adults. *Journal of Adolescent Research, 23*, 6–30. doi:10.1177/0743558407306348.

Chan, K. L., Straus, M. A., Brownridge, D. A., Tiwari, A., & Leung, W. C. (2008). Prevalence of dating partner violence and suicidal ideation among male and female university students worldwide. *Journal of Midwifery & Women's Health, 53*, 529–537. doi:10.1016/j.jmwh.2008.04.016.

Classen, C. C., Palesh, O. G., & Aggarwal, R. (2005). Sexual revictimization: A review of the empirical literature. *Trauma, Violence, & Abuse, 6*, 103–129. doi:10.1177/1524838005275087.

Contreras, J. M., Bott, S., Guedes, A., & Dartnall, E. (2010). *Sexual violence in Latin America and the Caribbean: A desk review*. Sexual Violence Research Initiative. Retrieved April 25, 2013, from: http://www.svri.org/SexualViolenceLACaribbean.pdf.

D'Abreu, L. C. F., Krahé, B., & Bazon, M. R. (2013). Sexual aggression among Brazilian college students: Prevalence of victimization and perpetration in men and women. *Journal of Sex Research, 50*, 795–807. doi:10.1080/00224499.2012.702799.

de Moraes, C. L., Cabral, C. S., & Heilborn, M. L. (2006). Magnitude e caracterização de situações de coerção sexual vivenciadas por jovens de três grandes capitais brasileiras: Porto Alegre, Rio de Janeiro e Salvador [Magnitude and characterization of sexual coercion experienced by young adults in three Brazilian state capitals: Porto Alegre, Rio de Janeiro, and Salvador]. *Cadernos de Saúde Pública, 22*, 1493–1504. doi:10.1590/S0102-311X2006000700013.

Dines, G. (2010). *Pornland: How porn has hijacked our sexuality*. Boston, MA: Beacon Press.

Drieschner, K., & Lange, A. (1999). A review of cognitive factors in the etiology of rape: Theories, empirical studies, and implications. *Clinical Psychology Review, 19*, 57–77. doi:10.1016/S0272-7358(98)00016-6.

Dworkin, S. L., Beckford, S. T., & Ehrhardt, A. A. (2007). Sexual scripts of women: A longitudinal analysis of participants in a gender-specific HIV/STD prevention intervention. *Archives of Sexual Behavior, 36*, 269–279. doi:10.1007/s10508-006-9092-9.

Fisher, B. S., Daigle, L. E., & Cullen, F. T. (2010). *Unsafe in the ivory tower: The sexual victimization of college women*. Los Angeles, CA: Sage.

Flack, W. F., Daubman, K. A., Caron, M. L., Asadorian, J. A., D'Aureli, N. R., Gigliotti, S. N., … Stine, E. R. (2007). Risk factors and consequences of unwanted sex among university students: Hooking up, alcohol, and stress response. *Journal of Interpersonal Violence, 22*, 139–157. doi:10.1177/0886260506295354.

French, B. H., Tilghman, J. D., & Malebranche, D. A. (2015). Sexual coercion context and psychosocial correlates among diverse males. *Psychology of Men and Masculinity, 16*, 42–53. doi:10.1037/a0035915.

Goldstein, A. L., Barnett, N. P., Pedlow, C. T., & Murphy, J. G. (2007). Drinking in conjunction with sexual experiences among at-risk college student drinkers. *Journal of Studies on Alcohol and Drugs, 68*, 697–705.

Hamby, S. (2005). Measuring gender differences in partner violence: Implications from research on other forms of violent and socially undesirable behavior. *Sex Roles, 52*, 725–742. doi:10.1007/s11199-005-4195-7.

Hines, D. A. (2007). Predictors of sexual coercion against women and men: A multilevel, multinational study of university students. *Archives of Sexual Behavior, 36*, 403–422. doi:10.1007/s10508-006-9141-4.

Huesmann, L. R. (1998). The role of information processing and cognitive schema in the acquisition and maintenance of habitual aggressive behavior. In R. G. Geen & E. Donnerstein (Eds.), *Human aggression: Theories, research and implications for social policy* (pp. 73–109). San Diego, CA: Academic Press.

Jozkowski, K. N., & Peterson, Z. D. (2013). College students and sexual consent: unique insights. *Journal of Sex Research, 50*, 517–523. doi:10.1080/00224499.2012.700739.

Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M. … White, J. W. (2007). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology of Women Quarterly, 31*, 357–370. doi:10.1111/j.1471-6402.2007.00385.x.

Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M. … White, J. W. (2008). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization: Erratum. *Psychology of Women Quarterly, 32*, 493. doi:10.1111/j.1471-6402.2008.00468.x.

Krahé, B. (2000a). Sexual scripts and heterosexual aggression. In T. Eckes & H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 273–292). Mahwah, NJ: L. Erlbaum.

Krahé, B. (2000b). Childhood sexual abuse and revictimization in adolescence and adulthood. *Journal of Personal and Interpersonal Loss, 5*, 149–165. doi:10.1080/10811440008409749.

Krahé, B. (2011). Pornografiekonsum, sexuelle Skripts und sexuelle Aggression im Jugendalter [Pornography use, sexual scripts and sexual aggression in adolescence]. *Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie, 43*, 133–141. doi:10.1026/0049-8637/a000044.

Krahé, B. (2013). *The social psychology of aggression* (2nd ed.). Hove: Psychology Press.

Krahé, B., Bieneck, S., & Scheinberger-Olwig, R. (2007a). Adolescents' sexual scripts: Schematic representations of consensual and nonconsensual heterosexual interactions. *Journal of Sex Research, 44*, 316–327. doi:10.1080/00224490701580923.

Krahé, B., Bieneck, S., & Scheinberger-Olwig, R. (2007b). The role of sexual scripts in sexual aggression and victimization. *Archives of Sexual Behavior, 36*, 687–701. doi:10.1007/s10508-006-9131-6.

Krahé, B., Tomaszewska, P., Kuyper, L., & Vanwesenbeeck, I. (2014). Prevalence of sexual aggression among young people in Europe: A review of the evidence from 27 EU countries. *Aggression and Violent Behavior, 19*, 545–558. doi:10.1016/j.avb.2014.07.005.

Kuyper, L., de Wit, J., Smolenski, D., Adam, P., Woertman, L., & van Berlo, W. (2013). Gender differences in patterns of experienced sexual coercion and associated vulnerability factors among young people in the Netherlands. *Journal of Interpersonal Violence, 28*, 3149–3170. doi:10.1177/0886260513488689.

Leduc, B. (2009). *Guidelines for gender sensitive research*. The International Centre for Integrated Mountain Development. Retrieved March 30, 2013, from www.icimod.org/resource/1290.

Lehrer, J. A., Lehrer, E. L., & Koss, M. P. (2013). Unwanted sexual experiences in young men: Evidence from a survey of university students in Chile. *Archives of Sexual Behavior, 42*, 213–223. doi:10.1007/s10508-012-0004-x.

Lehrer, J. A., Lehrer, V. L., Lehrer, E. L., & Oyarzun, P. B. (2007). Prevalence of and risk factors for sexual victimization in college women in Chile. *International Family Planning Perspectives, 33*, 168–175. doi:10.1363/3316807.

Lindgren, K. P., Schacht, R. L., Pantoalone, D. W., Blayney, J. A., & George, W. H. (2009). Sexual communication, sexual goals, and students' transition to college: Implications for sexual assault, decision-making, and risky behaviors. *Journal of College Student Development, 50*, 1–15. doi:10.1353/csd.0.0095.

Lo, V., & Wei, R. (2005). Exposure to internet pornography and Taiwanese adolescents' sexual attitudes and behavior. *Journal of Broadcasting & Electronic Media, 49*, 221–237. doi:10.1207/s15506878jobem4902_5.

Marinheiro, A. L., Vieira, E. M., & de Souza, L. (2006). Prevalência da violência contra a mulher usuária de serviço de saúde [Prevalence of violence against women users of health services]. *Revista de Saúde Pública, 40*, 604–610. doi:10.1590/S0034-89102006000500008.

Messman-Moore, T. L., & Long, P. J. (2000). Child sexual abuse and revictimization in the form of adult sexual abuse, adult physical abuse, and adult psychological maltreatment. *Journal of Interpersonal Violence, 15*, 489–502. doi:10.1177/088626000015005003.

O'Sullivan, L. F., & Allgeier, E. R. (1994). Disassembling a stereotype: Gender differences in the use of token resistance. *Journal of Applied Social Psychology, 24*, 1035–1055. doi:10.1111/j.1559-1816.1994.tb02372.x.

O'Sullivan, L. F., & Allgeier, E. R. (1998). Feigning sexual desire: Consenting to unwanted sexual activity in heterosexual dating relationships. *Journal of Sex Research, 35*, 234–243. doi:10.1080/00224499809551938.

Palmer, R. S., McMahon, T. J., Rounsaville, B. J., & Ball, S. A. (2010). Coercive sexual experiences, protective behavioral strategies, alcohol expectancies and consumption among male and female college students. *Journal of Interpersonal Violence, 25*, 1563–1578. doi:10.1177/0886260509354581.

Paul, E. L., & Hayes, K. A. (2002). The causalities of ''casual'' sex: A qualitative exploration of the phenomenology of college students' hookups. *Journal of Social and Personal Relationships, 19*, 639–661. doi:10.1177/0265407502195006.

Peter, J., & Valkenburg, P. M. (2006). Adolescents' exposure to sexually explicit material on the Internet. *Communication Research, 33*, 178–204. doi:10.1177/0093650205285369.

Peter, J., & Valkenburg, P. M. (2008). Adolescents' exposure to sexually explicit internet material, sexual uncertainty, and attitudes toward uncommitted sexual exploration: Is there a link? *Communication Research, 35*, 579–601. doi:10.1177/0093650208321754.

Ricardo, C., & Barker, G. (2008). *Men, masculinities, sexual exploitation and sexual violence: A literature review and call for action*. Rio de Janeiro: Promundo/MenEngage Alliance. Retrieved online September 20, 2014, from: http://www.hapinternational.org/pool/files/ricardobarkermenmasculinitiessexualexploitationsexualviolence.pdf.

Roodman, A. A., & Clum, G. A. (2001). Revictimization rates and method variance: A meta-analysis. *Clinical Psychology Review, 21*, 183–204. doi:10.1016/S0272-7358(99)00045-8.

Rose, S., & Frieze, I. H. (1993). Young singles' contemporary dating scripts. *Sex Roles, 28*, 499–509. doi:10.1007/BF00289677.

Sartor, C. E., Agrawal, A., McCutcheon, V. V., Duncan, A. E., & Lynskey, M. T. (2008). Disentangling the complex association between childhood sexual abuse and alcohol-related problems: A review of methodological issues and approaches. *Journal of Studies on Alcohol and Drugs, 69*, 718–727.

Schraiber, L. B., D'Oliveira, A. F., & Franca Junior, I. (2008). Violência sexual por parceiro íntimo entre homens e mulheres no Brasil urbano, 2005 [Intimate partner sexual violence among men and women in urban Brazil, 2005]. *Revista de Saúde Pública, 42*, 127–137. doi:10.1590/S0034-89102008000800015.

Schreiber, J. B., Amaury, N., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *Journal of Educational Research, 99*, 323–338. doi:10.3200/JOER.99.6.323-338.

Senn, T. E., Carey, M. P., & Vanable, P. A. (2008). Childhood and adolescent sexual abuse and subsequent sexual risk behavior: Evidence from controlled studies, methodological critique, and suggestions for research. *Clinical Psychology Review, 28*, 711–735. doi:10.1016/j.cpr.2007.10.002.

Simon, W., & Gagnon, J. H. (1986). Sexual scripts: Permanence and change. *Archives of Sexual Behavior, 15*, 97–120. doi:10.1007/BF01542219.

Spitzberg, B. H. (1999). An analysis of empirical estimates of sexual aggression victimization and perpetration. *Violence and Victims, 14*, 241–260.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scales (CTS2). *Journal of Family Issues, 17*, 283–316. doi:10.1177/019251396017003001.

Testa, M., Hoffman, J. H., & Livingston, J. A. (2010). Alcohol and sexual risk behaviors as mediators of the sexual victimization–revictimization relationship. *Journal of Consulting and Clinical Psychology, 78*, 249–259. doi:10.1037/a0018914.

Ward, L. M. (2003). Understanding the role of entertainment media in the sexual socialization of American youth: A review of empirical research. *Developmental Review, 23*, 347–388. doi:10.1016/S0273-2297(03)00013-3.

Weiss, K. G. (2010). Male sexual victimization: Examining men's experiences of rape and sexual assault. *Men and Masculinities, 12*, 275–298. doi:10.1177/1097184X08322632.

Widom, C. S., Czaja, S. J., & Dutton, M. A. (2008). Childhood victimization and lifetime revictimization. *Child Abuse and Neglect, 32*, 785–796. doi:10.1016/j.chiabu.2007.12.006.

Wight, D., & Abraham, C. (2000). From psycho-social theory to sustainable classroom practice: Developing a research-based teacher-delivered sex education programme. *Health Education Research, 15*, 25–38. doi:10.1093/her/15.1.25.

World Health Organization. (2005). *Alcohol use and sexual risk behaviour: A cross-cultural study in eight countries*. Geneva: WHO. Retrieved online February 2, 2014, from: http://www.who.int/iris/handle/10665/43122.

Ybarra, M., Mitchell, K., Hamburger, M., Diener-West, M., & Leaf, P. (2011). X-rated material and the perpetration of sexually aggressive behavior among children and adolescents: Is there a link? *Aggressive Behavior, 37*, 1–18. doi:10.1002/ab.20367.

Zotareli, V., Faúndes, A., Osis, M. J. D., Duarte, G. A., & Sousa, M. H. (2012). Gender and sexual violence among students at a Brazilian university. *Revista Brasileira de Saúde Materno Infantil, 12*, 37–46. doi:10.1590/S1519-38292012000100004.