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Is My Sex Life Ok? The Mediating Role of Sexual Anxiety in the Association between Childhood Sexual Abuse and Sexual Coercion against Women

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ABSTRACT

Empirical studies suggest that childhood sexual abuse is associated with sexual revictimization by a male romantic partner in female survivors. Yet, the potential mechanisms underlying this association remain understudied. Past studies indicated that women childhood sexual abuse survivors report more sexual anxiety, which in turn was linked to an increased risk of sustaining sexual coercion. The current study, conducted with a sample of 448 adult women from the community, aimed to examine sexual anxiety as a potential mechanism in the association between childhood sexual abuse and sexual coercion sustained by women in heterosexual romantic relationships. Results from path analyses confirmed the indirect effect of sexual anxiety in the relationship between childhood sexual abuse and sexual coercion victimization. Findings indicated that childhood sexual abuse is associated with higher levels of sexual anxiety, which in turn, was linked to a higher frequency of sexual coercion experiences perpetrated by the romantic partner. This study contributes to a better understanding of the determinants of sexual violence against women and provides an empirical basis to better inform prevention initiatives and guide future interventions.

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KEYWORDS

Childhood sexual abuse; sexual anxiety; sexual coercion; intimate partner sexual violence; sexual revictimization; violence against women

It is increasingly recognized that violence against women is a significant public health problem (World Health Organization, 2012), particularly violence that takes place in the context of an intimate relationship. One form of intimate partner violence that remains understudied is sexual violence, which includes any unwanted sexual contact and unwanted non-contact sexual experiences (e.g., insisting on sex once the partner has already refused, using threats to have sex; Barker et al., 2018; Black et al., 2011). Women are the primary victims of such violence, and US national surveys indicate that up to 44% of adult women have experienced sexual violence perpetrated by an intimate partner in their lifetime (Breiding, 2015). Moreover, sexual violence by a romantic partner might

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be equally or even more harmful to women's mental health than sexual violence by a non-partner because the coercive partner is constantly present and has continuous contact with their victim (Temple et al., 2007). Yet, very few studies have examined the specific associated factors or correlates of this type of intimate partner violence.

Sexual coercion is a form of intimate partner sexual violence (Gámez-Guadix et al., 2011) that refers to the use of manipulation, lies, drugs or alcohol, physical force, and other tactics (e.g., use of promises, threats about ending the relationship or spreading rumors, use of one's influence or authority; Black et al., 2011) to have sexual contact with one's partner under pressure, duress, or against their will (Struckman-Johnson et al., 2003). In this study, sexual coercion refers to a large continuum that therefore includes the use of physical force, threats, and persistent pressure under the form of insistence in an attempt to get their partner to engage in sex (Straus et al., 1996). According to North American studies, more than half (54.5%) of heterosexual couples have experienced some form of sexual coercion in their current relationship (Brousseau et al., 2011), with women being twice as likely as men to report having sustained sexual coercion from their romantic partner (Kar & O'Leary, 2010). Recent evidence also suggests that sexual coercion perpetrated by a male partner against a female partner in the past year affected approximately one-fifth of couples (15–19%; Daspe et al., 2016). Considering the common occurrence of this type of violence, it is surprising to observe that sexual violence and its correlates within romantic relationships remain understudied. Indeed, such data could offer useful cues to prevent further victimization and develop effective interventions for survivors. One salient risk factor that has been consistently empirically linked to sexual coercion experiences among adult women is a history of childhood sexual abuse (CSA) (Abramsky et al., 2011).

Childhood sexual abuse

CSA has been associated with numerous deleterious impacts on intimate couple relationships (Dugal et al., 2016; Godbout et al., 2017). Many survivors show difficulties in establishing healthy, fulfilling, and nonviolent intimate relationships (Lassri et al., 2018). For instance, in a study conducted with 16,993 adult men and women, Daigneault et al. (2009) found that women CSA survivors were almost four times more likely to be sexually victimized by their current or previous intimate partners than non-victims of CSA. Similarly, another study, conducted with 204 heterosexual newlywed couples, showed that women with a history of CSA experienced more sexual coercion than women without a history of CSA (DiLillo et al., 2016). However, these few available studies have neglected to explore potential

underlying mechanisms that could explain the association between CSA and adult sexual coercion victimization by a romantic partner. It is clear that the study of these correlates does not aim to hold women survivors accountable for a heightened risk of being victimized. Rather, the examination of the mechanisms that underlie sexual revictimization could help identify key vulnerability factors that could be addressed in prevention and treatment efforts.

Sexual revictimization within couple relationships

Several attempts have been made by researchers and clinicians to explain the association between the experience of CSA and sustained sexual coercion in adults' couple relationships. According to Briere (1992), CSA may lead to an impaired ability to correctly judge others' trustworthiness, an aversion to sex and intimacy, difficulties to identify and express one's needs and desires, or a feeling of powerlessness toward others who are harmful or manipulative, which may increase survivors' vulnerability to future sexual victimization. Other authors have also suggested that potential psychological repercussions of CSA, such as anxiety (Orcutt et al., 2005), post-traumatic stress symptoms (Hébert et al., 2017), and emotion dysregulation (Messman-Moore et al., 2010) could help explain sexual revictimization in CSA survivors. Yet, those repercussions do not consider the sexual nature of these victimization experiences. Indeed, very little attention has been given to the examination of potential sexual mechanisms (i.e., processes and associations between variables, which are related to one's sexuality), such as the role of sexual anxiety in the relation between CSA and later revictimization. Survivor's sexuality may bare the core of some revictimization processes.

Sexual anxiety

Empirical research (Bigras et al., 2017; Lacelle et al., 2012) has shown that CSA is associated with higher levels of sexual anxiety in adulthood, described as "the tendency to feel tension, discomfort, and anxiety about the sexual aspects of one's life" (Snell, 2013, p. 537). According to the theoretical framework of Finkelhor and Browne (1985), CSA may elicit a variety of consequences persisting into adulthood associated to four traumagenic dynamics: betrayal, powerlessness, stigmatization, and traumatic sexualization. Traumatic sexualization refers to a process by which a child's sexuality (i.e., sexual feelings and attitudes) is inappropriately shaped as a result of the abuse (e.g., marked with confusion, misconceptions, frightening memories), which subsequently leads to negative emotional responses, such as sexual

anxiety, triggered during sexual encounters (for more information, see Finkelhor & Browne, 1985).

Sexual anxiety may also be a key correlate of sexual revictimization in women, as it was found to increase vulnerability to sustained sexual coercion in adult women (Messman-Moore et al., 2008). In other words, residual traces of the endured CSA might alter survivors' ability to approach sex in a way that is free from fear and anxiety, and therefore it is possible that sexual anxiety is "associated with" an increased risk of sexual coercion victimization. Noll and Grych (2011) theorized a model of sexual revictimization in which CSA is associated to dysregulated biological processes in reaction to stressful or anxiety-inducing situations that can later influence victims' cognitive, physiological, and emotional responses to sexual threats. As such, sexual anxiety, potentially associated with CSA, may in turn impair one's ability to recognize coercion cues and to mobilize assertive resistance behaviors over the partner's sexually coercive tactics (Hamby & Grych, 2016, p. 75).

One previous study has examined sexual anxiety as a determinant of sexual victimization in women (Messman-Moore et al., 2008). This study demonstrated that sexual anxiety may act as a predictor of later sexual victimization among college women but failed to discriminate between sexual violence sustained from a partner or a non-partner nor did it examine previous experiences of victimization as a more distal predictor (i.e., CSA). Considering the relational nature of CSA and its significant impacts on couple functioning in adulthood (for a review, see Dugal et al., 2016), it is possible that its effect on emotional responses to sexuality (e.g., sexual anxiety) and sexual revictimization is particularly potent in the context of romantic relationships. Nonetheless, studies have yet to examine the role of sexual anxiety as a potential explanatory mechanism of the link between CSA and sustained sexual coercion by a romantic partner.

Purpose of the study

Despite previous studies demonstrating significant associations between CSA, sexual anxiety, and sustained sexual coercion, none has yet examined these variables in an integrative model. In addition, to our knowledge, no previous study has examined the specific mediation role of sexual anxiety in sexual revictimization within women's romantic relationships. The present study aimed to examine sexual anxiety as a mediation mechanism explaining the experience of sustained sexual coercion in romantic relationships by women CSA survivors. It was expected (a) that CSA will be positively associated with higher levels of sexual anxiety, (b) that higher levels of sexual anxiety will be positively associated with more experiences of sexual coercion victimization, and (c) that a mediational model will positively link CSA with increased

experiences of sexual coercion victimization by the current romantic partner, through elevated sexual anxiety.

Method

Participants and procedure

The sample was comprised of 448 self-identified heterosexual women currently involved in a romantic relationship. The mean age of participants was 28.42 years ($SD = 9.40$, range = 18–75). Sociodemographic characteristics of the sample are presented in [Table 1](#)

Participants were invited to take part in an anonymous online survey on past experiences of victimization, intrapersonal functioning, relationships, and sexual functioning. The study was advertised through social media, a web page hosting psychological research, and sent to various electronic mailing lists for students, teachers, and other professionals associated with psychology. In order to meet the inclusion criteria for the study, participants had to be over 18 years old, read French, and be involved in a heterosexual romantic relationship for at least six months.

Table 1. Sociodemographic characteristics.

Characteristics	Participants (%)
Birthplace	
Canada	82.1
United States	8.3
Europe	6.0
Other	3.6
Primary language	
French	84.5
English	12.3
Other	3.2
Occupation	
Student	53.6
Full-time worker	33.4
Part-time worker	9.9
Other	3.1
Education	
Primary school/high school	6.7
College/professional	21.0
Undergraduate	42.2
Graduate	30.1
Annual income	
CAD\$19,999 or less	47.0
CAD\$20,000 – CAD\$39,999	22.8
CAD\$40,000 – CAD\$59,999	15.4
CAD\$60,000 or more	14.8
Relationship status	
Relationship with a regular partner	47.8
Common-law partnership/cohabiting	37.1
Married	15.1

Measures

A sociodemographic questionnaire was used to gather information on participants' age, country of origin, occupation, relational status, level of education, and annual income.

Childhood sexual abuse

CSA was measured using a gate question based on the criteria of the Criminal Code, R.S.C. (1985) and used in previous studies. (e.g., Bigras et al., 2017). Participants were asked whether they experienced any unwanted sexual contact or any sexual contact with an adult, someone 5 years older, or someone in a position of authority before the age of 18. Additional questions assessed the type(s) of CSA (i.e., verbal solicitation, exposed genitals, exposure to sexual scenes, fondling, oral sex, vaginal or anal penetration) and the relation with the abuser(s) (e.g., father, babysitter, uncle/aunt, neighbor). Participants were classified as having experienced CSA if the answer to any question indicated contact or non-contact sexual abuse. A dichotomous code (0 = absence of CSA, 1 = presence of CSA) was used in the analyses.

Sexual anxiety

Sexual anxiety was assessed using the French version (Ravart et al., 2000) of the 5-item Sexual Anxiety subscale of the Multidimensional Sexuality Questionnaire (MSQ; Snell et al., 1993). Participants indicated the extent to which they experienced anxiety concerning sexual aspects of their life on a 5-point Likert scale ranging from 0 (*not at all characteristic of me*) to 4 (*very characteristic of me*) on items such as “*I feel anxious when I think about the sexual aspects of my life*”. Total scores ranged from 0 to 20, with higher scores reflecting more sexual anxiety. The psychometric qualities of the original standardized and validated scale were replicated in the current sample, with a Cronbach's alpha of .87 in the original sample (Snell et al., 1993) and .91 in the current sample.

Sustained sexual coercion

Sustained sexual coercion was assessed using three sexual violence items from the French version (Hébert & Parent, 2000) of the Revised Conflict Tactics Scale (CTS-2; Straus et al., 1996). Participants were asked the frequency, during the last year, at which their romantic partner used insistency, threats, or physical force to have sex with them once they had refused, on a seven-point Likert scale ranging from 0 (*this never happened*), to 6 (*more than 20 times during the past 12 months*). To only consider experiences of sustained sexual coercion in the past year, a score of 0 was assigned to “*not in the past year, but it did happen before*”. For the purpose of this study, scores from the three items were averaged into a continuous score, as per the authors'

recommendations (Straus et al., 1996). Given the small number of items for this scale, the average interitem correlation was used as an indicator of internal consistency, as this strategy is more representative of unidimensionality regardless of the number of items. The present study showed an interitem correlation of .35, which respected the proposed guideline range of .15-.50 (Clark & Watson, 1995).

Statistical analyses

Descriptive analyses, correlations, group comparison analyses, and multiple regressions were conducted using SPSS v24 to examine the distribution of sustained sexual coercion within the sample and the associations between the study variables. In order to test the hypothesized model, path analyses were tested using *Mplus*, version 7 (Muthén and Muthén 1998–2012) which is robust to non-normality through the use of Maximum Likelihood Estimation with Robust Standard Errors (MLR). The use of Full Information Maximum Likelihood (FIML) accounted for missing data. Model fit was tested by examining the following indices of adjustment: the root mean square error of approximation (RMSEA; Steiger, 1990), the comparative fit index (CFI; Bentler, 1990), the chi-square statistic and the ratio of chi-square to degrees of freedom (X^2/df), and the standardized root mean square residual (SRMR). In order to determine the goodness-of-fit of the theorized model, results must show a combination of a non-statistically significant chi-square value, a CFI value of .90 or higher, RMSEA value below .06, SRMR value below .08, and a ratio of chi-square to degrees of freedom less than three (Hu & Bentler, 1999; Kline, 2011; Ullman, 2001).

To examine the mediating role of sexual anxiety, direct effects (i.e., path coefficient from CSA to sustained sexual coercion) and indirect effects (i.e., the product of the path coefficients from CSA to sexual anxiety, and from sexual anxiety to sustained sexual coercion) were then computed using 95% bootstrap confidence intervals: confidence intervals that do not include zero indicate a significant indirect effect, thus a mediation (MacKinnon & Fairchild, 2009; MacKinnon et al., 2007). The present study used a cross-sectional design, and the causal order of the sequence of variables was determined based on theory and chronology.

Results

Descriptive statistics and bivariate correlations

Childhood sexual abuse

In the present sample, 22.1% ($n = 99$) of participants reported having experienced CSA. Of these women, 5.4% reported having experienced non-

contact abuse (verbal solicitation, exposed genitals, exposure to sexual scenes), 58.7% reported having experienced fondling, and 35.9% reported having experienced penetration (oral, vaginal, anal). A total of 32.1% of participants reported intra-familial abuse (e.g., committed by the mother, brother, uncle) and 67.9% reported extra-familial abuse (e.g., committed by a neighbor, clergy member, teacher), mainly by boys of the same age or older unknown men.

Sexual anxiety

Participants presented a mean score of 4.37 ($SD = 5.12$) on the sexual anxiety scale, which represents a low average level of sexual anxiety. Results of group comparison tests indicated that the scores for sexual anxiety differed significantly across CSA survivors and participants without CSA history, $t(126.50) = -2.41$, $p < .05$, with CSA survivors presenting more sexual anxiety ($M = 5.65$, $SD = 6.20$) than participants without CSA history ($M = 4.0$, $SD = 4.72$).

Sustained sexual coercion

Among participants, 21.1% reported having experienced at least one act of sexual coercion from their romantic partner in the past year. Among participants who reported sustained sexual coercion, the average score was 2.62 ($SD = 2.3$), reflecting a frequency of approximately two experiences of sexual coercion in the past year. Among those, 95.6% reported their partner has insisted on sex once they had already refused, 15.4% reported their partner has used threats to have sex with them, and 9.9% reported their partner has used physical force to have sex with them. A chi-square analysis compared the presence of sustained sexual coercion among participants reporting CSA or not. Results revealed that participants with CSA history were more likely to report sustained sexual coercion (30.9%, $n = 29$) than those who did not experience CSA (18.3%, $n = 62$), $\chi^2(1, 432) = 6.92$, $p < .01$, $\phi = .13$, which represents a small effect size.

Bivariate correlations

Bivariate Pearson correlations were run to determine the association between CSA, sexual anxiety, and sustained sexual coercion. Statistically significant positive correlations were found between all study variables. CSA was positively correlated to sexual anxiety ($r = .14$, $p < .01$), as well as sexual coercion experiences ($r = .14$, $p < .01$). Similarly, sexual anxiety was positively correlated to sexual coercion experiences ($r = .29$, $p < .001$).

Integrative model of the mediating role of sexual anxiety in the association between childhood sexual abuse and sustained sexual coercion

First, the direct path from CSA to sustained sexual coercion was tested and found to be significant ($\beta = .12$, $p = .03$). Then, when the mediator was added

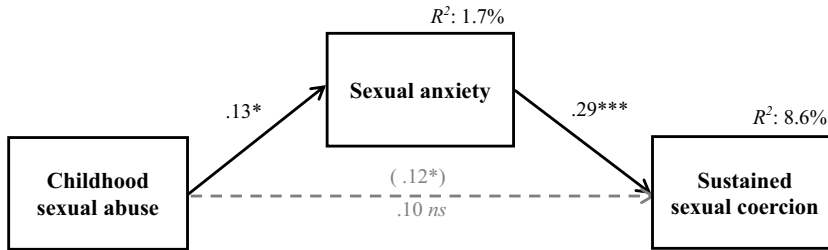


Figure 1. Integrative model of the mediating role of sexual anxiety in the association between childhood sexual abuse and sustained sexual coercion. Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

in the model, the direct path became non-significant, indicating full mediation. Results revealed that the proposed integrative model (see Figure 1) adequately fit the data, CFI = .95, RMSEA = .05 [CI = .00 to .15], $\chi^2 [1] = 2.21$, $p = .14$, Ratio $\chi^2/df = 2.21$, SRMR = .03. Bootstrap confidence intervals showed that the indirect effect of sexual anxiety ($\beta = .04$, 95% CI .01 to .11) in the association between CSA and sustained sexual coercion was significant, indicating mediation of the effect of CSA on sustained sexual coercion through sexual anxiety. More precisely, path analyses showed that CSA was positively associated with sexual anxiety, which in turn, increased the frequency of sustained sexual coercion experiences in a romantic relationship. Overall, the integrative model accounted for 8.6% ($p < .05$) of the variance in sustained sexual coercion.

To assess the generalizability of the mediational model across participants, age, country of origin, and relationship status were added as covariates in the model. Results from additional analyses revealed that controlling for these demographic variables did not change the significance and strength of the associations between the study variables. To examine the alternative hypothesis that could also be compatible with the correlational design of the present study, the integrative model was also tested by changing the order of the study variables (CSA related to sustained sexual coercion in turn associated with sexual anxiety). The model's paths did not reveal a mediation effect, as both the links between CSA and sexual anxiety ($p = .75$) and between CSA and sustained sexual coercion ($p = .42$) were not significant.

Discussion

The current study examined the mediating role of sexual anxiety in the relationship between CSA and sustained sexual coercion in adult women. In our sample, more than one in five women (22.1%) reported CSA, which is consistent with past prevalence rates reported by women collected in various epidemiological studies (Stoltenborgh et al., 2011). Also, more than one in five women (21.1%) reported at least one experience of sexual coercion victimization by their romantic partner in

the past year. This finding corroborates the prevalence found by Daspe et al. (2016) and provides confidence in the finding that sexual coercion perpetrated by a male partner against a female partner in the past year affects almost one-fifth of community couples. In accordance with past results (Daspe et al., 2016), our findings showed a high occurrence of verbal pressure as a tactic of sexual coercion and a lower occurrence of the use of threats or physical force. In short, our results indicate that sexual coercion is a common form of violence among heterosexual couples, mostly through the use of verbal insistence.

Results from the current study support those of previous studies (Daigneault et al., 2009; DiLillo et al., 2016) that have shown an association between CSA and sustained sexual coercion by a romantic partner in women survivors. In addition, the current findings add that sexual anxiety may act as a mechanism explaining the link between CSA and sustained sexual coercion. While the proposed mediational model was never examined before, the current results corroborate past studies that have found that, in women, CSA is linked to higher sexual anxiety (Lacelle et al., 2012), and that high levels of sexual anxiety increase the occurrence of sustained sexual coercion in adult women (Messman-Moore et al., 2008). These findings might reflect that the effect of sexual anxiety on survivors' decreased ability to be aware of their present-moment experience, bodily sensations (Déziel et al., 2018), self-understanding (e.g., acknowledgment of sexual needs or unwillingness to have sexual intimacy), and perhaps sexual assertiveness (Zerubavel & Messman-Moore, 2013), may in turn be related to sexual victimization by an intimate partner (Testa et al., 2007). These findings concur with Finkelhor and Asdigian's theory (Finkelhor & Asdigian, 1996), which stated that survivors' personal characteristics could represent vulnerabilities increasing the risk that aggressors may choose them as targets. Based on the current results, sexual anxiety could compromise survivors' capacity to resist or deter further victimization, and thus heighten their vulnerability to sexual violence experiences.

Considering the relational nature of partner violence, it seems important to also acknowledge the potential couple dynamics involved in our participants' experiences. Our findings could indicate that sexual anxiety experienced by a CSA survivor may potentially lead to avoidance of sexual intimacy with a romantic partner, as a way to avoid feeling anxious about the sexual aspects of one's life (Vaillancourt-Morel et al., 2015). However, stress-related avoidance strategies can increase one's risk of relational conflicts and sustained sexual coercion in relationships (Brassard et al., 2007). The relational nature of partner sexual violence may also add a level of complexity that involves multiple cognitive processes (e.g., desire to preserve the relationship, fear of being judged, ensuring physical safety) that can impede on women's interpretation and defense response to sexually coercive experiences, such as lower sexual assertiveness (Macy et al., 2006). Moreover, it is likely that such endured sexually coercive experiences maintain or increase women's sexual anxiety and

the use of sex avoidance strategies, possibly contributing to trapping both partners in a vicious cycle of negative interactions that may lead to the crystallization of sexually coercive tactics and sexual victimization.

Limitations and future studies

Results of this study should be appreciated in the light of its limitations. First, the use of retrospective self-report measures might heighten the risk of distortions in the recall of victimization experiences (e.g., CSA survivors might be more inclined to perceive and disclose sexual coercion; Breitenbecher, 2001) and enhance social desirability bias. Yet, self-reported measures have been found to be reliable in documenting endured victimization when using behavioral items (and not self-identification as a “victim”), leading to data that captures more accurate proportions compared to prospective measures or official documents (Newbury et al., 2018). Second, conclusions on the direction of causality or temporal order of the associations between the variables are theory-driven and longitudinal design are needed to confirm the model. Third, CSA measurement relied only on one item. Although using a dichotomized item to measure CSA is sufficient to predict the association between CSA and later couple difficulties (Godbout et al., 2009), more comprehensive measures of CSA may provide pertinent information on the potential role of the characteristics of CSA in association with sexual revictimization. Similarly, more information on the romantic relationship (e.g., length of their current romantic relationship) may provide relevant information and should be considered in future studies. Fourth, it is impossible to make firm assumptions about the generalizability of the results considering that the sample consisted of women involved in heterosexual relationships. Further research should aim to replicate this study with different samples, analyzing potential specificities regarding LGBTQ+ participants and men, given these populations may have particular issues that differ from the current sample. Sexual coercion perpetrated against sexual and gender minority women is a distinct phenomenon that deserves its own empirical study, as they are significantly more likely to report sexual victimization (Martin-Storey et al., 2018). Lastly, it would also be relevant to explore what specific aspects of one’s sex life that might cause anxiety or discomfort to better guide interventions and reduce sexual revictimization risk. For example, if the anxiety is caused by the fear of consequences of sexual refusal or if it is caused by the struggle to communicate one’s desires to their partner, the subsequent intervention efforts aimed at reducing that sexual anxiety may be very different.

Practical implications

These limitations notwithstanding, our data provides a new understanding of the mechanism through which women CSA survivors may experience sexual

coercion in their adult romantic relationships. The current study highlights sexual anxiety as a relevant mechanism involved in sexual revictimization in women. Thus, this study provides an empirical basis for adapted prevention or intervention programs aimed at women CSA survivors or women who report sustained sexual coercion in their romantic relationship. For instance, results support the need to assess CSA history in women victims of sexual coercion by an intimate partner.

Results also emphasize the important need for sexual rights education, and for prevention and intervention programs addressing sexual anxiety in women CSA survivors in order to prevent sexual coercion. For example, the Enhanced Assess, Acknowledge, Act (EAAA) Sexual Assault Resistance Program (SARE Centre, 2019) provides tools for women to better recognize risk cues for sexual violence, overcome personal obstacles to prioritizing their own sexual rights, and elaborate effective strategies to defend their boundaries. Such programs could also educate on the ongoing collaborative processes needed between partners for healthy and satisfying sexual relationships, which requires consent, connection, humanity, vulnerability, compassionate communication skills, and treating your partner like an equal.

Practitioners should target the regulation of anxiety about sexual aspects of one's life, through methods such as mindfulness training in order to reduce anxiety and elevate present-moment and body awareness (Silverstein et al., 2011), and promoting sexual assertiveness as a way to help women's relational functioning. For example, Livingston et al. (2007) have documented the benefits of interventions designed to improve women's ability to refuse unwanted sexual acts in order to reduce their risk of sexual revictimization (Livingston et al., 2007). Sexual self-knowledge, sexual assertiveness, and increased couple communication skills could decrease sexual anxiety for women, promoting the healthy expression of partners' desires, needs, and limits within a clear honest discussion. The goal of sexual assertiveness enhancement is to help partners develop and share sexual intimacy mutually consensual and pleasurable, thus ensuring a climate of trust between partners (Greene & Faulkner, 2005; MacNeil & Byers, 2009). Despite the modest proportion of explained variance, sexual anxiety relevance in clinical practice determines the need to further explore this phenomenon. Thereby, the current study brings new insights into possible educational, preventive, curative, and clinical practices aiming at promoting mental and relational health in women, especially CSA survivors.

Conclusion

In conclusion, the sexual repercussions of CSA, and specifically elevated sexual anxiety, in women survivors may increase survivors' vulnerability to sexual revictimization by a male romantic partner. The present study offers a significant first step in establishing the relevance to examine sexual anxiety

as a mechanism underlying sexual revictimization. The good news is that sexual anxiety can be lowered. As such, psychotherapy and intervention programs designed to promote women's safety in their relationships and lessen sexual revictimization risk should aim to reduce sexual anxiety. It is important to mention that results of this study should not be interpreted as blaming women for their victimization nor increasing their burden by protecting themselves from sexual revictimization. The responsibility for sexual violence always lies with the perpetrator. Rather, it is hoped that acknowledging CSA and its long-term consequences on women's sexuality and relational well-being might help prevent subsequent sexual victimization. The ultimate target of sexual violence research is to empower women in the prevention of violence. In the present era of #MeToo movement, this study provides empirical data on sexual violence perpetrated against women inside their own home.

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Disclosure of interest

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Ethical standards and informed consent

All procedures followed were in accordance with the ethical standards the Human Research Review Committee of the Université du Québec à Montréal, and with the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all participants for being included in the study. No identifying information about participants was included in the article.

References

- Abramsky, T., Watts, C. H., Garcia-Moreno, C., Devries, K., Kiss, L., Ellsberg, M., Jansen, H. A., & Heise, L. (2011). What factors are associated with recent intimate partner violence? Findings from the WHO multi-country study on women's health and domestic violence. *BMC Public Health*, *11*(1), 109–125. <https://doi.org/10.1186/1471-2458-11-109>
- Barker, L. C., Stewart, D. E., & Vigod, S. N. (2018). Intimate partner sexual violence: An often overlooked problem. *Journal of Women's Health*, *28*(3), 363–374. <http://doi.org/10.1089/jwh.2017.6811>
- Bentler, P. M. (1990). Comparative fit indices in structural models. *Psychological Bulletin*, *107*(2), 38–246. <https://doi.org/10.1037/0033-2909.107.2.238>
- Bigras, N., Daspe, M. È., Godbout, N., Briere, J., & Sabourin, S. (2017). Cumulative childhood trauma and adult sexual satisfaction: Mediation by affect dysregulation and sexual anxiety in men and women. *Journal of Sex & Marital Therapy*, *43*(4), 377–396. <http://doi.org/10.1080/0092623X.2016.1176609>
- Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., Chen, J., & Stevens, M. R. (2011). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 summary report*. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Brassard, A., Shaver, P. R., & Lussier, Y. (2007). Attachment, sexual experience, and sexual pressure in romantic relationships: A dyadic approach. *Personal Relationships*, *14*(3), 475–493. <https://doi.org/10.1111/j.1475-6811.2007.00166.x>
- Breiding, M. J. (2015). Prevalence and characteristics of sexual violence, stalking, and intimate partner violence victimization—national intimate partner and sexual violence survey, United States, 2011. *American Journal of Public Health*, *105*(4), e11–e12. <http://doi.org/10.2105/AJPH.2015.302634>
- Breitenbecher, K. H. (2001). Sexual revictimization among women: A review of the literature focusing on empirical investigations. *Aggression and Violent Behavior*, *6*(4), 415–432. [https://doi.org/10.1016/S1359-1789\(00\)00014-8](https://doi.org/10.1016/S1359-1789(00)00014-8)
- Briere, J. (1992). *Child abuse trauma: Theory and treatment of the lasting effects*. Sage Publications, Inc.
- Brousseau, M. M., Bergeron, S., Hébert, M., & McDuff, P. (2011). Sexual coercion victimization and perpetration in heterosexual couples: A dyadic investigation. *Archives of Sexual Behavior*, *40*(2), 363–372. <https://doi.org/10.1007/s10508-010-9617-0>

- Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, 7(3), 309–319. <https://doi.org/10.1037/1040-3590.7.3.309>
- Criminal Code, R.S.C. (1985). c.34, s.150(1). http://www2.psych.utoronto.ca/users/reingold/courses/resources/handouts_apa/Citing4.pdf
- Daigneault, I., Hébert, M., & McDuff, P. (2009). Men's and women's childhood sexual abuse and victimization in adult partner relationships: A study of risk factors. *Child Abuse & Neglect*, 33(9), 638–647. <http://doi.org/10.1016/j.chiabu.2009.04.003>
- Daspe, M.-È., Sabourin, S., Godbout, N., Lussier, Y., & Hébert, M. (2016). Neuroticism and men's sexual coercion as reported by both partners in a community sample of couples. *Journal of Sex Research*, 53(8), 1036–1046. <http://doi.org/10.1080/00224499.2015.1094778>
- Déziel, J., Godbout, N., & Hébert, M. (2018). Anxiety, dispositional mindfulness, and sexual desire in men consulting in clinical sexology: A mediational model. *Journal of Sex & Marital Therapy*, 44(5), 1–8. <http://doi.org/10.1080/0092623X.2017.1405308>
- DiLillo, D., Jaffe, A. E., Watkins, L. E., Peugh, J., Kras, A., & Campbell, C. (2016). The occurrence and traumatic impact of sexual revictimization in newlywed couples. *Couple and Family Psychology: Research and Practice*, 5(4), 212–225. <http://doi.org/10.1037/cfp0000067>
- Dugal, C., Bigras, N., Godbout, N., & Bélanger, C. (2016). Childhood interpersonal trauma and its repercussions in adulthood: An analysis of psychological and interpersonal sequelae. In G. El-Baalbaki & C. Fortin (Eds.), *A multidimensional approach to post-traumatic stress disorder-from theory to practice* (pp. 71–107). IntechOpen.
- Finkelhor, D., & Asdigian, N. L. (1996). Risk factors for youth victimization: Beyond a lifestyles/routine activities theory approach. *Violence and Victims*, 11(1), 3–19. <https://doi.org/10.1891/0886-6708.11.1.3>
- Finkelhor, D., & Browne, A. (1985). The traumatic impact of child sexual abuse: A conceptualization. *American Journal of Orthopsychiatry*, 55(4), 530–541. <http://doi.org/10.1111/j.1939-0025.1985.tb02703.x>
- Gámez-Guadix, M., Straus, M. A., & Hershberger, S. L. (2011). Childhood and adolescent victimization and perpetration of sexual coercion by male and female university students. *Deviant Behavior*, 32(8), 712–742. <https://doi.org/10.1080/01639625.2010.514213>
- Godbout, N., Daspe, M.-È., Lussier, Y., Sabourin, S., Dutton, D., & Hébert, M. (2017). Early exposure to violence, relationship violence, and relationship satisfaction in adolescents and emerging adults: The role of romantic attachment. *Psychological Trauma: Theory, Research, Practice, and Policy*, 9(2), 127–137. <http://doi.org/10.1037/tra0000136>
- Godbout, N., Sabourin, S., & Lussier, Y. (2009). Child sexual abuse and adult romantic adjustment: Comparison of single-and multiple-indicator measures. *Journal of Interpersonal Violence*, 24(4), 693–705. <https://doi.org/10.1177/0886260508317179>
- Greene, K., & Faulkner, S. L. (2005). Gender, belief in the sexual double standard, and sexual talk in heterosexual dating relationships. *Sex Roles*, 53(3–4), 239–251. <http://doi.org/10.1007/s11199-005-5682-6>
- Hamby, S., & Grych, J. (2016). The complex dynamics of victimization: Understanding differential vulnerability without blaming the victim. In C. Cuevas & C. Rennison (Eds.), *The Wiley handbook on the psychology of violence* (pp. 66–85). Wiley-Blackwell.
- Hébert, M., Daspe, M. È., Blais, M., Lavoie, F., & Guerrier, M. (2017). Agression sexuelle et violence dans les relations amoureuses: Le rôle médiateur du stress post-traumatique. *Criminologie*, 50(1), 157–179. <http://doi.org/10.7202/1039800ar>
- Hébert, M., & Parent, N. (2000). *Version française abrégée du Revised Conflict Tactics Scales (CTS-2) [French version of the short form of Revised Conflict Tactics Scales]*. (M. A. Straus,

- S. L. Hamby, S. Boney-McCoy, & D. B. Sugarman, 1996). Department of Sexology, Université du Québec à Montréal.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Kar, H. L., & O’Leary, K. D. (2010). Gender symmetry or asymmetry in intimate partner victimization? Not an either/or answer. *Partner Abuse*, 1(2), 152–168. <https://doi.org/10.1891/1946-6560.1.2.152>
- Kline, R. B. (2011). *Principles and practice of structural equation modeling*. Guilford Press.
- Lacelle, C., Hébert, M., Lavoie, F., Vitaro, F., & Tremblay, R. E. (2012). Sexual health in women reporting a history of child sexual abuse. *Child Abuse & Neglect*, 36(3), 247–259. <https://doi.org/10.1016/j.chiabu.2011.10.011>
- Lassri, D., Luyten, P., Fonagy, P., & Shahar, G. (2018). Undetected scars? Self-criticism, attachment, and romantic relationships among otherwise well-functioning childhood sexual abuse survivors. *Psychological Trauma: Theory, Research, Practice, and Policy*, 10(1), 121–129. <http://doi.org/10.1037/tra0000271>
- Livingston, J. A., Testa, M., & VanZile-Tamsen, C. (2007). The reciprocal relationship between sexual victimization and sexual assertiveness. *Violence against Women*, 13(3), 298–313. <https://doi.org/10.1177/1077801206297339>
- MacKinnon, D. P., & Fairchild, A. J. (2009). Current directions in mediation analysis. *Current Directions in Psychological Science*, 18(1), 16–20. <https://doi.org/10.1111/j.1467-8721.2009.01598.x>
- MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. *Annual Review of Psychology*, 58(1), 593–614. <https://doi.org/10.1146/annurev.psych.58.110405.085542>
- MacNeil, S., & Byers, E. S. (2009). Role of sexual self-disclosure in the sexual satisfaction of long-term heterosexual couples. *Journal of Sex Research*, 46(1), 3–14. <https://doi.org/10.1080/00224490802398399>
- Macy, R. J., Nurius, P. S., & Norris, J. (2006). Responding in their best interests: Contextualizing women’s coping with acquaintance sexual aggression. *Violence against Women*, 12(5), 478–500. <https://doi.org/10.1177/1077801206288104>
- Martin-Storey, A., Paquette, G., Bergeron, M., Dion, J., Daigneault, I., Hébert, M., & Ricci, S. (2018). Sexual violence on campus: Differences across gender and sexual minority status. *Journal of Adolescent Health*, 62(6), 701–707. <https://doi.org/10.1016/j.jadohealth.2017.12.013>
- Messman-Moore, T. L., Coates, A. A., Gaffey, K. J., & Johnson, C. F. (2008). Sexuality, substance use, and susceptibility to victimization: Risk for rape and sexual coercion in a prospective study of college women. *Journal of Interpersonal Violence*, 23(12), 1730–1746. <https://doi.org/10.1177/0886260508314336>
- Messman-Moore, T. L., Walsh, K. L., & DiLillo, D. (2010). Emotion dysregulation and risky sexual behavior in revictimization. *Child Abuse & Neglect*, 34(12), 967–976. <https://doi.org/10.1016/j.chiabu.2010.06.004>
- Muthén, L. K., & Muthén, B. O. (1998-2012). *Mplus user’s guide* (7th ed.). Muthén & Muthén.
- Newbury, J. B., Arseneault, L., Moffitt, T. E., Caspi, A., Danese, A., Baldwin, J. R., & Fisher, H. L. (2018). Measuring childhood maltreatment to predict early-adult psychopathology: Comparison of prospective informant-reports and retrospective self-reports. *Journal of Psychiatric Research*, 96, 57–64. <https://doi.org/10.1016/j.jpsychires.2017.09.020>
- Noll, J. G., & Grych, J. H. (2011). Read-react-respond: An integrative model for understanding sexual revictimization. *Psychology of Violence*, 1(3), 202–215. <http://doi.org/10.1037/a0023962>

- Orcutt, H. K., Cooper, M. L., & Garcia, M. (2005). Use of sexual intercourse to reduce negative affect as a prospective mediator of sexual revictimization. *Journal of Traumatic Stress: Official Publication of the International Society for Traumatic Stress Studies*, 18(6), 729–739. <https://doi.org/10.1002/jts.20081>
- Ravart, M., Trudel, G., & Turgeon, L. (2000). L'inventaire multidimensionnel de la sexualité [French translation of the Multidimensional Sexuality Questionnaire]. In G. Trudel (Ed.), *Les dysfonctions sexuelles: Évaluation et traitement par des méthodes psychologique, interpersonnelle et biologique* (2nd ed., pp. 585–589). Presse de l'Université du Québec.
- SARE Centre. (2019). *About flip the script™, the Enhanced Assess, Acknowledge, Act (EAAA) sexual assault resistance education program*. <http://sarecentre.org/>
- Silverstein, R. G., Brown, A. C. H., Roth, H. D., & Britton, W. B. (2011). Effects of mindfulness training on body awareness to sexual stimuli: Implications for female sexual dysfunction. *Psychosomatic Medicine*, 73(9), 817–825. <https://doi.org/10.1097/PSY.0b013e318234e628>
- Snell, W. E. (2013). Multidimensional sexual self-concept questionnaire. In T. D. Fisher, C. M. Davis, & W. L. Yarber (Eds.), *Handbook of sexuality-related measures Third Edition* (pp. 537–539). Routledge.
- Snell, W. E., Fisher, T. D., & Walters, A. S. (1993). The multidimensional sexuality questionnaire: An objective self-report measure of psychological tendencies associated with human sexuality. *Annals of Sex Research*, 6(1), 27–55. <https://doi.org/10.1007/BF00849744>
- Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research*, 25(2), 173–180. https://doi.org/10.1207/s15327906mbr2502_4
- Stoltenborgh, M., Van Ijzendoorn, M. H., Euser, E. M., & Bakermans-Kranenburg, M. J. (2011). A global perspective on child sexual abuse: Meta-analysis of prevalence around the world. *Child Maltreatment*, 16(2), 79–101. <https://doi.org/10.1177/1077559511403920>
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2) development and preliminary psychometric data. *Journal of Family Issues*, 17(3), 283–316. <https://doi.org/10.1177/019251396017003001>
- Struckman-Johnson, C., Struckman-Johnson, D., & Anderson, P. B. (2003). Tactics of sexual coercion: When men and women won't take no for an answer. *Journal of Sex Research*, 40(1), 76–86. <http://doi.org/10.1080/00224490309552168>
- Temple, J. R., Weston, R., Rodriguez, B. F., & Marshall, L. L. (2007). Differing effects of partner and nonpartner sexual assault on women's mental health. *Violence against Women*, 13(3), 285–297. <http://doi.org/10.1177/1077801206297437>
- Testa, M., VanZile-Tamsen, C., & Livingston, J. A. (2007). Prospective prediction of womens sexual victimization by intimate and nonintimate male perpetrators. *Journal of Consulting and Clinical Psychology*, 75(1), 52–60. <http://doi.org/10.1037/0022-006X.75.1.52>
- Ullman, S. E. (2001). Structural equation modeling. In B. G. Tabachnick & L. S. Fidell (Eds.), *Using multivariate statistics* (4th ed., pp. 653–771). Allyn and Bacon.
- Vaillancourt-Morel, M. P., Godbout, N., Labadie, C., Runtz, M., Lussier, Y., & Sabourin, S. (2015). Avoidant and compulsive sexual behaviors in male and female survivors of childhood sexual abuse. *Child Abuse & Neglect*, 40, 48–59. <http://doi.org/10.1016/j.chiabu.2014.10.024>
- World Health Organization. (2012). *Understanding and addressing violence against women: Intimate partner violence* (No. WHO/RHR/12.36). World Health Organization.
- Zerubavel, N., & Messman-Moore, T. L. (2013). Sexual victimization, fear of sexual powerlessness, and cognitive emotion dysregulation as barriers to sexual assertiveness in college women. *Violence against Women*, 19(12), 1518–1537. <https://doi.org/10.1177/1077801213517566>