

Journal of Sex & Marital Therapy

ISSN: 0092-623X (Print) 1521-0715 (Online) Journal homepage: http://www.tandfonline.com/loi/usmt20

### Adult Profiles of Child Sexual Abuse Survivors: Attachment Insecurity, Sexual Compulsivity, and Sexual Avoidance

Chloé Labadie, Natacha Godbout, Marie-Pier Vaillancourt-Morel & Stéphane Sabourin

**To cite this article:** Chloé Labadie, Natacha Godbout, Marie-Pier Vaillancourt-Morel & Stéphane Sabourin (2018) Adult Profiles of Child Sexual Abuse Survivors: Attachment Insecurity, Sexual Compulsivity, and Sexual Avoidance, Journal of Sex & Marital Therapy, 44:4, 354-369, DOI: <u>10.1080/0092623X.2017.1405302</u>

To link to this article: https://doi.org/10.1080/0092623X.2017.1405302

Accepted author version posted online: 15 Nov 2017. Published online: 08 Feb 2018.

C	Ø,

Submit your article to this journal 🕝

Article views: 165



View related articles 🗹

🕨 View Crossmark data 🗹



Check for updates

### Adult Profiles of Child Sexual Abuse Survivors: Attachment Insecurity, Sexual Compulsivity, and Sexual Avoidance

Chloé Labadie<sup>a</sup>, Natacha Godbout<sup>b</sup>, Marie-Pier Vaillancourt-Morel<sup>c</sup>, and Stéphane Sabourin<sup>a</sup>

<sup>a</sup>École de Psychologie, Université Laval, Quebec, Quebec, Canada; <sup>b</sup>Department of Sexology, Montreal, Université du Quebec à Montreal, Montreal, Quebec, Canada; <sup>c</sup>Department of Psychology, Université de Montréal, Montreal, Quebec, Canada

#### ABSTRACT

The present study examined the possibility of different groups of child sexual abuse (CSA) survivors based on their different patterns of attachment and sexual problems. A sample of 324 CSA survivors and 484 participants who did not report any child maltreatment experiences completed online questionnaires. A cluster analysis on attachment and sexual outcomes revealed that CSA survivors formed two distinct profiles. The first profile included CSA survivors with elevated attachment anxiety and low to moderate scores on attachment avoidance, sexual compulsion, and sexual avoidance. The second profile comprised CSA survivors with high scores on attachment anxiety, attachment avoidance, sexual compulsion, and sexual avoidance. These groups were then compared on CSA severity, gender differences, and other child maltreatment experiences. As compared to CSA survivors of the first profile, survivors from the second profile reported more intrusive and extrafamilial CSA, higher rates of psychological maltreatment and witnessed parental violence, and experienced more personal and couple distress. These results suggest that CSA survivors form a heterogeneous population and that sexual abuse is differentially associated with the complex unfolding of the attachment and sexual systems within two distinct subgroups.

Child sexual abuse (CSA) is defined as any sexual act, ranging from sexual touching to sexual intercourse, between a person under the age of 16 and an individual more than five years older (or an authority figure) (World Health Organization, 1999). CSA is judged to be more severe when abusive sexual experiences are more frequent, more intrusive (i.e., anal or vaginal penetration or penetration attempt), and when the assailant is a parental figure (Zink, Klesges, Stevens, & Decker, 2009). Although most scientific and clinical literature point toward adverse short- and long-term effects of CSA (Murray, Nguyen, & Cohen, 2014), outcome heterogeneity remains a significant problem that needs to be addressed from a wide range of perspectives. In the present study, heterogeneity outcomes are explored through an examination of the diversity of attachment and sexual difficulties in adult survivors of CSA.

### **Adult attachment**

For adults in a couple relationship, attachment is defined by the emotional bond between partners and refers to a pattern of interaction designed to satisfy needs for attention, security, and support, especially when facing stressful situations (Simpson & Rholes, 2012). The adult attachment system is generally

CONTACT Chloé Labadie 🖾 chloe.labadie.1@ulaval.ca 🖃 École de Psychologie, Université Laval, 2325 rue des Bibliothèques, Quebec, Quebec, G1V 0A6 Canada.

conceptualized using a bidimensional model of insecurity in close relationships. In the first dimension, self-representations are defined by *attachment-related anxiety*, encompassing chronic doubts about self-worth and a hyperactivation of the attachment system when the individual is facing perceived threat. In the second dimension, intimate partners are perceived as unavailable and untrustworthy, leading to *attachment-related avoidance*. In these situations, the attachment system is repeatedly deactivated and emotional needs are repressed (Mikulincer & Shaver, 2007).

Sexual experiences are also driven by a distinct bidimensional behavioral system that aims to increase sexual well-being using either *approach* (sustained or anxious efforts to maximize sexual access, potentially inducing sexual compulsivity) or *avoidant* strategies (deemphasizing the importance of sexual experiences and needs to minimize sexual distress and disappointments, possibly leading to sexual avoidance; Mikulincer & Shaver, 2012; Szepsenwol, Mizrahi, & Birnbaum, 2015). Even though the attachment behavior system and the sexual behavior system are distinct, they both seem to be based on an anxious and an avoidant behavior pattern (Birnbaum, 2010; Mikulincer, 2006). The main goal of the present study was to explore how these two behavior patterns may combine to form different homogeneous groups of CSA adult survivors.

#### Coordination of the sexual and attachment systems

A systematic examination of the coordination of attachment and sexual responses may help to identify distinct profiles of CSA survivors. Recent theoretical analyses emphasize that under conditions of relationship threats or uncertainties, attachment and sexuality are powerful motivational and behavioral systems that contribute to distress regulation or dysregulation (Birnbaum, 2015; Szepsenwol et al., 2015). When distress or insecurity is high, sexual behaviors may be more directly motivated by attachment needs for reassurance and intimacy than by personal needs focused on sexual exploration and physical pleasure (Davis, Shaver, & Vernon, 2004). For example, anxious individuals frequently initiate sexual activities thinking that if they do not frequently display high sexual initiative and energy, they will disappoint their partner who in return may reject them. In such cases, the sexual system seems subordinated to the attachment system and sexual behaviors are initiated to down-regulate abandonment fears. In the same way, in stressful relationship situations, avoidant individuals may inhibit or suppress sexual behaviors and feelings toward their partner to assert their independence or to modulate fears of closeness or intrusiveness because of their discomfort with intimacy (Brassard, Dupuy, Bergeron, & Shaver, 2015). These sexual-attachment dynamics have been mainly studied in the general population and, to our knowledge, not in CSA adult survivors where attachment insecurities and sexual problems are frequently reported but not examined jointly (Stefanou & McCabe, 2012). CSA is indeed both a sexual transgression and a significant breach of attachment trust, but we do not know how attachment and sexual difficulties interact in sexual trauma victims.

#### Child sexual abuse, attachment insecurity, and sexual outcomes

Recent theoretical advances and studies on the coordination of the attachment and sexual behavioral systems (Mikulincer & Shaver, 2012; Szepsenwol et al., 2015) have not yet had an impact in the child abuse research literature. However, many clinicians have suggested that CSA survivors report both attachment insecurities and sexual compulsion or avoidance problems (Aaron, 2012; Cloitre, Miranda, Stovall-McClough, & Hyemee, 2005; Godbout, Runtz, MacIntosh, & Briere, 2013). CSA may be experienced by many individuals as an interpersonal trauma characterized by secrecy, deception, betrayal, and transgression (Finkelhor & Brown, 1985), features that may restrict future relationship security and sexual well-being. However, the empirical basis for this hypothesis of simultaneous effects on attachment and sexual behaviors is surprisingly limited.

There is a small number of studies on the association between CSA and adult attachment insecurity, and their results are inconsistent. In some investigations, CSA has been shown to predict anxious but not avoidant attachment (Brassard et al., 2014; Godbout, Sabourin, & Lussier, 2007; Kwako, Noll, Putnam, & Trickett, 2010; Whiffen, Judd, & Aube, 1999), avoidant but not anxious attachment (Mallinckrodt, McCreary, & Robertson, 1995; Swanson & Mallinckrodt, 2001; Vaillancourt-Morel, Godbout, Sabourin,

Péloquin, & Wright, 2014), and both anxious and avoidant attachment (Aspelmeier, Elliott, & Smith, 2007; Frias, Brassard, & Shaver, 2014; Godbout, Dutton, Lussier, & Sabourin, 2009; Minzenberg, Poole, & Vinogradov, 2006; Roche, Runtz, & Hunter, 1999). Although some hypotheses have been proposed to explain these inconsistent results (i.e., the nature of the relationship with the aggressor, gender differences, and clinical/nonclinical characteristics of the samples), they also underline the possibility that distinct profiles of CSA survivors may present distinct patterns of attachment problems. Past reviews of gender differences in romantic attachment observed in the general population show that attachment anxiety is higher in women than in men and that attachment avoidance is higher in men than in women (Del Giudice, 2011). However, it is difficult to ascertain if CSA may be differentially associated with disturbances in attachment patterns and explain some of the observed inconsistencies in women and men who experienced CSA.

The number of studies on how CSA is associated to adult sexual attitudes and behaviors is continually increasing (Rellini, 2014). For example, child sexual abuse is frequently associated with sexual compulsion (Blain, Muench, Morgenstern, & Parsons, 2012; Hequembourg, Bimbi, & Parsons, 2011; Vaillancourt-Morel et al., 2015), sexual avoidance (Easton et al., 2011; Lemieux & Byers, 2008; McCallum, Peterson, & Mueller, 2012), or both (Merrill, Guimond, Thomsen, & Milner, 2003; Noll, Trickett, & Putnam, 2003; Vaillancourt-Morel et al., 2016; for reviews of these multiple pathways, see Aaron, 2012, and Colangelo & Keefe-Cooperman, 2012). Some studies have shown that negative sexual reactions are nonexistent in a significant portion of CSA survivors (Dennerstein, Guthrie, & Alford, 2004; Rellini & Meston, 2007). Again, these inconsistent findings may suggest the existence of distinct profiles of CSA survivors with regard to sexual outcome variables. In the same way, even though in general samples sexual compulsion seems more prevalent in men and sexual avoidance more frequent in women (see Joannides, 2012; Clayton & Valladares Juarez, 2017; McCabe et al., 2016), it is not clear how CSA may affect this pattern of gender differences and explain the higher levels of sexual compulsion observed in women who were sexually abused (Vaillancourt-Morel et al., 2015).

#### Person-centered analyses

Up until now, CSA repercussions in adults have generally been studied by asking individuals to report on the extent of their difficulties—for example, attachment insecurities or sexual compulsions and avoidance—and by examining the predictors of these problems (e.g., CSA severity, parental or professional support; Godbout, Briere, Sabourin, & Lussier, 2014). This analytic system is a variable-centered strategy aiming to determine the unique associations between features of the sexually abusive experiences and, for example, attachment or sexual outcomes across persons. Such analyses do not address the hypothesis that some individuals may report (1) neither attachment or sexual difficulties, (2) joint attachment and sexual difficulties, or (3) either attachment or sexual difficulties. Person-centered analyses explore the possibility that different subgroups of CSA survivors may present distinct profiles of attachment insecurities and sexual problems.

Both analytic systems are complementary, but a person-centered perspective based on classification analyses (Marsh, Lüdtke, Trautwein, & Morin, 2009) examining jointly attachment insecurities (anxiety and avoidance) and sexual problems (approach and avoidance) may provide important insights into different groupings of adult survivors of CSA. For example, CSA survivors for whom the attachment and sexual systems are both hyperactivated (i.e., anxious individuals who also evidence a pattern of sexually anxious compulsive attitudes and behaviors) or deactivated (i.e., avoidant individuals who also show sexual avoidance) may form two distinct profiles. In these two cases, attachment and sexual problems would be related in a theoretically consistent way (Birnbaum, 2010). However, the possibility that the attachment and the sexual system may not be related in a consistent way must also be examined.

#### Correlates of child sexual abuse survivors' profiles

Person-centered analyses will also allow us to examine whether different profiles of CSA survivors are associated to specific patterns of CSA severity, gender, other experienced child maltreatment, and postabuse personal and couple distress. These antecedents and consequences of CSA survivor profiles have been chosen because they are meaningfully associated to CSA (e.g., Bigras et al., 2017a; Vaillancourt-Morel et al., 2015).

Past variable-centered analyses have indeed shown that CSA severity is related to greater attachment and sexual difficulties (Trickett, Noll, & Putnam, 2011; Tyler, 2002; Vaillancourt-Morel et al., 2014). Likewise, gender differences in adult outcomes have been reported (Skegg, Nada-Raja, Dickson, & Paul, 2010), although other results suggest gender invariance, inconsistencies that could be explained by variations in CSA severity or by distinct profiles of survivors (Plant, Plant, & Miller, 2005; Vaillancourt-Morel et al., 2015). Recent studies also indicate that cumulative adverse childhood experiences, even when excluding CSA, are associated with adult attachment insecurity and sexual problems (Bigras, Godbout, Hébert, & Sabourin, 2017b; Godbout, Lussier, & Sabourin, 2006; Oshri, Sutton, Clay-Warner, & Miller, 2015; Voisin, Hotton, & Schneider, 2014; Walsh, Latzman, & Latzman, 2014).

Finally, to validate CSA survivors' profiles and better understand previous inconsistencies when comparing CSA survivors and nonvictims not only on the clustering variables (i.e., attachment anxiety and avoidance as well as sexual compulsion and avoidance) but also on psychological and couple distress, another comparison group composed of nonvictims was included. Psychological and couple distress are important variables because they are not used in the cluster analysis, and this provides an external validation perspective to our analyses of CSA survivor profiles. CSA has been repeatedly associated to multiple symptoms of anxiety and depression, which are robust indicators of psychological distress (Amado, Arce, & Herraiz, 2015), and to higher rates of couple distress, intimate partner violence, and union dissolution (Colman & Widom, 2004; Godbout et al., 2009). Attachment insecurities also predict multiple indicators of psychological and couple distress (Mikulincer & Shaver, 2012).

#### The current study

The current study was designed to pursue four objectives. The first objective was to explore, using cluster analysis, the number of distinct homogeneous groups of CSA survivors based on the coordination of the sexual and attachment systems and to compare these survivors' groups and a nonvictim group on the four continuous variables used to create profiles: attachment anxiety, attachment avoidance, sexual compulsion, and sexual avoidance. We hypothesized that anxious attachment would cluster with sexual compulsion in a first group of CSA survivors because sexual compulsion refers to anxious sexual intrusive preoccupations. Likewise, we propose that avoidant attachment will cluster with sexual avoidance to form a second group. The second objective of the study was to determine the proportion of women and men in these profiles. The third objective of this investigation was to examine whether some of these distinct profiles of CSA survivors were characterized by higher rates of CSA severity and higher rates of other cumulative child maltreatment experiences. The fourth objective was to compare these profiles and a nonvictim group on personal and couple distress.

#### Method

#### Procedure

The present sample of adult French-Canadian women and men was recruited online via social networks (e.g., Facebook, Twitter), online advertisements, and the university's electronic list of staff and students to complete an online survey. Interested participants accessed a hyperlink that led them to a secure website, LimeSurvey, where they electronically signed a consent form. No compensation was offered to participants. The present study was part of a larger research project on factors associated with sexuality in adulthood, which was approved by the [University Laval] Institutional Review Board. A small subgroup of the sample was included in another published study without using person-centered analyses and on a topic unrelated to the coordination of attachment and sexual responses in CSA survivors (Vaillancourt-Morel et al., 2015).

#### Participants

Among the 1,803 participants who completed the online questionnaire, 351 participants reported CSA for a prevalence rate of 19.5% (19.8% for women and 18.8% for men). Of these, 324 provided usable data for profile formation (i.e., they completed the attachment and sexual measures). No significant differences were observed between CSA survivors who provided complete (n = 324) or incomplete (n = 27) data on age (p = .556), gender (p = .361), relationship to the assailant (p = .261), and CSA frequency (p = .454) or intrusiveness (p = .552). In the CSA final sample (n = 324), 74.7% were women and 25.3% were men. Participants' mean age was 28.56 years (SD = 9.92). A total of 33.2% worked full-time, 5.0% worked part-time, 58.4% were full-time students, and 3.4% were unemployed. More than two thirds (67.5%) of CSA survivors reported an annual income of less than CAN\$30,000, which is slightly less than the mean salary reported in Canada (CAN\$30,100 for women and CAN\$47,000 for men; Statistics Canada, 2014). A total of 29.9% were single, 19.1% were cohabiting, 34.0% were in a dating relationship, 12.3% were married, 4.0% were divorced, and 0.6% were widowed.

Among the completed sample of 1,803 participants, 484 participants did not report any child maltreatment experience. These participants formed the final nonvictim comparison sample. Most of these participants were women (72.5%). Participants' mean age was 24.95 (SD = 7.03). A total of 22.8% were fulltime workers, 3.5% worked part-time, 72.5% were undergraduate or graduate students, and 1.2% were unemployed. Three quarters of these participants (75.4%) reported an income of less than CAN\$30,000. A total of 32.2% were single, 17.8% were cohabiting, 42.6% reported being in a dating relationship, 7.0% were married, and 0.4% were widowed.

#### Measures

All participants completed a sociodemographic questionnaire to assess age, sex, occupation, income, education, and relationship status.

#### Child sexual abuse

A 12-item French questionnaire was used to assess the occurrence of CSA based on the definition of the Criminal Code of Canada (Vaillancourt-Morel et al., 2015). This measure evaluated if, before 16 years old, participants had any sexual experiences with one (or more) individuals at least five years older or in a position of authority. To characterize potential abusers, 12 response choices were presented: natural or adoptive mother, natural or adoptive father, stepmother, stepfather, grandmother, grandfather, sister, brother, other family member, family friend, or an acquaintance at least five years older, teacher/babysitter/instructor, or stranger at least five years older than the respondent. Those who responded affirmatively to one of those 12 items were classified as having experienced child sexual abuse. To estimate the severity of CSA, participants who reported CSA were asked follow-up questions to describe their abuse.

CSA severity was operationalized through three characteristics of the abuse: the intrusiveness of abusive sexual experiences (coded 1 = no direct sexual contact, i.e., voyeurism or exposure; 2 = sexual touching; 3 = oral penetration; and 4 = anal or vaginal penetration), the frequency of sexual abuse (coded 1 = one time; 2 = two to five times; and 3 = more than five times), and the relationship with the perpetrator (coded 1 = stranger; 2 = known person; 3 = family member; and 4 = parental figure). The severity indicators were used separately and summed to obtain an overall score ranging from 3 to 11, where a higher score represented more severe sexual abuse. In past studies, these three indicators were well represented by a CSA severity latent variable, and were significantly associated with couple distress (Vaillancourt-Morel et al., 2015) and extradyadic sexual involvement (Vaillancourt-Morel et al., 2016).

#### Attachment anxiety and avoidance

The 12-item French version of the Experiences in Close Relationships questionnaire (see Brennan, Clark, & Shaver, 1998, for the original 36-item questionnaire and Lafontaine et al., 2016, for the 12-item version

in French; ECR-12) was used to measure romantic attachment. The ECR-12 is based on the bidimensional model of adult attachment and includes two 6-item subscales that respectively assess anxious (e.g., "I worry about being abandoned") and avoidant attachment (e.g., "I don't feel comfortable opening up to romantic partners"). All items are scored on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Items are averaged for each subscale, elevated scores indicating greater anxiety and avoidance in couple relationships. Using a sample of 4,184 adults, Brassard et al. (2012) applied ROC curve techniques to determine clinical thresholds for the Anxiety and Avoidance subscales of the ECR-12. Maximum sensitivity and specificity to detect couple distress are attained with an item mean of 3.5 for the Anxiety subscale and an item mean of 2.5 for the Avoidance subscale. Reliability estimates for the 12-item version vary from .78 to .87 for the Anxiety subscale, and from .74 to .83 for the Avoidance subscale and, over a one-year period, test-retest coefficients range from .64 to .96 (Lafontaine et al., 2016). Confirmatory factor analyses show that the ECR-12 is based on a bidimensional factor structure reflecting attachment anxiety and avoidance and is invariant across gender and language (Lafontaine et al., 2016). In the present study, Cronbach's alpha for the two subscales was .82.

#### Sexual Avoidance

The 10-item French version of the Sexual Avoidance subscale (Katz, Gipson, & Turner, 1992, translated into French by Vaillancourt-Morel et al., 2015), is drawn from the 30-item Sexual Aversion Scale (Katz, Gipson, Kearl, & Kriskovich, 1989) and assesses a general tendency to avoid sexual situations and sexual interactions with a partner. Each item is answered on a 4-point Likert scale from 1 (*not like me at all*) to 4 (*really like me*) (e.g., "I am afraid to engage in sexual intercourse with another person," "The thought of sex makes me nervous"). Item responses are summed to obtain a total score ranging from 10 to 40, with high scores reflecting higher avoidance of sexual activities. Previous studies of the Sexual Avoidance subscale have found satisfactory internal consistency (alpha = .87, La Rocque & Cioe, 2011), high testretest reliability over one month (r = .90; Katz et al., 1989), and a unidimensional factorial structure for both the English (Katz et al., 1992) and the French version of this subscale (Vaillancourt-Morel et al., 2015). The construct validity of the scale is supported by a significant association of sexual avoidance with sexuality concerns and low sexual desire (Katz & Jardine, 1999). In the present study, Cronbach's alpha was .86.

#### Sexual compulsion

The 10-item French version of the Sexual Compulsivity Scale (Kalichman et al., 1994, translated into French by Vaillancourt-Morel et al., 2015), assesses participants' intrusive preoccupation with sexuality, their inability to manage their sexual thoughts and/or behaviors, and the subsequent effects of such phenomena on daily functioning. The items are answered on a 4-point Likert scale with response options ranging from 1 (not like me at all) to 4 (totally like me) (e.g., "My sexual thoughts and behaviors are causing problems in my life," "I think about sex more than I would like to"). The items are added to compute a total score ranging from 10 to 40, where a higher score represents a higher level of sexual compulsivity. Though there is no validated clinical cutoff score for this scale, a value of 24 or higher has been used by previous researchers to indicate severe sexual compulsivity symptoms (Cooper, Delmonico, & Burg, 2000; Parsons, Bimbi, & Halkitis, 2001). This scale has excellent internal consistency (alpha ranges from .87 to .92; Kalichman & Rompa, 1995; 2001) and satisfactory test-retest temporal stability over a three-month period (r = .80, Kalichman & Rompa, 1995). Confirmatory factor analysis shows that the scale measures a unidimensional concept (Vaillancourt-Morel et al., 2015). Finally, strong associations between sexual compulsivity and sexual risk taking in diverse populations support the construct validity of the Sexual Compulsivity Scale (see McBride, Reece, & Sanders, 2008). In the present study, Cronbach's alpha was .85.

#### Other child maltreatment experiences

A six-item French questionnaire was used to assess the presence of past childhood maltreatment other than CSA. This measure is based on self-report measures used in past studies assessing physical and psychological abuse, physical and psychological negligence, and exposure to physical and psychological

intimate partner violence (Briere & Runtz, 1990; Godbout et al., 2006). Response choices vary from 0 (*never*) to 4 (*very often*). However, because our goal was to measure the occurrence rather than the intensity of other maltreatment experiences, these items were recoded (experienced = 0, or not experienced = 1) and summed to form a global score from 0 to 6, with higher scores indicating greater exposure to other child maltreatment experiences. In a recent study (Bigras et al., 2017b), based on an eight-item similar measure that included CSA and bullying, confirmatory factor analysis showed that all these maltreatment experiences loaded on a single latent variable, with significant loadings ranging from .66 to .91. In addition, the construct validity of this questionnaire was supported by significant associations between exposure to these other child maltreatment experiences and attachment insecurity, affect regulation, psychological distress, couple problems, and sexual well-being (Bigras et al., 2017a; Godbout et al., 2006). In the present study, when items were treated as dichotomized variables, Cronbach's alpha was .81.

### **Psychological Distress**

Psychological distress was assessed with a 14-item French version of the Psychiatric Symptoms Inventory (PSI; Boyer, Préville, Légaré, & Valois, 1993; Ilfeld, 1976) measuring depression, anxiety, cognitive impairment, and irritability. All items are answered on a 4-point Likert scale ranging from 0 (*never*) to 3 (*really often*). Using the rule of three, the total score is transformed on a 0 to 100 score, with a total score of 30 representing the clinical threshold (Boyer et al., 1993). This self-report questionnaire showed excellent construct validity (Boyer et al., 1993; Kovess, Murphy, Tousignant, & Fournier, 1985). In the present sample, Cronbach's alpha was .91.

#### **Couple adjustment**

Participants who were married, cohabiting, or dating completed the French-Canadian version of the four-item Dyadic Adjustment Scale (DAS-4; Sabourin, Valois, & Lussier, 2005; Spanier, 1976). The first three items are answered on a 6-point Likert scale ranging from 0 (*never*) to 5 (*always*), and the fourth item is rated on a 7-point Likert scale ranging from 0 (*extremely unhappy*) to 6 (*perfectly happy*). All items are summed to compute a total score ranging from 0 to 21, with a score of 13 representing the clinical cutoff distinguishing distressed from nondistressed participants (Sabourin et al., 2005). This short instrument has shown psychometric qualities similar to the original version, including satisfactory internal consistency (Cronbach's alpha from .76 to .96) and high stability over a two-year follow-up (Sabourin et al., 2005). In the present sample, Cronbach's alpha was .80.

### **Statistical analyses**

#### **Objective 1**

To identify homogeneous and distinct subgroups within our sample of CSA survivors, the software program SAS 9.4 was used to perform a hierarchical cluster analysis using four continuous variables: attachment anxiety, attachment avoidance, sexual avoidance, and sexual compulsion. All variables were Z-transformed so that each of them would contribute equally to the formation of the clusters. Because high correlations between clustering variables may overweight the underlying constructs, the correlation matrix was examined and did not indicate multicolinearity problems (r < .23). The Ward method algorithm using the Euclidian distance strategy was used to determine the number of homogenous profiles of CSA survivors that could be formed. Cases were combined when they increased the overall within-cluster variance to the smallest possible degree. The best number of homogeneous profiles was assessed using three statistical criteria: the Cubicon Clustering Criterion (CCC), the Pseudo F2, and the T2. Those criteria are applied to assess within-profile homogeneity (CCC) and between-profile heterogeneity (Pseudo F2 and T2). The best combination of these three indices indicates the number of profiles that best fit the data.

Further analyses were then conducted with SPSS 24.0 to describe the distinctive features of these clusters. A multivariate analysis of variance (MANOVA) followed by least-significant-difference (LSD) post-hoc comparisons was performed to compare the obtained profiles and the nonvictim group on

the four dependent variables: attachment anxiety, attachment avoidance, sexual avoidance, and sexual compulsion.

#### **Objective 2**

A chi-square analysis was conducted to examine the distribution of women and men across CSA survivor profiles.

#### **Objective 3**

To examine whether the different profiles of CSA survivors present higher rates of CSA severity and other child maltreatment experiences, chi-square analyses were computed. More specifically, we sought to determine whether the CSA profiles could be distinguished with regard to CSA severity indicators (i.e., intrusiveness of the abusive experiences, frequency of abuse and relationship with the assailant) and the experience of nonsexual child maltreatment (psychological abuse, physical abuse, neglect and exposure to parental violence and cumulative traumas). A *t* test was also performed to compare if CSA survivors from distinct profiles reported different CSA severity scores.

#### **Objective 4**

A one-way MANOVA (CSA survivors groups obtained using cluster analysis plus a nonvictim group) was performed on two dependent variables: personal distress and couple distress. Follow-up ANOVAs and LSD comparisons were used to locate specific group differences.

#### Results

#### Number of CSA profiles

For the hierarchical profile analyses on the CSA sample (n = 324), solutions were investigated for one to 15 clusters. The combination of fit indices indicated that the two-cluster solution was optimal. When moving from a two-cluster to a three-cluster solution, a substantial drop was observed for the Pseudo F (two-cluster solution = 83.1, three-cluster solution = 79.9) and the T-square criteria (two-cluster solution = 107, three-cluster solution = 32.5), and a relatively small decrease was observed for the cubic clustering criterion (two-cluster solution = 6.1, three-cluster solution = 6.7). In addition, the inspection of the hierarchical analysis dendogram indicates the presence of two distinct clusters. These results suggest that a two-cluster model is parsimonious while still capturing the nature of the distinct underlying classes of victims.

#### **Descriptions of CSA survivor profiles**

Means and standard deviations of attachment and sexual variables for each profile are reported in Table 1. The first profile included 65.7% of the CSA sample. Using the available clinical thresholds, CSA survivors in this cluster reported elevated attachment anxiety (62% clinically significant), moderate scores on attachment avoidance (32.4% clinically significant), and relatively low scores on sexual avoidance and sexual compulsion (0.9% clinically significant). This pattern of results fit a Preoccupied Attachment profile. The second profile includes 34.3% of the CSA sample. These CSA survivors showed high scores on attachment anxiety (73.9% clinically significant) and avoidance (73.9% clinically significant), as well as high scores on sexual avoidance and sexual compulsion (51.4% clinically significant for compulsion). CSA survivors from this cluster seemed to form a Fearful Attachment and Sexual Ambivalence profile. When data from these two profiles were combined, a substantial majority of CSA survivors (79.6%) reported clinically significant disruptions of attachment security (71.4% in the first profile and 95.5% in the second profile).

	CSA Cluster 1	CSA Cluster 2 Fearful Attachment and Sexual Ambivalence Profile n = 111	Comparison Group Nonvictims n = 484
	Preoccupied Attachment Profile		
	n = 213		
Cluster variables	M (SD)	M (SD)	M (SD)
Attachment-related anxiety	4.08 (1.55) <sup>a,c</sup>	4.40 (1.38) <sup>a</sup>	3.73 (1.45) <sup>b,c</sup>
Attachment-related avoidance	2.25 (1.01) <sup>a</sup>	3.63 (1.40) <sup>b</sup>	2.51 (1.20) <sup>c</sup>
Sexual avoidance	12.12 (3.03) <sup>a</sup>	15.23 (6.36) <sup>b</sup>	11.79 (3.23) <sup>a</sup>
Sexual compulsion	14.15 (3.25) <sup>a</sup>	23.53 (6.81) <sup>b</sup>	14.54 (4.81) <sup>a</sup>
Gender	% (n)	% (n)	. ,
Women	82.2% (175)*	60.4% (67)*	_
Men	17.8% (38)*	19.6% (44)*	—
CSA characteristics	M (SD)	M (SD)	M (SD)
Severity	7.03 (1.40)	7.18 (1.64)	—
Proximity with the assailant	% ( <i>n</i> )	% ( <i>n</i> )	
Intrafamilial	83.1% (177)	73.9% (82)	—
Extrafamilial	16.9% (36) <sup>*</sup>	26.1% (29)*	—
Type of act			
Without penetration	78.2% (158)	58.3% (63)	_
With penetration	21.8% (44)*	41.7% (45)*	—
Frequency			
Single abuse	22.7% (48)	27.4% (29)	—
2 to 5 times	50.2% (106)	37.7% (40)	_
More than 5 times	27.0% (57)	34.9% (37)	
Nonsexual child maltreatment	M (SD)	M (SD)	
Cumulative traumas (0 to 6)	2.70 (1.30)	2.99 (1.42)	—
	% ( <i>n</i> )	% ( <i>n</i> )	
Psychological abuse	56.4% (119) <sup>*</sup>	70.5% (74)*	_
Physical abuse	31.4% (72)	38.1% (40)	—
Neglect	35.7% (75)	42.9% (45)	_
Exposure to parental violence	46.2% (96)*	59.0% (62) <sup>*</sup>	
Psychosocial outcomes	M (SD)	M (SD)	M (SD)
Psychological distress	29.90 <sup>a</sup> (18.71)	39.91 <sup>b</sup> (20.36)	26.02 <sup>c</sup> (18.41)
Couple adjustment	16.28 <sup>a</sup> (2.94)	12.28 <sup>b</sup> (3.36)	16.65 <sup>a</sup> (2.87)

Table 1. Means and standard deviations for attachment, sexual, and psychosocial outcomes among survivors from the two CSA clusters and nonvictims.

*Note*. CSA = childhood sexual abuse.

Means with different letters differ at p < .05. \*p < .05.

# Comparison of attachment insecurity and sexual functioning among CSA survivor profiles and nonvictims

Means and standard deviations for attachment security and sexual functioning in CSA survivors and nonvictims are presented in Table 1. There was a significant multivariate between-group difference on attachment security and sexual functioning, F(8,1466) = 59.47, p < .001,  $\eta^2 = .245$ , Wilks's  $\lambda = .570$ . Post-hoc ANOVAs showed significant group differences on all four dependent variables, i.e., attachment anxiety with a small effect, F(2,736) = 10.35, p < .001,  $\eta^2 = .027$ , avoidant attachment with a medium effect, F(2,736) = 52.99, p < .001,  $\eta^2 = .126$ , sexual avoidance with a small effect F(2,736) = 38.13, p < .001,  $\eta^2 = .094$ , and sexual compulsion with a large effect, F(2,736) = 186.06, p < .001,  $\eta^2 = .336$ .

LSD post-hoc tests revealed that compared with CSA survivors from the Preoccupied Attachment profile and nonvictims, CSA survivors from the Fearful Attachment and Sexual Ambivalence profile showed higher attachment-related avoidance (p < .001), higher sexual avoidance (p < .001), and higher

sexual compulsion (p < .001). The two CSA profiles were not significantly different on attachment anxiety (p = .061), but both groups reported more anxious attachment than nonvictims did (Fearful Attachment and Sexual Ambivalence profile, p < .001; Preoccupied Attachment profile, p = .006). The results also indicated that compared to nonvictims, CSA survivors from the Preoccupied Attachment profile reported less avoidant attachment (p = .011). These two groups were not significantly different with regard to sexual avoidance (p = .232) and sexual compulsion (p = .508).

#### Comparison of gender in the CSA survivor profiles

#### Gender

To determine whether the distribution of women and men in the Preoccupied Attachment and the Fearful Attachment and Sexual Ambivalence profiles were significantly different, a chi-square analysis was conducted. The results showed that gender and profiles were associated with a small effect,  $\chi^2(1) = 18.34$ , p < .001,  $\varphi = .238$ . In the Preoccupied Attachment profile, the proportion of women was significantly larger, whereas in the Fearful Attachment and Sexual Ambivalence profile, the proportion of men was significantly larger (see Table 1).

# Comparison of CSA severity and other child maltreatment experiences in the CSA survivor profiles

#### CSA severity

Results showed that CSA survivors in the Fearful Attachment and Sexual Ambivalence group had more often experienced CSA involving penetration with a small effect,  $\chi^2(1) = 3.87$ , p < .05,  $\varphi = .109$ , and not committed by a parental figure (intrafamilial CSA) with a small effect,  $\chi^2(1) = 13.60$ , p < .001,  $\varphi = .209$ , when contrasted with CSA survivors from the Preoccupied Attachment profile. There was no significant difference between both groups on the frequency of abuse,  $\chi^2(2) = 4.49$ , p = .106,  $\varphi = .119$ , or on the overall score of CSA severity, t(332) = -0.83, p = .406, d = .098.

#### Other child maltreatment experiences

Nonsexual forms of child maltreatment were experienced by a substantial number of CSA survivors. In the Preoccupied Attachment profile, these rates ranged from 31% to 56%, whereas in the Fearful Attachment and Sexual Ambivalence profile, rates ranged from 38% to 70% (see Table 1). When the different forms of child maltreatment were examined separately, CSA survivors from the Fearful Attachment and Sexual Ambivalence profile reported higher rates of psychological abuse with a small effect,  $\chi^2(1) = 5.85$ , p = .016,  $\varphi = .136$ , and higher rates of exposure to parental violence with a small effect,  $\chi^2(1) = 4.64$ , p < .05,  $\varphi = .122$ , compared to CSA survivors from the Preoccupied Attachment profile. Regarding cumulative child maltreatment, CSA survivors in both profiles experienced, on average, at least two other forms of child maltreatment in addition to the CSA. However, the between-group difference was not significant t(332) = -1.85, p = .065, d = .21.

#### Psychological and couple distress among CSA survivors and nonvictims

Finally, to determine whether the two CSA profiles (n = 324) and the nonvictim group (n = 484) were significantly different on psychological and couple distress, a MANOVA was computed. Results indicated a significant difference, F(4,926) = 12.00, p < .001,  $\eta^2 = .049$ , Wilks's  $\lambda = .904$ . Mean differences were significant for both psychological, F(2,464) = 13.74, p < .001,  $\eta^2 = .056$ , and couple distress, F(2,464) = 18.75,  $p < .001, \eta^2 = .075$  (see Table 1). Post-hoc tests revealed that CSA survivors from the Fearful Attachment and Sexual Ambivalence profile showed more psychological (p < .001) and couple distress (p < .001) than CSA survivors from the Preoccupied Attachment profile and nonvictims did. CSA survivors from the Preoccupied Attachment profile reported more psychological distress (p = .029) than nonvictims, but these two groups did not differ on couple adjustment (p = .108).

#### Discussion

First, it must be emphasized that two thirds of CSA survivors included in this study reported clinically significant disruptions of attachment security. This result confirms that CSA represents a major attachment trauma, an observation that underlies many theories developed to explain the adverse outcomes specific to early sexually abusive experiences (Browning, 2002; Finkelhor & Browne, 1985) or child maltreatment in general (Allen & Fonagy, 2015; Briere & Scott, 2015; Courtois, 2010; Freyd & Birrell, 2013; Freyd, Deprince, & Zurbriggen, 2001).

Paralleling previous findings, the results of this study are consistent with previous findings (Briere & Scott, 2015; Trickett et al., 2011) and suggest that adult survivors of child sexual abuse do not form a homogeneous group. When attachment and sexual outcomes are studied simultaneously, two distinct profiles of CSA survivors emerge. First, a subgroup formed mostly by anxious individuals reporting no significant sexual problems, and second, a subgroup of fearfully attached individuals showing a complex pattern of sexual ambivalence, with victims reporting both sexual compulsion and sexual avoidance. Those results provide support for a new integrative, person-centered perspective that reconciles the inconsistencies found in past studies on attachment and sexual responses in child sexual abuse survivors. The hypothesis that these discrepancies might be better understood by subdividing CSA survivors into different profiles shows promise.

In the first profile, comprising the majority of CSA survivors from the present sample (65.7%), most individuals could be characterized as anxiously attached or preoccupied. However, this group is unique because in these CSA survivors, the activation of the attachment and sexual behavioral systems was not coordinated. This finding runs counter to recent theoretical advances (Mikulincer & Shaver, 2012) and empirical findings (Birnbaum, 2015) stipulating that in anxious individuals, there is a concurrent hyperactivation of the sexual behavioral system (i.e., sexually compulsive attitudes and behaviors designed to minimize abandonment fears). Thus, "variable-centered" studies that treat CSA survivors as a uniform group and compare them with nonvictims on attachment or sexual variables may not be well suited to identify a specific subgroup of survivors in which the attachment and sexual behavioral systems are decoupled or desynchronized. The absence of significant negative sexual outcomes in this subgroup can also be explained by a reduced capacity to report adverse sexual responses that are nevertheless present, perhaps because of the inability of our research measures to assess sexual variables that are specifically related to the observed pattern of anxious attachment in CSA survivors (e.g., automatized sexual compliance or submissiveness) or because of other clinical symptoms not measured in the present study (e.g., dissociation).

In the second profile, including approximately one third of CSA survivors sample, most individuals displayed fearful attachment. In these cases, the attachment system was closely synchronized with the sexual system; that is, fearful attachment (i.e., individuals with elevated attachment anxiety and avoidance) accompanied sexual ambivalence, in which sexual compulsion coexisted with sexual avoidance. Whereas rapid changes from sexual avoidance to sexual compulsion have been previously reported in a past study of young female CSA survivors (Noll et al., 2003), many provisional explanations of this phenomenon must await future empirical investigations. Our findings also partially support Aaron's (2012) conclusions suggesting that sexual avoidance and compulsion are situated on a bipolar dimension and are both frequently reported CSA outcomes. In addition, clinical case conceptualizations of CSA generally suggest that that fear betrayal induced by the CSA experience may lead to emotion dysregulation and cognitive errors in the interpretation of their own or their partner's sexual desire (Finkelhor & Brown, 1985). The pattern of more severe attachment and sexual difficulties in this subgroup was also associated to higher scores of psychological and couple distress. This is consistent with past studies indicating that CSA severity was generally associated with several indicators of mental health (Amado et al., 2015) and marital problems (Colman & Widom, 2004; Godbout et al., 2009).

In an effort to better understand the two profiles of CSA survivors, we explored their characteristics in terms of gender, CSA severity, and other types of child maltreatment experiences. CSA survivors from both groups were mainly women who reported multiple abusive incidents involving a family member and who also experienced other forms of child maltreatment. However, although these effects were small, the Fearful Attachment and Sexual Ambivalence group included slightly more men, incidents of penetration, cases of extrafamilial abuse, co-occurring psychological abuse, and exposure to parental violence compared to the Preoccupied profile. One could cautiously conclude that CSA survivors from the Fearful Attachment and Sexual Ambivalence profile have faced more complex forms of traumatic exposure and thus present the more complicated pattern of sexual reactions observed in a smaller proportion of adult survivors of CSA (Courtois & Ford, 2009). The available past evidence of a dose-response association between CSA severity and negative attachment outcomes (Allen & Fonagy, 2015) is consistent with our observation that CSA survivors from Fearful Attachment and Sexual Ambivalence profile reported more psychological and couple distress than preoccupied CSA survivors. These findings should be replicated to confirm our observations, and the regulative mechanisms through which attachment and sexuality become disconnected should be further studied.

#### Limitations and further study

The results should be interpreted within the limitations of the present design. First, our sampling strategy, which was limited to French-speaking Canadians who volunteered to participate in an online study, yielded an overrepresentation of women and undergraduate students, thereby limiting the generalizability of our findings. Second, self-report assessments, including a retrospective assessment of CSA, may introduce biases or distortions in the recall of the abuse. Moreover, the present pattern of results may differ when controlling for positive or negative events that intervened between CSA and our assessment of adult sexual and attachment outcomes. CSA-related reactions, support, or treatment that are known to affect attachment insecurity may have a positive effect on the course of the negative outcomes. For example, good psychological support from the non abuser caregiver when the abuse is disclosed may reduce trauma-related symptoms and predict less negative outcomes (Godbout et al., 2014). In the same vein, past studies have amply shown that attachment can be positively modified by a psychological treatment (Shaver & Mikulincer, 2008). On the other hand, other negative developmental experiences such as sexual revictimization, negative reactions to CSA disclosure, or an intimate relationship in which betrayal emotions are re-experienced may negatively affect adult sexuality and attachment, and worsen this negative trauma-symptom trajectory. Finally, additional subgroups may be identified in treatment-seeking CSA survivors or when examining different sexual outcomes (e.g., sexual dysfunctions or compulsive pornography consumption) to cover a wider range of sexual difficulties.

Longitudinal studies may help to explain the complex interplay of sexual and attachment systems following CSA and the role of potential moderator/mediator variables (e.g., dissociative or trauma-related symptoms, specific indicators of CSA severity or other traumatic maltreatment experiences), as well as changes to attachment and sexual approach/avoidance motivations over time. Past studies have indeed shown that romantic attachment is not a fixed phenomenon and that positive changes in attachment security over the course of a close relationship or following psychological treatments can occur (Fraley, Vicary, Brumbaugh, & Roisman, 2011; Godbout et al., 2017).

#### **Clinical Implications**

Our results highlight the clinical importance of considering CSA survivors as a heterogeneous population for whom specific assessment of trauma-related symptoms should inform treatment plans and intervention targets according to the needs of each survivor. Evidence-based assessment of CSA survivor profiles must be conducted within a life-history approach to more precisely pinpoint the multiple, complex developmental pathways that might result in different patterns of maladaptive attachment and sexual responses in adulthood. Efficient assessment may help health professionals to identify the subgroup to which the survivor belongs and provide well-tailored interventions. In the current study, we used simple, short-length, self-reported questionnaires that are not time-consuming and are easily and freely accessible to help health professionals better understand CSA survivors' symptoms and guide interventions. Our findings suggest that CSA survivors could benefit from interventions that target, or consider, attachment insecurities and, in some cases, associated sexual motivations while exploring possible individual and couple distress as previously proposed (see Briere & Scott, 2015; Johnson & Zuccarini, 2010).

#### References

- Aaron, M. (2012). The pathways of problematic sexual behavior: A literature review of factors affecting adult sexual behavior in survivors of childhood sexual abuse. Sexual Addiction & Compulsivity: The Journal of Treatment & Prevention, 19(3), 199–218. doi:10.1080/10720162.2012.690678
- Allen, J. G., & Fonagy, P. (2015). Trauma. In P. Luyten, L. C. Mayes, P. Fonagy, M. Target, & S. J. Blatt (Eds.), Handbook of psychodynamic approaches to psychopathology (pp. 165–198). New York, NY: Guilford Press.
- Amado, B. G., Arce, R., & Herraiz, A. (2015). Psychological injury in victims of child sexual abuse: A meta-analytic review. Psychosocial Intervention, 24(1), 49–62. doi:S1132055915000083
- 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. doi:10.1016/j.chiabu.2006.12.002
- Bigras, N., Daspe, M. E., Godbout, N., Briere, J., & Sabourin, S. (2017a). 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), 1–20. doi:10.1080/0092623X.2016.1176609
- Bigras, N., Godbout, N., Hébert, M., & Sabourin, S. (2017b). Cumulative adverse childhood experiences and sexual satisfaction in sex therapy patients: What role for symptom complexity? *The Journal of Sexual Medicine*, 14(3), 444–454. doi:10.1016/j.jsxm.2017.01.013
- Birnbaum, G. E. (2010). Bound to interact: The divergent goals and complex interplay of attachment and sex within romantic relationships. *Journal of Social and Personal Relationships*, 27(2), 245–252. doi:10.1177/0265407509360902
- Birnbaum, G. E. (2015). Like a horse and carriage? European Psychologist, 20(4), 265–274. doi:10.1027/1016-9040/a000237
- Blain, L. M., Muench, F., Morgenstern, J., & Parsons, J. T. (2012). Exploring the role of child sexual abuse and posttraumatic stress disorder symptoms in gay and bisexual men reporting compulsive sexual behavior. *Child Abuse & Neglect*, 36(5), 413–422. doi:10.1016/j.chiabu.2012.03.003
- Boyer, R., Préville, M., Légaré, G., & Valois, P. (1993). La détresse psychologique dans la population du Québec non institutionnalisée: Résultats normatifs de l'enquête Santé Québec [Psychological distress in the non-institutionalized Quebec's population: norms from the Santé Quebec's survey]. Revue Canadienne de Psychiatrie, 38, 339–343.
- Brassard, A., Darveau, V., Péloquin, K., Lussier, Y., & Shaver, P. R. (2014). Childhood sexual abuse and intimate partner violence in a clinical sample of men: The mediating roles of adult attachment and anger management. *Journal of Aggression, Maltreatment & Trauma, 23*(7), 683–704. doi:10.1080/10926771.2014.933464
- Brassard, A., Dupuy, E., Bergeron, S., & Shaver, P. R. (2015). Attachment insecurities and women's sexual function and satisfaction: The mediating roles of sexual self-esteem, sexual anxiety, and sexual assertiveness. *The Journal of Sex Research*, 52(1), 110–119.
- Brassard, A., Péloquin, K., Dupuy, E., Wright, J., & Shaver, P. R. (2012). Romantic attachment insecurity predicts sexual dissatisfaction in couples seeking marital therapy. *Journal of Sex & Marital Therapy*, 38(3), 245–262. doi:10.1080/0092623X.2011.606881
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). New York, NY: Guilford Press.
- Briere, J., & Runtz, M. (1990). Differential adult symptomatology associated with three types of child abuse histories. *Child Abuse & Neglect*, 14(3), 357–364. doi:10.1016/0145-2134(90)90007-G
- Briere, J., & Scott, C. (2015). Complex trauma in adolescents and adults: Effects and treatment. Psychiatric Clinics of North America, 38(3), 515–527. doi:10.1016/j.psc.2015.05.004
- Browning, C. R. (2002). Trauma or transition: A life-course perspective on the link between childhood sexual experiences and men's adult well-being. *Social Science Research*, *31*, 473–510.
- Clayton, A. H., & Vallarades Juarez, E. M. (2017). Female sexual dysfunction. *Psychiatric Clinics of North America*, 40(2), 267–284. doi:10.1016/j.psc.2017.01.004
- Cloitre, M., Miranda, R., Stovall-McClough, C., & Hyemee, H. (2005). Beyond PTSD: Emotion regulation and interpersonal problems as predictors of functional impairment in survivors of childhood abuse. *Behavior Therapy*, 36, 119–124.
- Colangelo, J. J., & Keefe-Cooperman, K. (2012). Understanding the impact of childhood sexual abuse on women's sexuality. *Journal of Mental Health Counseling*, 34(1), 14–37.
- Colman, R. A., & Widom, C. S. (2004). Childhood abuse and neglect and adult intimate relationships: A prospective study. *Child Abuse & Neglect*, 28(11), 1133–1151. doi:10.1016/j.chiabu.2004.02.005
- Cooper, A., Delmonico, D., & Burg, R. (2000). Cybersex users, abusers, and compulsives: New findings and implications. Sexual Addiction & Compulsivity, 7(1-2), 5-29. doi:10.1080/10720160008400205
- Courtois, C. A. (2010). Healing the incest wound: Adult survivors in therapy (2nd ed.). New York, NY: Norton.
- Courtois, C. A., & Ford, J. D. (2009). Treating complex traumatic stress disorders: An evidence-based guide. New York, NY: Guilford Press.

- Davis, D., Shaver, P. R., & Vernon, M. L. (2004). Attachment style and subjective motivations for sex. Personality and Social Psychology Bulletin, 30(8), 1076–1090. doi:10.1177/0146167204264794
- Del Giudice, M. (2011). Sex differences in romantic attachment: A meta-analysis. *Personality and Social Psychology Bulletin*, 37(2), 193–214. doi:10.1177/0146167210392789
- Dennerstein, L., Guthrie, J. R., & Alford, S. (2004). Childhood abuse and its association with mid-aged women's sexual functioning. *Journal of Sex & Marital Therapy*, 30(4), 225–234. doi:10.1080/00926230490422331
- Easton, S. D., Coohey, C., O'leary, P., Zhang, Y., & Hua, L. (2011). The effect of childhood sexual abuse on psychosexual functioning during adulthood. *Journal of Family Violence*, 26, 41–50. doi:10.1007/s10896-010-9340-6
- Finkelhor, D., & Browne, A. (1985). The traumatic impact of child sexual abuse: A conceptualization. American Journal of Orthopsychiatry, 55(4), 530–541.
- Fraley, R. C., Vicary, A. M., Brumbaugh, C. C., & Roisman, G. I. (2011). Patterns of stability in adult attachment: An empirical test of two models of continuity and change. *Interpersonal Relations and Group Processes*, 101(5), 974–992. doi:10.1037/a0024150
- Freyd, J., & Birrell, P. (2013). Blind to betrayal: Why we fool ourselves we aren't being fooled. Hoboken, NJ: Wiley.
- Freyd, J. J., Deprince, A. P., & Zurbriggen, E. L. (2001). Self-reported memory for abuse depends upon victim-perpetrator relationship. *Journal of Trauma & Dissociation*, 2(3), 5–15. doi:10.1300/J229v02n03\_02
- Frias, M. T., Brassard, A., & Shaver, P. R. (2014). Childhood sexual abuse and attachment insecurities as predictors of women's own and perceived-partner extradyadic involvement. *Child Abuse & Neglect*, 38, 1450–1458. doi:10.1016/j.chiabu.2014.02.009
- Godbout, N., Briere, J., Sabourin, S., & Lussier, Y. (2014). Child sexual abuse and subsequent relational and personal functioning: The role of parental support. *Child Abuse & Neglect*, 38(2), 317–325. doi:10.1016/j.chiabu.2013.10.001
- Godbout, N., Daspe, M.-E., 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. doi:10.1037/tra0000136
- Godbout, N., Dutton, D. G., Lussier, Y., & Sabourin, S. (2009). Early exposure to violence, domestic violence, attachment representations, and marital adjustment. *Personal Relationships*, 16, 365–384.
- Godbout, N., Lussier, Y., & Sabourin, S. (2006). Early abuse experiences and subsequent gender differences in couple adjustment. Violence and Victims, 21(6), 744–760.
- Godbout, N., Runtz, M., MacIntosh, H., & Briere, J. (2013). Traumas interpersonnels vécus en enfance et relations de couple [Childhood traumas and couple relationships]. *Cahier Recherche et Pratique*, 3(2), 14–17.
- Godbout, N., Sabourin, S., & Lussier, Y. (2007). La relation entre l'abus sexuel subi durant l'enfance et la satisfaction conjugale chez l'homme [The relation between child sexual abuse and couple satisfaction in men]. Revue Canadienne des Sciences du Comportement, 39(1), 46–59. doi:10.1037/cjbs2007004
- Hequembourg, A. L., Bimbi, D., & Parsons, J. T. (2011). Sexual victimization and health-related indicators among sexual minority men. *Journal of LGBT Issues Counseling*, 5(1), 2–20. doi:10.1080/15538605.2011.554603
- Ilfeld, F. W. (1976). Further validation of a psychiatric symptom index in a normal population. *Psychological Reports*, 39, 1215–1228.
- Joannides, P. (2012). The challenging landscape of problematic sexual behaviors, including "sexual addiction" and "hypersexuality." In P. J. Kleinplatz (Eds.), New directions in sex therapy: Innovations and alternatives (pp. 69–83). New York, NY: Routledge/Taylor & Francis Group.
- Johnson, S., & Zuccarini, D. (2010). Integrating sex and attachment in emotionally focused couple therapy. The Journal of Marital and Family Therapy, 36(4), 431–445. doi:10.1111/j.1752-0606.2009.00155.x
- Kalichman, S. C., Johnson, J. R., Adair, V., Rompa, D., Multhauf, K., & Kelly, J. A. (1994). Sexual sensation seeking: Scale development and predicting AIDS-risk behavior among homosexually active men. *Journal of Personality Assessment*, 62(3), 385–397. doi:10.1207/s15327752jpa6203\_1
- Kalichman, S. C., & Rompa, D. (1995). Sexual sensation seeking and sexual compulsivity scales: Validity, and predicting HIV risk behavior. *Journal of Personality Assessment*, 65(3), 586–601. doi:10.1207/s15327752jpa6503\_16
- Kalichman, S. C., & Rompa, D. (2001). The sexual compulsivity scale: Further development and use with HIV-positive persons. *Journal of Personality Assessment*, 76(3), 379–395. doi:10.1207/S15327752JPA7603\_02
- Katz, R. C., Gipson, M. T., Kearl, A., & Kriskovich, M. (1989). Assessing sexual aversion in college students: The Sexual Aversion Scale. Journal of Sex & Marital Therapy, 15(2), 135–140. doi:10.1080/00926238908403818
- Katz, R. C., Gipson, M., & Turner, S. (1992). Brief report: Recent findings on the Sexual Aversion Scale. Journal of Sex & Marital Therapy, 18(2), 141–146. doi:10.1080/00926239208404366
- Katz, R. C., & Jardine, D. (1999). The relationship between worry, sexual aversion, and low sexual desire. Journal of Sex & Marital Therapy, 25, 293–296.
- Kovess, V., Murphy, H. B. M., Tousignant, M., & Fournier, L. (1985). Évaluation de l'état de santé de la population des territoires des DSC de Verdun et de Rimouski [Evaluation of health status in the community dwellings of Verdun and Rimouski in the province of Quebec, Canada]. Unité de recherche psychosociale. Centre hospitalier Douglas.
- Kwako, L. E., Noll, J. G., Putnam, F. W., & Trickett, P. K. (2010). Childhood sexual abuse and attachment: An intergenerational perspective. *Clinical Child Psychology and Psychiatry*, 15(3), 407–422. doi:10.1177/1359104510367590
- La Rocque, C. L., & Cioe, J. (2011). An evaluation of the relationship between body image and sexual avoidance. *Journal of* Sex Research, 48(4), 397–408. doi:10.1080/00224499.2010.499522

- Lafontaine, M.-F., Brassard, A., Lussier, Y., Valois, P., Shaver, P. R., & Johnson, S. M. (2016). Selecting the best items for a short-form of the experiences in close relationships questionnaire. *European Journal of Psychological Assessment*, 32(2), 140–154. doi:10.1027/1015-5759/a000243
- Lemieux, S. R., & Byers, E. S. (2008). The sexual well-being of women who have experienced child sexual abuse. *Psychology of Women Quarterly*, 32(2), 126–144. doi:10.1111/j.1471-6402.2008.00418.x
- Mallinckrodt, B., McCreary, B. A., & Robertson, A. K. (1995). Co-occurrence of eating disorders and incest: The role of attachment, family environment, and social competencies. *Journal of Counseling Psychology*, 42(2), 178–186. doi:10.1037/0022-0167.42.2.178
- Marsh, H. W., Lüdtke, O., Trautwein, U., & Morin, A. J. S. (2009). Classical latent profile analysis of academic self-concept dimensions: Synergy of person and variable-centered approaches to theoretical models of self-concept. Structural Equation Modeling: A Multidisciplinary Journal, 16(2), 191–225. doi:10.1080/10705510902751010
- McBride, K. R., Reece, M., & Sanders, S. A. (2008). Using the Sexual Compulsivity Scale to predict outcomes of sexual behavior in young adults. *Sexual Addiction & Compulsivity*, 15(2), 97–115. doi:10.1080/10720160802035816
- McCabe, M. P., Sharlip, I. D., Lewis, R., Atalla, E., Balon, R., Fisher, A. D., Laumann, E., Lee, S. W., & Segraves, R. T. (2016). Incidence and prevalence of sexual dysfunction in women and men: A consensus statement from the Fourth International Consultation on Sexual Medicine 2015. *The Journal of Sexual Medicine*, 13, 144–152. doi:10.1016/j.jsxm.2015.12.034
- McCallum, E. B., Peterson, Z. D., & Mueller, T. M. (2012). Validation of the Traumatic Sexualization Survey for use with heterosexual men. *Journal of Sex Research*, 49(5), 423–433. doi:10.1080/00224499.2011.585524
- Merrill, L. L., Guimond, J. M., Thomsen, C. J., & Milner, J. S. (2003). Child sexual abuse and number of sexual partners in young women: The role of abuse severity, coping style, and sexual functioning. *Journal of Consulting and Clinical Psychology*, 71(6), 987–996. doi:10.1037/0022-006X.71.6.987
- Mikulincer, M. (2006). Attachment, caregiving, and sex within romantic relationships. In M. Mikulincer & G. S. Goodman (Eds.), *Dynamics of romantic love: Attachment, caregiving, and sex* (pp. 23–44). New York, NY: Guilford Press.
- Mikulincer, M., & Shaver, P. R. (2007). Attachment in adulthood: Structure, dynamics, and change. New York, NY: Guilford Press.
- Mikulincer, M., & Shaver, P. R. (2012). An attachment perspective on psychopathology. World Psychiatry, 11, 11–15.
- Minzenberg, M. J., Poole, J. H., & Vinogradov, S. (2006). Adult social attachment disturbance is related to childhood maltreatment and current symptoms in borderline personality disorder. *Journal of Nervous and Mental Disease*, 194(5), 341–368.
- Murray, L. K., Nguyen, A., & Cohen, J. A. (2014). Child sexual abuse. Child & Adolescent Psychiatric Clinics of North America, 23(2), 321–337. doi:10.1016/j.chc.2014.01.003
- Noll, J. G., Trickett, P. K., & Putnam, F. W. (2003). A prospective investigation of the impact of childhood sexual abuse on the development of sexuality. *Journal of Consulting and Clinical Psychology*, 71(3), 575–586. doi:10.1037/0022-006x.71.3.575
- Oshri, A., Sutton, T. E., Clay-Warner, J., & Miller, J. D. (2015). Child maltreatment types and risk behaviors: Associations with attachment style and emotion regulation dimensions. *Personality and Individual Differences*, 73, 127–133. doi:10.1016/j.paid.2014.09.015
- Parsons, J. T., Bimbi, D., & Halkitis, P. N. (2001). Sexual compulsivity among gay/bisexual male escorts who advertise on the Internet. Sexual Addiction & Compulsivity, 8(2), 101–112. doi:10.1080/10720160127562
- Plant, M., Plant, M., & Miller, P. (2005). Childhood and adult sexual abuse: Relationships with 'addictive' or 'problem' behaviours and health. *Journal of Addictive Diseases*, 24(1), 25–38. doi:10.1300/J069v24n01\_03
- Rellini, A., & Meston, C. (2007). Sexual function and satisfaction in adults based on the definition of child sexual abuse. *Journal of Sexual Medicine*, 4(5), 1312–1321. doi:10.1111/j.1743-6109.2007.00573.x
- Rellini, A. H. (2014). Sexual abuse and sexual function. In G. Corona, E. A. Jannini, & M. Maggi (Eds.), Emotional, physical and sexual abuse. Impact in children and social minorities (pp. 61–70). Cham, Switzerland: Springer.
- 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. doi:10.1177/088626099014002006
- Sabourin, S., Valois, P., & Lussier, Y. (2005). Development and validation of a brief version of the Dyadic Adjustment Scale with a nonparametric item analysis model. *Psychological Assessment*, 17(1), 15–27. doi:10.1037/1040-3590.17.1.15
- Shaver, P. R., & Mikulincer, M. (2008). Augmenting the sense of security in romantic, leader-follower, therapeutic, and group relationships: A relational model of psychological change. In J. P. Forgas & J. Fitness (Eds.), Social relationships: Cognitive, affective, and motivational processes (pp. 55–74). New York: Psychology Press
- Simpson, J. A., & Rholes, W. S. (2012). Adult attachment orientations, stress, and romantic relationships. In P. Devine & A. Plant (Eds.), Advances in experimental social psychology (Vol. 45, pp. 279–328). Burlington, MA: Academic Press.
- Skegg, K., Nada-Raja, S., Dickson, N., & Paul, C. (2010). Perceived "out of control" sexual behavior in a cohort of young adults from the Dunedin Multidisciplinary Health and Development Study. *Archives of Sexual Behavior*, 39(4), 968–978. doi:10.1007/s10508-009-9504-8
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. Journal of Marriage and the Family, 38(1), 15–28.

- Statistics Canada. (2014). Seuil de faible revenu pour chaque année selon la taille du ménage [Income threshold for each year according to the size of the family]. RLRQ, chapter R-10, r. 2, art. 35.1; 30045N, 38012N. Retrieved from http://cdn.carra.gouv.qc.ca/général/pages/IN99KXXX00A001.aspx.
- Stefanou, C., & McCabe, M. P. (2012). Adult attachment and sexual functioning: A review of past research. The Journal of Sexual Medicine, 9(10), 2499–2507. doi:10.1111/j.1743-6109.2012.02843.x
- Swanson, B., & Mallinckrodt, B. (2001). Family environment, love withdrawal, childhood sexual abuse, and adult attachment. Psychotherapy Research, 11(4), 455–472. doi:10.1080/713664062
- Szepsenwol, O., Mizrahi, M., & Birnbaum, G. E. (2015). Fatal suppression: The detrimental effects of sexual and attachment deactivation within emerging romantic relationships. *Social Psychological and Personality Science*, 6(5), 504–512. doi:10.1177/1948550615572636
- Trickett, P. K., Noll, J. G., & Putnam, F. W. (2011). The impact of sexual abuse on female development: Lessons from a multigenerational, longitudinal research study. *Development and Psychopathology*, 23(2), 453–476. doi:10.1017/S0954579411000174
- Tyler, K. A. (2002). Social and emotional outcomes of childhood sexual abuse: A review of recent research. *Aggression and Violent Behavior*, 7(6), 567–589. doi:10.1016/S1359-1789(01)00047-7
- Vaillancourt-Morel, M.-P., Dugal, C., Poirier Stewart, R., Godbout, N., Sabourin, S., Lussier, Y., & Briere, J. (2016). Extradyadic sexual involvement and sexual compulsivity in male and female sexual abuse survivors. *The Journal of Sex Research*, 53(4-5), 614–625. doi:10.1080/00224499.2015.1061633
- 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. doi:10.1016/j.chiabu.2014.10.024
- Vaillancourt-Morel, M.-P., Godbout, N., Sabourin, S., Briere, J., Lussier, Y., & Runtz, M. (2016). Adult sexual outcomes of child sexual abuse vary according to relationship status. *Journal of Marital and Family Therapy*, 42(2), 341–356. doi:10.1111/jmft.12154
- Vaillancourt-Morel, M.-P., Godbout, N., Sabourin, S., Péloquin, K., & Wright, J. (2014). Les séquelles conjugales d'une agression sexuelle vécue à l'enfance ou à l'adolescence [Couple outcomes of child or adolescent sexual abuse]. Carnet de notes sur les Maltraitances Infantiles, 1(1), 21–41.
- Voisin, D. R., Hotton, A., & Schneider, J. (2014). Exposure to verbal parental aggression and sexual activity among low income African American youth. *Journal of Child and Family Studies*, 23(2), 285–292. doi:10.1007/s10826-013-9720-7
- Walsh, K., Latzman, N. E., & Latzman, R. D. (2014). Pathway from child sexual and physical abuse to risky sex among emerging adults: The role of trauma-related intrusions and alcohol problems. *Journal of Adolescent Health*, 54(4), 442–448. doi:10.1016/j.jadohealth.2013.09.020
- 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.
- World Health Organization. (1999). *Report of the consultation on child abuse prevention*. Geneva, 29–31 March. Document WHO/HSC/PVI/99.1
- Zink, T., Klesges, L., Stevens, S., & Decker, P. (2009). The development of a sexual abuse severity score: Characteristics of childhood sexual abuse associated with trauma symptomatology, somatization, and alcohol abuse. *Journal of Interpersonal Violence*, 24(3), 537–546. doi:10.1177/0886260508317198