# Sexual Satisfaction in Childhood Sexual Abuse Survivors: The Mediating Role of Romantic Attachment and Dyadic Coping in Romantic Relationships



Melissa Phua

Student number: 1149040

Utrecht University

Faculty of Social and Behavioural Sciences

Supervisor: Femke van den Brink

Date: 27-06-2022

Word count: 5343/5500 (excluding exploratory factor analysis)

#### Abstract

Previous literature highlighted the significance of childhood sexual abuse (CSA) on sexual satisfaction in women and men. Given the pervasive lifelong consequences associated with CSA and the health and well-being implications associated with sexual satisfaction, it is beneficial to examine underlying mechanisms of this relationship. The aim of the present study was to examine CSA as a potential factor associated with romantic attachment, and subsequently dyadic coping (DC) and sexual satisfaction. In a cross-sectional design, 221 women and men in committed romantic relationships completed an online self-report questionnaire assessing the variables of interest. Results of correlation analyses revealed no significant associations between CSA and romantic attachment, DC, and sexual satisfaction. Furthermore, results of a serial mediation analysis revealed that romantic attachment and DC did not (sequentially) mediate the relationship between CSA and sexual satisfaction. The current study adds to existing research by supporting the need for more comprehensive understanding of sexual satisfaction for women and men who experienced CSA. The findings raised by this study emphasize the need for a more complete understanding of the CSA-sexual satisfaction link. Future research recommendations include creating a more nuanced perspective on the circumstances and conditions within which CSA impacts sexual well-being as well as a more representative and diverse sample of both women and men of ages, sexual orientations, and ethnicities.

Keywords: childhood sexual abuse, sexual satisfaction, romantic attachment, dyadic coping

Sexual Satisfaction in Childhood Sexual Abuse Survivors: The Mediating Role of Romantic

Attachment and Dyadic Coping in Romantic Relationships

In the past decades, there has been an increase in research on determinants of sexual satisfaction. Sexual satisfaction can be defined as "an affective response arising from one's subjective evaluation of the positive and negative dimensions associated with one's sexual relationship" (Lawrance & Byers, 1995, p. 268). Data from a large-scale study on participants from several European countries indicate that about 23-34% of women experience low sexual satisfaction (Graziottin, 2007). In the Netherlands, about 92% of men and 75% of women report sexual satisfaction (Rutgers, 2017). Research further indicates that sexual satisfaction plays a key role in individuals' overall well-being and quality of life (Anderson, 2013; Davison et al., 2009). Yet in a subset of the population, an apparent link can be observed between (childhood) sexual abuse and later sexual satisfaction difficulties (Finkelhor et al., 1989; Leonard et al., 2008)

Sexual abuse is a worldwide issue with negative short- and long-term implications on physical, psychological, as well as sexual health, including diminished sexual satisfaction in adulthood (Hailes et al., 2019; Nielsen et al., 2018). As many women and men that undergo sex therapy are survivors of sexual abuse (Leonard & Follette, 2002; Pulverman et al., 2018), sexual abuse may be an important determinant of sexual satisfaction. Childhood sexual abuse (CSA) can be defined as the involvement of a child in any sexual act, either by an adult figure or another child, where the child victim was unable to or did not give informed consent, or was not developmentally prepared, or that violated the laws or social taboos of society (WHO, 1999). According to the World Health Organization (2020), 25% of women and 7.7% of men report a history of sexual abuse during childhood and adolescence. In the Netherlands, about 10-14% of women and 3-4% of men had experienced sexual boundary crossing and/or sexual violence before the age of 16 (Rutgers, 2017).

Given the significant implications that both CSA and sexual satisfaction can have on one's general health and well-being, it is worthwhile to examine the possible mechanisms underlying the relation between CSA and sexual satisfaction.

An explanation of how CSA can lead to sexual difficulties (i.e., sexual satisfaction) is provided by the Self-Trauma Model (Briere, 2002; Briere & Scott, 2014). There are three pathways which may disrupt developmental processes: (1) altered expectations and assumptions about relationships, including the trust and safety required in sexual activities; (2) attention on distorted cognitions and external states, consequently leading to negative selfschemas or indiscriminate/compulsive sexual behaviors; (3) inadequate resources (as a result of the traumatic context of CSA) to develop adequate emotion regulation abilities. It is theorized that these pathways can lead to a disruption in child development and the emergence of later symptomatology, further complicating sexual well-being. Furthermore, as CSA occurs in the context of human relationships, it can disrupt and inhibit normal processes of trust, autonomy, and stability in relationships (Elliott, 1994; Leifer et al., 2003). Thus, CSA may lead to a diminished ability to connect with others throughout life, including establishing and maintaining healthy intimate relationships in adulthood (Dimitrova et al., 2010; Oshri et al., 2015). As the romantic context in particular combines intimacy and sexuality, romantic relationships might pose a specific challenge for CSA survivors. Romantic attachment is one factor that could potentially explain why CSA survivors may struggle to form intimate connections.

Attachment can be defined as a systematic pattern of expectations, emotions, and behaviors resulting from an individual's unique attachment history (Mikulincer & Shaver, 2013). Attachment directs individuals' social interactions and provides the framework for people's understanding and expectations about relationships (Fraley & Shaver, 2000; Hazan & Shaver, 1987). As such, adult romantic attachment may provide a theoretical framework for

understanding the developmental implications of sexual abuse, later difficulties with forming (intimate) connections, and sexual satisfaction.

Romantic adult attachment can be conceptualized in terms of two dimensions: attachment anxiety and attachment avoidance (Brennan et al., 1998; Fraley & Shaver, 2000). According to Hazan and Shaver (1987), the attachment anxiety dimension is marked by a strong desire for closeness and an insufficient sense of security. In particular, attachment anxiety refers to the degree to which the individual worries that a partner will be unavailable and unsupportive in times of need, which in turns heightens efforts to maintain closeness to relationship partners (Berant et al., 2005; Shaver & Mikulincer, 2002). This extends toward sexual relationships as well: anxious individuals tend to be preoccupied with abandonment and tend to defer to their partner's sexual needs (Davis et al., 2006; Shaver & Hazan, 1988). These concerns may influence anxious individuals in such a way that they have difficulty enjoying sexual encounters.

In contrast, attachment avoidance is marked by a fear of closeness and a tendency to avoid relying on others (Brennan et al., 1998). Attachment avoidance refers to the extent to which the individual distrusts relationship partners' good intentions and capacity to help, which in turn increases efforts to maintain a safe degree of independence and self-reliance. Their discomfort toward closeness and intimacy seems to extend to (romantic) sexual relationships: avoidant individuals have aversive feelings about sex and tend to be uncomfortable with intimacy and closeness, which may negatively impact sexual satisfaction (Birnbaum et al., 2006).

Research has indeed shown that CSA has often been associated with attachment anxiety and attachment avoidance (Meyer et al., 2017; Roche et al., 1999) as well as lower levels of attachment security in in romantic relationships (Aspelmeier et al., 2007; Oshri et al., 2015).

Attachment insecurities can further impair healthy and functional patterns of dyadic communication (e.g., Feeney & Noller, 1992). Anxiously attached individuals tend to bottle up and hide their emotions from romantic partners (Feeney, 1995; 1999), while also dismissing or doubting the partner's expressions of positive feelings for them (Noller, 2005). Avoidantly attached individuals are less likely to encourage warm and affectionate exchanges with a romantic partner and may be less accurate in decoding the partner's verbal and nonverbal messages, particularly regarding signals for a desire of closeness, support, or reassurance (Schachner et al., 2005). Research further shows that higher scores on measures of attachment anxiety and avoidance are also related to lower sensitive responding in times of stress (Collins and Freeney, 2000; Simpson et al., 1992). To summarize shortly, attachment anxiety and avoidance may lead to an array of maladaptive behaviors that may impede communication within romantic dyads, especially when the partner is undergoing stress.

Indeed, romantic attachment (i.e., attachment anxiety and avoidance) has been linked to negative coping strategies, including poor dyadic coping (Fuenfhausen & Cashwell, 2013; Levesque et al., 2017). Dyadic coping (DC) refers to a stress communication process where partners try to manage stressful circumstances to relieve one another's (shared) stresses (Bodenmann, 2005). There are three interacting factors that constitute the process of DC: the stress signals of one partner, the coping responses of the other partner, and joint coping efforts (Bodenmann, 2008a). Within DC, we can make a distinction between positive and negative DC (Bodenmann & Cina, 2005). Positive DC strategies involve providing the partner help in their coping efforts to alleviate stress. In contrast, negative DC strategies involve an attitude of insincerity and reluctance when helping the partner.

In terms of sexual well-being, positive DC was related to higher sexual satisfaction, sexual behaviors, and orgasms in women (Bodenmann et al., 2010; Wawrzicny et al., 2021). Furthermore, DC is more predictive of relationship functioning overall than individual

coping, indicating the importance of considering the joint coping process in examining romantic relationships (Bodenmann, 2005). Given the key role that DC plays in sexual satisfaction, it would be worthwhile to examine its relation to romantic attachment within this theoretical framework.

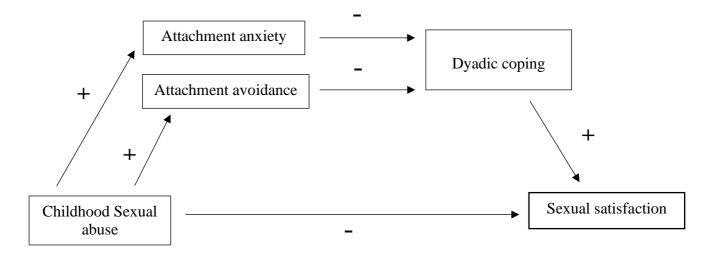
So far, a theoretical pathway from CSA to sexual satisfaction has been discussed in which romantic attachment (i.e., anxiety and avoidance) and DC are proposed as mediating variables. Despite increasing evidence that CSA leads to long-term difficulties in sexual well-being, to the best of our knowledge, no single study has focused explicitly on the role of both attachment and DC in the relationship between CSA and sexual satisfaction. Focusing on the role of attachment and DC may advance our understanding of the mechanisms underlying sexual problems in victims of sexual abuse and provide implications for effective interventions.

## The present study

This study aims to investigate the relationships between CSA, romantic attachment (i.e., attachment anxiety and avoidance), DC, and sexual satisfaction in adult women and men. Firstly, it is hypothesized that the extent to which people have experienced CSA will be negatively associated with sexual satisfaction levels (e.g., Oshri et al., 2015). Secondly, it is argued that CSA will be positively associated with both attachment anxiety and attachment avoidance (e.g., Meyer et al., 2017) and negatively associated with DC (Fuenfhausen & Cashwell, 2013). Thirdly, it is expected that attachment style and DC will mediate the relationship between CSA and sexual satisfaction (Aspelmeier et al., 2007; Bodenmann et al., 2010; Levesque et al., 2017; Wawrzicny et al., 2021). More specifically, it was hypothesized that more CSA experiences would be associated with less sexual satisfaction consecutively through more attachment avoidance and anxiety, and lower levels of positive DC. Figure 1 provides a schematic summary of this hypothetical model.

Figure 1

Schematic Summary of the Hypothesized Relationship between Childhood Sexual Abuse and Sexual Satisfaction, through Attachment Avoidance, Attachment Anxiety and Dyadic Coping.



#### Methods

## **Participants and Procedure**

Participants were recruited through social networking channels and the SONA system of Utrecht University. Women and men who were 18 years or older, residing in the Netherlands and (sexually) engaged in committed romantic relationships were invited to take part in the survey. The survey was created on Qualtrics (2005) and available in both Dutch and English. Prior to starting the questionnaire, participants were provided with information regarding the study, their guaranteed anonymity and voluntary participation. Participants were asked to give informed consent in order to proceed. Afterwards, participants filled in a set of questionnaires including demographics, sexual satisfaction, CSA, romantic attachment, and DC. At the end of the questionnaire, Utrecht University students of the social science department were able to receive course credits for their participation. This study was approved by the Ethics Committee of the Faculty of Social and Behavioral Sciences of Utrecht University, the Netherlands (FETC-21-0427).

Prior to the study, sample size calculations were conducted using G\*Power 3.1.8.7 statistical power software (Faul et al., 2007). Under the guidelines of Cohen (1998), the power analysis revealed that 166 participants would be required to detect small to medium effects with a power of .80 and an alpha of .05. Sample size calculations of the indirect effects revealed that a sample size of 148 would be required to detect mediation effects for small to medium effects (Fritz & MacKinnon, 2007). Considering the results of both sample size calculations, the required sample size was at least N = 166. The estimated effect size was based on effects found in similar past research (Aspelmeier et al., 2007; Mark et al., 2018; Stephenson et al., 2014; Wawrziczny et al., 2021).

A total of 223 participants completed the survey, 2 of which were excluded because they identified as neither female nor male. Therefore, the total number of participants in this study was N = 221. Age ranged between 18 and 64 years (M = 24.89; SD = 8.20). The majority of participants were female (72.4%), heterosexual (83.3%), currently in or having completed university-level education (67.4%), in a romantic relationship for 1-5 years (58.9%), married or in a registered partnership (93.7%) and not living with their partner (61.5%).

## Measures

All scales were translated from English to Dutch with a backward translation method unless otherwise stated.

## Sexual Satisfaction

Sexual satisfaction was measured using the Global Measure of Sexual Satisfaction (GMSEX; Lawrance & Byers, 1995). Participants rate their sexual relationship on five 7-point dimensions (i.e., *Good-Bad, Pleasant-Unpleasant, Positive-Negative, Satisfying-Unsatisfying, Valuable-Worthless*) for the underlying question "In general, how would you describe your

sexual relationship with your partner?". Higher total scores on this measure indicate greater sexual satisfaction (Mark et al., 2013). Prior studies show that the GMSEX has good test-retest reliability and internal consistency (Lawrance & Byers, 1995). Cronbach's alpha in the current study was  $\alpha = .86$ .

### Childhood Sexual Abuse

CSA was assessed via the Child Trauma Questionnaire – short form (CTQ-SF; Bernstein et al., 2009, translated in Dutch by Thombs et al., 2009) and refers to sexual contact or conduct between a child and an older person, including explicit coercion. This measure consists of 25 items that evaluate five forms of abuse (emotional, physical, sexual) and neglect (emotional, physical) through a 5-point Likert scale from 1 = never true to 5 = veryoften true. For the scope of this thesis, we will focus only on the Dutch version of the sexual abuse subscale, which consists of four instead of the original five items (e.g., "Someone tried to touch me in a sexual way or tried to make me touch them"; Thombs et al., 2009). The entire CTQ scale was shown to be a reliable and valid measure of childhood maltreatment (Bernstein et al., 2003; Thombs et al., 2009). However, as the psychometric properties of these four items were not yet well-established, an exploratory factor analysis with principal axis factoring extraction and an oblimin rotation was run to determine whether the four items loaded sufficiently on a single factor. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.772) indicated that an adequate number of participants were used (Fabrigar & Wegener, 2012; Field, 2013). Bartlett's test of Sphericity ( $x^2(6) = 460.078$ , p < .001) indicated that correlations between items were significant (Fabrigar & Wegener, 2012; Osborne, 2014). A pattern matrix of principal axis factoring and an oblimin rotation with Kaiser normalization, one factor was found to explain 70.65% of the variance. This was furthermore the only factor with an eigenvalue > 1 (2.83). Following rotation, all items had a sufficient factor loading of > .50 (Phakiti et al., 2018). As the exploratory factor analysis shows that the CSA subscale

with four items is a unidimensional scale and results are sufficient within a sample of both Dutch and English-speaking participants, we decided to continue the analysis with four items. The total score of the four items indicates the degree of CSA, where a high score indicates high exposure to CSA. Cronbach's alpha for the sexual abuse subscale was  $\alpha = .85$ .

### Romantic Attachment

Romantic attachment was measured using the Experiences in Close Relationships-Relationship Structures (ECR-RS; Fraley et al., 2011). The scale consists of 9 items on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree and contains two subscales: attachment anxiety (e.g., "I often worry that this person doesn't really care for me") and attachment avoidance (e.g., "I don't feel comfortable opening up to this person"). Higher scores indicate higher attachment anxiety and attachment avoidance. Previous research shows the scale to have good internal consistency and construct validity (Feddern et al., 2013; Rocha et al., 2017). Cronbach's alpha in the current study was  $\alpha = .85$  for the anxiety subscale and  $\alpha = .75$  for the avoidance subscale.

## **Dyadic Coping**

DC was assessed via the Dyadic Coping Inventory (DCI; Bodenmann, 2008b, translated in Dutch by Ponnet, 2012). The scale consisted of 37 items on a 5-point Likert scale from  $1 = very\ rarely$  to  $5 = very\ often$  (e.g., "I show empathy and understanding to my partner"). The overall score of DC is the sum the first 35 items following reserve coding of the negative behavior scale items. Higher scores indicate high DC. This measure was shown to have high internal consistency and validity (Bodenmann, 2008b; Ledermann et al., 2010). Cronbach's alpha in the current study was  $\alpha = .92$ .

## **Statistical Analysis**

All statistical analyses were performed using IBM SPSS Statistics Version 25.

Bivariate correlations between the study variables were computed and analyzed using Pearson

correlation coefficients. Next, a serial mediation analysis was computed using Hayes' Process Macro model 6 (2015) with the independent variable CSA, the sequential mediators romantic attachment (i.e., attachment anxiety and avoidance) and DC, and the dependent variable sexual satisfaction. As it is unclear whether gender has an influence on our study variables (e.g., some studies on sexual satisfaction in men and women report equal levels sexual satisfaction (e.g., Sánchez-Fuentes et al., 2014) or no association in both genders between CSA and sexual satisfaction (e.g., Bigras et al., 2015)), gender was included as a covariate. The mediation analysis consisted of several sub-analyses which provided estimations of the total, direct, and indirect effects of CSA on sexual satisfaction. Multiple regression analyses were conducted for the association between CSA and gender on romantic attachment, CSA and DC, and romantic attachment and DC. A hierarchical multiple regression analysis was used to assess the total and direct effects of CSA on sexual satisfaction (Step 1), as well as the direct effects of attachment anxiety and DC on sexual satisfaction (Step 2).

Following Hayes' (2013) recommendations, bootstrap analyses with 5000 bootstrap samples were used to estimate the indirect effects of CSA on sexual satisfaction through attachment and DC. The total indirect effect and the indirect effects via mediators 1 (i.e., attachment anxiety and avoidance), via mediator 2 (i.e., DC), and via both of the mediators were assessed and compared (pairwise) if significant. Bias corrected and accelerated 95% confidence intervals (BCa 95% CI) for DC. All coefficients were reported in completely standardized form.

## Results

Descriptive Statistics and Bivariate Associations between Childhood Sexual Abuse, Romantic Attachment, Dyadic Coping, and Sexual Satisfaction

The results of the bivariate correlation analyses between all study variables, along with the descriptive statistics, are displayed in Table 1. In contrast with the expectation, CSA was not significantly related to attachment avoidance and greater sexual satisfaction. Higher levels of CSA were, however, significantly associated with greater attachment anxiety. This was in line with the expectation. Furthermore, DC was significantly positively linked to sexual satisfaction. Attachment anxiety was significantly associated with increased attachment avoidance and poorer DC. Lastly, the covariate gender was found to be significantly associated with greater attachment anxiety, but not with CSA.

Table 1

Means, Standard Deviations, Minimum and Maximum Scores, Range, and Bivariate

Associations Between Study Variables (N = 221)

Variable	M (SD)	Range	Min	Max	1	2	3	4	5	6
1. Childhood	4.87	4-20	4	19	-					
Sexual Abuse	(2.31)									
2. Attachment	7.21	3-21	3	20	.12	-				
Anxiety	(4.44)									
3. Attachment	12.12	6-42	6	33	.09	.42***	-			
Avoidance	(4.99)									
4. Dyadic	140.4	35-	91	175	.02	-	56***	-		
Coping	(15.59)	175				.36***	36			
5. Sexual	29.37	5-35	12	35	09	.11	-21**	.31***	-	
Satisfaction	(4.81)									
6. Gender	-	-	-	-	.12	.19**	.06	03	09	-

*Note*. Higher scores indicate greater levels of the construct they measured (with the exception of the variable gender). The variable gender was scored as 1 = male and 2 = female.

p < .001, p < .01, p < .05

## Total, Direct, and Indirect Effects of Childhood Sexual Abuse on Sexual Satisfaction through Attachment Anxiety, Attachment Avoidance and Dyadic Coping

The assumptions of multiple regression analysis (i.e., normality, linearity, multicollinearity, and homoscedasticity) were all tested and met. Although Mahalanobis distance (20.52; df = 5) indicated 5 outliers, they were still included in the analysis as the results with and without the outliers were comparable. The findings of the regression analyses are displayed in Figure 2. Multiple regression analyses revealed that the effects of CSA on attachment anxiety (t = 1.42, p = .156) and attachment avoidance (t = 1.26, p = .210) were both insignificant. The effect of gender on attachment anxiety, however, was significant (t = 2.72, t = 0.007), while the effect of sex on attachment avoidance was insignificant (t = 0.68, t = 0.498). The effect of CSA on DC was also insignificant, t = 0.27, t = 0.268. The effect of attachment anxiety (t = -5.62, t = 0.001) as well as of attachment avoidance (t = -10.10, t = 0.001) on DC were both significant.

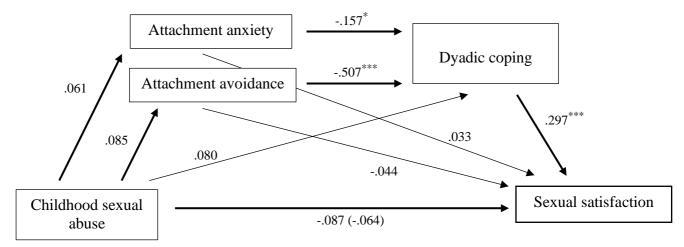
Results of the hierarchical regression analyses showed that the total effect (Step 1) of CSA on sexual satisfaction was insignificant and explained 0.8% of the total variance of sexual satisfaction, F(1, 219) = 1.782, p = .183. The direct effect (Step 2) of CSA on sexual satisfaction was insignificant,  $\beta = -.092$ , t = -1.42, p = .157, as was attachment anxiety on sexual satisfaction,  $\beta = .009$ , t = .14, p = .893, and attachment avoidance on sexual satisfaction,  $\beta = -.037$ , t = -.47, p = .639. There was, however, a significant direct effect between DC and sexual satisfaction,  $\beta = .292$ , t = 3.75, p < .001. CSA, romantic attachment, DC and gender together explained 5.3% of the variance of sexual satisfaction, F(3, 217) = 4.11, p = .007.

An overview of the indirect effects can be found in Table 2 below. The bootstrap analyses revealed the total indirect effect to be insignificant. Furthermore, the indirect effects of CSA on sexual satisfaction through both attachment anxiety and DC, CSA on sexual

satisfaction through attachment anxiety alone, and CSA on sexual satisfaction through DC alone are all insignificant. Lastly, the indirect effects of CSA on sexual satisfaction through both attachment avoidance and DC, CSA on sexual satisfaction through attachment avoidance alone and CSA on sexual satisfaction through DC alone are insignificant as well. In sum, all the indirect effects in this model were found to be insignificant. Thus, the third hypothesis could not be confirmed.

Figure 2

Results of the Simple and Hierarchical Regression Analysis Conducted as part of the Serial Mediation Analysis Linking Childhood Sexual Abuse with Sexual Satisfaction via Attachment Anxiety, Attachment Avoidance, and Dyadic Coping, with Gender as Covariate.



*Note*. The total effect as derived from Step 1 of the hierarchical regression analysis is displayed in parenthesis. All coefficients are reported in standardized form. Control paths for gender on attachment anxiety and avoidance ( $\beta = .162 p = .003$  and  $\beta = .046 p = .600$ , respectively), dyadic coping ( $\beta = .018 p = .737$ ) and sexual satisfaction ( $\beta = -.070, p = .299$ ) was omitted for figure clarity.

Table 2

Results of the Bootstrap Analyses as part of the Serial Mediation Analysis Linking Childhood

Sexual Abuse with Sexual Satisfaction via (1) Attachment Anxiety and Dyadic Coping, and via

(2) Attachment Avoidance and Dyadic Coping.

Path			SE	95% CI	
1 4411		β	SL	LL	UL
Indirect effects	$CSA \rightarrow attachment anxiety \rightarrow SS$	.020	.006	010	.016
	$CSA \rightarrow DC \rightarrow SS$	.024	.023	017	.073
	$CSA \rightarrow attachment anxiety \rightarrow DC \rightarrow SS$	003	.004	012	.003
Total indirect effect			.023	020	.073
Indirect effects	CSA → attachment avoidance → SS	002	.007	017	.011
	$CSA \rightarrow DC \rightarrow SS$	.024	.022	015	.072
	$CSA \rightarrow attachment avoidance \rightarrow SS$	007	.010	028	.010
Total indirect effect			.027	036	.071

*Note*. CSA = childhood sexual abuse; DC = dyadic coping; SS = sexual satisfaction.

#### **Discussion**

The purpose of this study was to investigate the relationship between CSA and sexual satisfaction in women and men and how romantic attachment (i.e., attachment anxiety and avoidance) and DC may sequentially mediate this relationship.

Interestingly, contrary to expectation (e.g., Oshri et al., 2015), no significant association between CSA and sexual satisfaction was found. More specifically, there was no relation between CSA and diminished sexual satisfaction levels. One explanation is that the framing of the CSA questions in the CTQ-SF measure (e.g., "I believe that I was sexually abused", Bernstein et al., 2009) provides little information about the sexual abuse events themselves and their associated characteristics (e.g., chronicity of abuse, relationship to

perpetrator). As a result, the CSA subscale could have defined CSA too broadly, leading to some CSA survivors not interpreting the question uniformly and/or not identifying with such a label themselves (Kilimnik et al., 2018). This would ultimately explain the small subset of participants who scored high on the CSA subscale. Indeed, as the mean of CSA was very low, it seems that majority of our sample has either never experienced CSA or only to a certain extent, or that they did not recognize themselves in the formulation of the questions.

Therefore, future research should focus on choosing and developing measures of CSA that provide sufficient clarity on what sexual activities are meant by or fall under sexual abuse and that account for the other facets of CSA.

Contrary to previous research (e.g., Meyer et al., 2017), there was no significant relation between CSA and romantic attachment. This could be explained by the relatively low levels of attachment anxiety and avoidance in the current sample. Alternatively, previous studies have shown that attachment as a moderator influences CSA and its outcomes (Aspelmeier et al., 2007; Whiffen et al., 1999). It is thus possible that romantic attachment as a moderator would have been more suitable and reaped different results. Future research should test a more representative sample and focus on clarifying the role of romantic attachment in the CSA-sexual satisfaction link.

Results of the serial mediation analyses revealed that, contrary to expectations and previous studies (e.g., Aspelmeier et al., 2007; Bodenmann et al., 2010; Wawrzicny et al., 2021), the findings indicated that romantic attachment and DC did not mediate the relationship between CSA and sexual satisfaction. The limited amount of variance explained (5.3%) indicates factors other than romantic attachment and DC are important determinants for sexual satisfaction. As sexual satisfaction is dyadic in nature, (other) relevant dyadic factors should also be considered as potential variables explaining sexual satisfaction (DeWitte, 2013). As such, relationship satisfaction may act as a protective buffer against the

negative effects of CSA and thereby positively affect sexual satisfaction (Vaillancourt-Morel et al., 2020). Future research may benefit from taking interpersonal factors such as relationship satisfaction into account to explain more variance of sexual satisfaction.

Additionally, taking into consideration that (1) most participants were relatively young, (2) the average relationship duration was around 5.5 years, and (3) the rather high levels of sexual satisfaction on average, a longitudinal study design might be more suitable for this study's research questions. Indeed, several studies show that some detrimental effects of CSA on sexual satisfaction in romantic relationships may emerge over time as the relationship progresses (DiLillo et al., 2009; Vaillancourt-Morel et al., 2020). Future research should therefore consider implementing a (dyadic) longitudinal study design to investigate the long-term effects of CSA on sexual satisfaction.

Although the theoretical model was not supported in this study, the pathway from romantic attachment and DC to sexual satisfaction was significant and consistent with previous literature (Bodenmann 2010, Wawrzicny 2021). This suggests that people's perspectives about love and their subsequent behavior in romantic relationships affects the way they, together with their partner, tackle external stressors, which ultimately affects their sexual satisfaction. Interestingly, this finding potentially shows that regardless of a history of CSA or not, individuals with attachment anxiety and avoidance are more likely to experience DC difficulties which lead to diminished sexual satisfaction. It would be worthwhile to further expand on this pathway by examining the extent to which romantic attachment, DC and sexual satisfaction are significant in different samples and under different circumstances.

Lastly, gender was found to only be a significant covariate for attachment anxiety, suggesting gender differences in levels of attachment anxiety. In line with research, gender did not seem to influence the other study variables in the tested model (e.g., Sánchez-Fuentes, 2014). So far, no clear consensus has been reached on the role that gender

differences could play in romantic attachment (Scharfe, 2017). This is in part because studies using different measures and samples show mixed results (Del Giudice & Belsky, 2010).

More research would be needed on gender differences in attachment orientation to specify whether and how gender differences affect romantic attachment.

## **Implications**

This study adds to previous literature on CSA and sexual satisfaction by providing more insight into the role of romantic attachment (i.e., attachment anxiety and avoidance) and DC as sequential mediators. The findings from this study could help improving existing research on CSA and sexual satisfaction and present possible factors (i.e., attachment anxiety and avoidance, and DC) amenable to intervention. Emotionally focused couple therapy (EFT) — an empirically validated attachment-based couple therapy - has shown to be effective in improving couples' sexual satisfaction in the long term by reducing attachment avoidance (Beasley & Ager, 2019; Wiebe et al., 2018). EFT has the potential to help couples with sexual satisfaction difficulties through promoting a more secure attachment bond. Additionally, several interventions have been developed to help couples cope with stress together by improving DC, including the coping-oriented couple therapy (COCT) approach (Bodenmann, 2007). Following a randomized controlled trial, COCT was shown to be as effective in improving depressive symptomatology as cognitive behavioral therapy and interpersonal therapy, with approximately similar relapse rates (Bodenmann, 2008c).

These interventions highlight not only the effectiveness of tackling romantic attachment and DC in couples' therapy, but also the need for sex therapists to pay more attention to the attachment and DC patterns in couples in order to promote successful treatment completion (e.g., Margola et al., 2017).

## Limitations

This study also includes some limitations. Firstly, results are based on a cross-sectional design using self-report data, which may be subjected to social desirability bias and recall bias. Participants may have tried to adhere to cultural and/or social expectations as the survey included private and personal questions about CSA and their romantic relationship (Krumpal, 2011). Many participants may also cope with shame and embarrassment regarding their experiences of CSA (e.g., MacGinley et al., 2019) or decide not to report their experiences in order to protect perpetrators and witnesses (e.g., Kenny & McEachern, 2000).

Furthermore, the generalizability of our results is limited by our relatively homogeneous convenience sample of predominantly young (90.1% under age 30), female, and heterosexual participants. Women who participate in sex research tend to have more sexual experience and hold less traditional sexual attitudes (Wiederman, 1999). This selection bias may have also skewed results to be less representative of the general population. Indeed, male and LGBTQ+ CSA survivors are still severely underrepresented in most studies on sexual well-being, while higher levels of CSA in sexual and gender minorities have been noted before (Bigras et al., 2021; Cohen & Byers, 2015; Scheim & Bauer, 2019).

Additionally, participants were not asked about their ethnic and cultural background, leading to a lack of knowledge about the racial/ethnic diversity in this sample. In order to examine whether CSA implications differ across age, gender, sexual orientations, and ethnicities, future studies need more diverse and inclusive samples so as to be more representative of the diversity of sexual experiences following CSA.

#### Conclusion

In conclusion, this study added to previous research on the CSA-sexual satisfaction link by examining romantic attachment (i.e., attachment anxiety and avoidance) and DC as potential mediators. Results revealed no significant associations between CSA and sexual

satisfaction, romantic attachment, nor DC. The present findings further indicate that romantic attachment and DC do not mediate the relationship between CSA and sexual satisfaction. However, despite the limitations, the insignificant results of this study were able to provide some insight into how to improve future research in the realm of CSA and sexual well-being. Further investigation is needed on the conditions under which CSA significantly affects sexual satisfaction. Future research may profit from investigating other potentially relevant factors underlying the link between CSA and sexual satisfaction and the specific conditions under which these factors would be significant.

## References

- Anderson, R.M. (2013). Positive sexuality and its impact on overall well-being.

  \*Bundesgesundheitsblatt-Gesundheitsforschung-Gesundheitsschutz, 56(2), 208-214.

  https://doi.org/10.1007/s00103-012-1607-z
- Aspelmeier, J. E., Elliott, A. N., & Smith, C. H. (2007). Childhood sexual abuse, attachment, and trauma symptoms in college females: The moderating role of attachment. *Child Abuse & Neglect*, 31(5), 549-566. https://doi.org/10.1016/j.chiabu.2006.12.002
- Beasley, C. C., & Ager, R. (2019). Emotionally focused couples therapy: A systematic review of its effectiveness over the past 19 years. *Journal of Evidence-Based Social Work*, 16(2), 144-159. https://doi.org/10.1080/23761407.2018.1563013
- Berant, E., Mikulincer, M., Shaver, P. R., & Segal, Y. (2005). Rorschach correlates of self-reported attachment dimensions: Dynamic manifestations of Hyperactivating and deactivating strategies. *Journal of Personality Assessment*, 84(1), 70-81. https://doi.org/10.1207/s15327752jpa8401\_13
- Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., Stokes, J., Handelsman, L., Medrano, M., Desmond, D., & Zule, W. (2003). Development and validation of a brief screening version of the childhood trauma questionnaire. *Child Abuse & Neglect*, 27(2), 169-190. https://doi.org/10.1016/s0145-2134(02)00541-0
- Bernstein, D. P., Fink, L., Handelsman, L., Foote, J., Lovejoy, M., Wenzel, K., ... Ruggiero, J. (1994). Initial reliability and validity of a new retrospective measure of child abuse and neglect. *The American Journal of Psychiatry*, *151*(8), 1132–1136. https://doi.org/10.1176/ajp.151.8.1132
- Bigras, N., Vaillancourt-Morel, M., Nolin, M., & Bergeron, S. (2021). Associations between childhood sexual abuse and sexual well-being in adulthood: A systematic literature

- review. *Journal of Child Sexual Abuse*, *30*(3), 332-352. https://https://doi.org/10.1080/10538712.2020.1825148
- Bigras, N., Godbout, N., & Briere, J. (2015). Child sexual abuse, sexual anxiety, and sexual satisfaction: The role of self-capacities. *Journal of Child Sexual Abuse*, *24*(5), 464-483. https://doi.org/10.1080/10538712.2015.1042184
- Birnbaum, G. E., Reis, H. T., Mikulincer, M., Gillath, O., & Orpaz, A. (2006). When sex is more than just sex: Attachment orientations, sexual experience, and relationship quality. *Journal of Personality and Social Psychology*, *91*, 929–943. https://doi.org/10.1037/0022-3514.91.5.929
- Bodenmann, G., Atkins, D. C., Schär, M., and Poffet, V. (2010). The association between daily stress and sexual activity. J. *Family Psychology*, *24*, 271–279. https://doi.org/10.1037/a0019365
- Bodenmann, G. (2008a). Dyadic coping and the significance of this concept for prevention and therapy. *Zeitschrift für Gesundheitspsychologie*, *16*(3), 108-111. https://doi.org/10.1026/0943-8149.16.3.108
- Bodenmann, G. (2008b). *Dyadisches Coping Inventar [Dyadic Coping Inventory]*. Manual. Bern: Huber.
- Bodenmann, G. (2008c). Dyadic coping and the significance of this concept for prevention and therapy. *Zeitschrift für Gesundheitspsychologie*, *16*(3), 108-111. https://doi.org/10.1026/0943-8149.16.3.108
- Bodenmann, G. (2007). Dyadic coping and the 3-phase-method in working with couples. In L. VandeCreek (Ed.), *Innovations in clinical practice: Focus on group and family therapy* (pp. 235–252). Sarasota: Professional Resources Press.

- Bodenmann, G., Pihet, S., and Kayser, K. (2006a). The relationship between dyadic coping and marital quality: a 2-year longitudinal study. *Journal of Family Psychology*, 20, 485–493. https://doi.org/10.1037/0893-3200.20.3.485
- Bodenmann, G., Pihet, S., Shantinath, S. D., Cina, A., & Widmer, K. (2006b). Improving dyadic coping in couples with a stress-oriented approach. *Behavior Modification*, 30(5), 571-597. https://doi.org/10.1177/0145445504269902
- Bodenmann, G., & Cina, A. (2006). Stress and coping among stable-satisfied, stable-distressed and separated/Divorced Swiss couples. Journal of Divorce & Remarriage, 44(1-2), 71-89. https://doi.org/10.1300/j087v44n01 04
- Bodenmann, G. (2005). Dyadic coping and its significance for marital functioning. *Couples coping with stress: Emerging perspectives on dyadic coping*, 33-49. https://doi.org/10.1037/11031-002
- Bowlby, J. (1973). Attachment and loss: Vol. 2 Separation. New York: Basic Books.
- Bowlby, J. (1982). Attachment and loss: Vol. 1. Attachment (2nd Ed.). New York: Basic Books.
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In W. S. Rholes, & J. A. Simpson (Eds.), *Attachment theory and close relationships* (pp. 46–76). New York: Guilford Press.
- Butzer, B., Campbell, L., & Wong, J. (2007). Adult attachment and sexual satisfaction: A study of married couples. PsycEXTRA Dataset. https://doi.org/10.1037/e633982013-474
- Cohen, J. N., & Byers, E. S. (2015). Minority stress, protective factors, and sexual functioning of women in a same-sex relationship. *Psychology of Sexual Orientation and Gender Diversity*, 2(4), 391–403. https://doi.org/10.1037/sgd0000108

- Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Hillsdale, NJ:

  Lawrence Erlbaum Associates.
- Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support seeking and caregiving in intimate relationships. *Journal of Personality and Social Psychology*, 78(6), 1053-1073. https://doi.org/10.1037/0022-3514.78.6.1053
- Davis, D., Shaver, P. R., Widaman, K. F., Vernon, M. L., Follette, W. C., & Beitz, K. (2006). "I can't get no satisfaction": Insecure attachment, inhibited sexual communication, and sexual dissatisfaction. *Personal Relationships*, *13*, 465–483. https://doi.org/10.1111/j.1475-6811.2006.00130.x
- Davison, S. L., Bell, R. J., LaChina, M., Holden, S. L., & Davis, S. R. (2009). The relationship between self-reported sexual satisfaction and general well-being in women. *Journal of Sexual Medicine*, *6*(10), 2690-2697. https://doi.org/10.1111/j.1743-6109.2009.01406.x
- Del Giudice, M., & Belsky, J. (2010). Sex differences in attachment emerge in middle childhood: An evolutionary hypothesis. *Child Development Perspectives*, *4*, 97–105.
- Dewitte, M. (2013). On the interpersonal dynamics of sexuality. *Journal of Sex & Marital Therapy*, 40(3), 209-232. https://doi.org/10.1080/0092623x.2012.710181
- DiLillo, D., Peugh, J., Walsh, K., Panuzio, J., Trask, E., & Evans, S. (2009). Child maltreatment
  - history among newlywed couples: A longitudinal study of marital outcomes and mediating pathways. *Journal of Consulting and Clinical Psychology*, 77(4), 680–692. https://doi.org/10.1037/a0015708
- Dimitrova, N., Pierrehumbert, B., Glatz, N., Torrisi, R., Heinrichs, M., Halfon, O., &

- Chouchena, O. (2010). Closeness in relationships as a mediator between sexual abuse in childhood or adolescence and psychopathological outcome in adulthood. *Clinical Psychology & Psychotherapy*, 17(3), 183–195. https://doi.org/10.1002/cpp.650
- Elliot, D. (1994). Impaired object relations in professional women molested as children.

  \*Psychotherapy, 31, 79-86. https://doi.org/10.1037/0033-3204.31.1.79
- Fabrigar, L. R., & Wegener, D. T. (2012). *Exploratory factor analysis*. Oxford: Oxford University Press.
- Falconier, M. K., & Kuhn, R. (2019). Dyadic coping in couples: A conceptual integration and a review of the empirical literature. *Frontiers in Psychology, 10*. https://doi.org/10.3389/fpsyg.2019.00571
- Falconier, M. K., Jackson, J. B., Hilpert, P., & Bodenmann, G. (2015). Dyadic coping and relationship satisfaction: A meta-analysis. *Clinical Psychology Review*, 42, 28-46. https://doi.org/10.1016/j.cpr.2015.07.002
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191. https://doi.org/10.3758/bf03193146
- Feddern Donbaek, D., & Elklit, A. (2013). A validation of the experiences in close relationships-relationship structures scale (ECR-RS) in adolescents. *Attachment & Human Development, 16*(1), 58-76. https://doi.org/10.1080/14616734.2013.850103
- Feeney, J. A. (1996). Attachment, caregiving, and marital satisfaction. *Personal Relationships*, 3(4), 401-416. https://doi.org/10.1111/j.1475-6811.1996.tb00124.x
- Feeney, J. A. (1995). Adult attachment and emotional control. *Personal Relationships*, 2, 143–159. https://doi.org/ 10.1111/j.1475-6811.1995.tb00082.x
- Feeney, J. A., & Noller, P. (1992). Attachment style and romantic love: Relationship

- dissolution. *Australian Journal of Psychology, 44*(2), 69-74. https://doi.org/10.1080/00049539208260145
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). SAGE Publications.
- Finkelhor, D., Hotaling, G. T., Lewis, I. A., & Smith, C. (1989). Sexual abuse and its relationship to later sexual satisfaction, marital status, religion, and attitudes. *Journal of Interpersonal Violence*, 4(4), 379-399. https://doi.org/10.1177/088626089004004001
- Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The Experiences in Close Relationships-Relationship Structures questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, 23(3), 615–625. https://doi.org/10.1037/a0022898
- Fraley, R. C., & Shaver, P. R. (2000). Adult romantic attachment: Theoretical developments, emerging controversies, and unanswered questions. *Review of General Psychology*, 4(2), 132–154. https://doi.org/10.1037/1089-2680.4.2.132
- Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect.

  \*Psychological Science\*, 18, 233–239. https://doi.org/10.1111/j.1467-9280.2007.01882.x
- Fuenfhausen, K. K., & Cashwell, C. S. (2013). Attachment, stress, dyadic coping, and marital satisfaction of counseling graduate students. *The Family Journal*, 21(4), 364-370. https://doi.org/10.1177/1066480713488523
- Graziottin, A. (2007). Original research: Prevalence and evaluation of sexual health problems—HSDD in Europe. *The Journal of Sexual Medicine*, *4*, 211-219. https://doi.org/10.1111/j.1743-6109.2007.00447.x
- Hailes, H. P., Yu, R., Danese, A., & Fazel, S. (2019). Long-term outcomes of childhood

- sexual abuse: An umbrella review. *The Lancet Psychiatry*, *6*(10), 830-839. https://doi.org/10.1016/s2215-0366(19)30286-x
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process.

  \*\*Journal of Personality and Social Psychology, 52(3), 511–524.\*\*

  https://doi.org/10.4324/9781351153683-17
- Hulme, P. A. (2004). Retrospective measurement of childhood sexual abuse: A review of instruments. *Child Maltreatment*, 9(2), 201-217.
  https://doi.org/10.1177/1077559504264264
- Kenny, M. C., & McEachern, A. G. (2000). Racial, ethnic, and cultural factors of childhood sexual abuse: A selected review of the literature. *Clinical Psychology Review*, 20, 905–922. https://doi.org/10.1016/s0272-7358(99)00022-7
- Kilimnik, C. D., Pulverman, C. S., & Meston, C. M. (2018). Methodologic considerations for the study of childhood sexual abuse in sexual health outcome research: A comprehensive review. *Sexual Medicine Reviews*, 6(2), 176-187.
  https://doi.org/10.1016/j.sxmr.2017.11.006
- Krumpal, I. (2011). Determinants of social desirability bias in sensitive surveys: A literature review. *Quality & Quantity*, 47(4), 2025-2047. https://doi.org/10.1007/s11135-011-9640-9
- Lawrance, K., & Byers, E. S. (1995). Sexual satisfaction in long-term

  heterosexual relationships: The Interpersonal Exchange Model of Sexual Satisfaction.

  Personal Relationships, 2, 267-285. https://doi.org/10.1111/j.1475-6811.1995.tb00092.x
- Ledermann, T., Bodenmann, G., Gagliardi, S., Charvoz, L., Verardi, S., Rossier, J., Bertni, A.,

- & Iafrate, R. (2010). Psychometrics of the Dyadic Coping Inventory in three language groups. Swiss Journal of Psychology/Schweizerische Zeitschrift für Psychologie/Revue Suisse de Psychologie, 69(4), 201-212. https://doi.org/10.1024/1421-0185/a000024
- Leifer, M., Kilbane, T., & Skolnick, L. I. (2003). Relationships between maternal adult attachment security, child perceptions of maternal support, and maternal perceptions of child responses to sexual abuse. *Journal of Child Sexual Abuse, 11*(3), 107–124. https://doi.org/10.1300/j070v11n03\_06
- Leonard, L. M., Iverson, K. M., & Follette, V. M. (2008). Sexual functioning and sexual satisfaction among women who report a history of childhood and/or adolescent sexual abuse. *Journal of Sex & Marital Therapy*, *34*(5), 375-384. https://doi.org/10.1080/00926230802156202
- Leonard, L. M. and Follette, V. M. 2002. Sexual functioning in women reporting a history of child sexual abuse. Review of the empirical literature and clinical implications. *Annual Review of Sex Research*, 13, 346–389.
- Levesque, C., Lafontaine, M., & Bureau, J. (2017). The mediating effects of emotion regulation and dyadic coping on the relationship between romantic attachment and non-suicidal self-injury. *Journal of Youth and Adolescence*, 46(2), 277-287. https://doi.org/10.1007/s10964-016-0547-6
- Lewis, R. W., Fugl-Meyer, K. S., Corona, G., Hayes, R. D. Laumann, E. O., et al. (2010). Definition/epidemiology/risk factors for sexual dysfunction. *Journal of Sexual Medicine*, 7, 1598–1607.
- Li, T., & Chan, D. K. (2012). How anxious and avoidant attachment affect romantic relationship quality differently: A meta-analytic review. *European Journal of Social Psychology*, 42(4), 406-419. https://doi.org/10.1002/ejsp.1842
- MacGinley, M., Breckenridge, J., & Mowll, J. (2019). A scoping review of adult survivors'

- experiences of shame following sexual abuse in childhood. *Health & Social Care in the Community*. https://doi.org/10.1111/hsc.12771
- Margola, D., Donato, S., Accordini, M., Emery, R. E., & Snyder, D. K. (2017). Dyadic coping in couple therapy process: An exploratory study. *Family Process*, 57(2), 324-341. https://doi.org/10.1111/famp.12304
- Mark, K. P., Vowels, L. M., & Murray, S. H. (2018). The impact of attachment style on sexual atisfaction and sexual desire in a sexually diverse sample. *Journal of Sex & Marital Therapy*, *44*(5), 450-458. https://doi.org/10.1080/0092623x.2017.1405310
- McClelland, S. I. (2011). Who is the "Self" in self reports of sexual satisfaction? Research and policy implications. *Sexuality Research and Social Policy*, 8(4), 304-320. https://doi.org/10.1007/s13178-011-0067-9
- Meyer, D., Cohn, A., Robinson, B., Muse, F., & Hughes, R. (2017). Persistent complications of child sexual abuse: Sexually compulsive behaviors, attachment, and emotions.

  \*\*Journal of Child Sexual Abuse\*, 26(2), 140-157.\*\*

  https://doi.org/10.1080/10538712.2016.1269144
- Mikulincer, M., & Shaver, P. R. (2013). Attachment orientations and meaning in life. *The Experience of Meaning in Life*, 287-304. https://doi.org/10.1007/978-94-007-6527-6\_22
- Mikulincer, M., Shaver, P. R., & Pereg, P. (2003). Attachment Theory and Affect Regulation:

  The Dynamics, Development, and Cognitive Consequences of Attachment-Related

  Strategies. *Motivation and Emotion*, 27(2), 77-102. https://doiorg.proxy.library.uu.nl/10.1023/A:1024515519160
- Nielsen, B. F., Wind, G., Tjørnhøj-Thomsen, T., & Martinsen, B. (2018). A Scoping Review

- of Challenges in Adult Intimate Relationships After Childhood Sexual Abuse. *Journal of Child Sexual Abuse*, *27*(6), 718-728. https://doi.org/10.1080/10538712.2018.1491915
- Noller, P. (2005). Attachment insecurity as a filter in the decoding and encoding of nonverbal behavior in close relationships. *Journal of Nonverbal Behavior*, 29(3), 171-176. https://doi.org/10.1007/s10919-005-4848-9
- Osborne, J. W. (2014). *Best practices in exploratory factor analysis*. Lexington, KY: CreateSpace Independent Publishing Platform.
- Oshri, A., Sutton, T., Clay-Warner, J., & Miller, J. (2015). Child maltreatment types and risk behaviors: Associations with attachment style and emotion regulation dimensions.

  \*Personality and Individual Differences, 73, 127–133.\*

  https://doi.org/10.1016/j.paid.2014.09.015
- Pan, Y., Lin, X., Liu, J., Zhang, S., Zeng, X., Chen, F., & Wu, J. (2020). Prevalence of Childhood Sexual Abuse Among Women Using the Childhood Trauma Questionnaire: A Worldwide Meta-Analysis. *Trauma, Violence, & Abuse,* 152483802091286. https://doi.org/10.1177/1524838020912867
- Parish, W.L., Luo, Y., Stolzenberg, R., Laumann, E. O., Farrer, G., & Pan, S. (2007).

  Sexual practices and sexual satisfaction: A population-based study of Chinese urban adults. *Archives of Sexual Behavior*, *36*, 5-20.
- Ponnet, K. (2012). *The Dutch version of Bodenmann's dyadic coping inventory*. Antwerp: University of Antwerp.
- Pulverman, C. S., Kilimnik, C. D., & Meston, C. M. (2018). The impact of childhood sexual abuse on women's sexual health: A comprehensive review. *Sexual Medicine Reviews*, 6(2), 188-200. https://doi.org/10.1016/j.sxmr.2017.12.002
- Oualtrics. (2005). [Computer Software]. Available from https://www.qualtrics.com

- Rellini, A. H., Vujanovic, A. A., Gilbert, M., & Zvolensky, M. J. (2012). Childhood maltreatment and difficulties in emotion regulation: Associations with sexual and relationship satisfaction among young adult women. *Journal of Sex Research*, 49(5), 434-442. https://doi.org/10.1080/00224499.2011.565430
- Rellini, A. H., Vujanovic, A. A., & Zvolensky, M. J. (2010). Emotional dysregulation: Concurrent relation to sexual problems among trauma-exposed adult cigarette smokers. *Journal of Sex & Marital Therapy*, *36*, 137–153.
- Rocha, G. M., Peixoto, E. M., Nakano, T. D., Motta, I. F., & Wiethaeuper, D. (2017). The experiences in close relationships Relationship structures questionnaire (ECR-RS):
  Validity evidence and reliability. *Psico-USF*, 22(1), 121-132.
  https://doi.org/10.1590/1413-82712017220111
- Roche, D. N., Runtz, M. G., & Hunter, M. A. (1999). Adult Attachment: A Mediator Between Child Sexual Abuse and Later Psychological Adjustment. *Journal of Interpersonal Violence*, *14*(2), 184-207.

  https://doi-org.proxy.library.uu.nl/10.1177/088626099014002006
- Rutgers. (2017). Sexual health in the Netherlands 2017.

  https://rutgers.nl/wp-content/uploads/2021/03/Seksuele-Gezondheid-in-Nederland-2017.pdf
- Sánchez-Fuentes, M. D., Santos-Iglesias, P., & Sierra, J. C. (2014). A systematic review of sexual satisfaction. *International Journal of Clinical and Health Psychology, 14*(1), 67-75. https://doi.org/10.1016/s1697-2600(14)70038-9
- Schachner, D. A., Shaver, P. R., & Mikulincer, M. (2005). Patterns of nonverbal behavior and Sensivity in the context of attachment relations. *Journal of Nonverbal Behavior*, 29(3), 141-169. https://doi.org/10.1007/s10919-005-4847-x
- Scharfe, E. (2017). Sex differences in attachment. Encyclopedia of Evolutionary

- Psychological Science, 7087-7091. https://doi.org/10.1007/978-3-319-19650-3 3592
- Scheim, A. I., & Bauer, G. R. (2019). Sexual inactivity among transfeminine persons: A

  Canadian respondent-driven sampling survey. *The Journal of Sex Research*, 56(2),
  - 271. https://doi.org/10.1080/00224499.2017.1399334

264-

- Shaver, P. R., & Mikulincer, M. (2002). Attachment-related psychodynamics. *Attachment & Human Development*, 4(2), 133–161. https://doi.org/10.1080/14616730210154171
- Shaver, P. R., & Hazan, C. (1988). A biased overview of the study of love. *Journal of Social* and *Personal Relationships*, 5, 473–501.
- Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). Support seeking and support giving within couples in an anxiety-provoking situation: The role of attachment styles.

  \*\*Journal of Personality and Social Psychology, 62(3), 434-446.\*\*

  https://doi.org/10.1037/0022-3514.62.3.434
- Stephenson, K. R., Pulverman, C. S., & Meston, C. M. (2014). Assessing the association between childhood sexual abuse and adult sexual experiences in women with sexual difficulties. *Journal of Traumatic Stress*, *27*(3), 274-282. https://doi.org/10.1002/jts.21923
- Thombs, B. D., Bernstein, D. P., Lobbestael, J., & Arntz, A. (2009). A validation study of the Dutch Childhood Trauma Questionnaire-Short Form: Factor structure, reliability, and known-groups validity. *Child Abuse & Neglect*, *33*(8), 518–523. https://doiorg.proxy.library.uu.nl/10.1016/j.chiabu.2009.03.001
- Vaillancourt-Morel, M., Byers, E. S., Péloquin, K., & Bergeron, S. (2020). A dyadic longitudinal study of child maltreatment and sexual well-being in adult couples: The buffering effect of a satisfying relationship. *The Journal of Sex Research*, *58*(2), 248-260. https://doi.org/10.1080/00224499.2020.1792396

- Wawrziczny, E., Nandrino, J., Constant, E., & Doba, K. (2021). Characterizing the determinants of sexual dissatisfaction among heterosexuals: The specific role of dyadic coping. *Scandinavian Journal of Psychology*, 62(5), 763-773. https://doi.org/10.1111/sjop.12759
- Whiffen, V. E., Judd, M. E., & Aube, J. A. (1999). Intimate relationships moderate the association between childhood sexual abuse and depression. *Journal of Interpersonal Violence*, *14*(9), 940-954. https://doi.org/10.1177/088626099014009002
- Wiebe, S. A., Elliott, C., Johnson, S. M., Burgess Moser, M., Dalgleish, T. L., Lafontaine, M., & Tasca, G. A. (2018). Attachment change in emotionally focused couple therapy and sexual satisfaction outcomes in a two-year follow-up study. *Journal of Couple & Relationship Therapy*, 18(1), 1-21. https://doi.org/10.1080/15332691.2018.1481799
- Wiederman, M. W. (1999). Volunteer bias in sexuality research using college student participants. *Journal of Sex Research*, *36*(1), 59–66. https://doi.org/10.1080/00224499909551968
- World Health Organization. (2020). Child maltreatment fact sheet.

  https://www.who.int/news-room/fact-sheets/detail/child-maltreatment
- World Health Organization. Social Change and Mental Health, & Global Forum for Health Research. (1999). Report of the consultation on child abuse prevention: 29-31 March 1999; WHO, Geneva.