

RUNNING HEAD: CSA, SELF-CRITICISM, ATTACHMENT, RELATIONSHIPS

Undetected scars? Self-criticism, attachment, and romantic relationships among otherwise well-functioning childhood sexual abuse survivors

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This work was supported by a research grant given from The Israel Foundations Trustees (Doctoral Grant 29) to Dana Lassri. Dana Lassri was supported by a postdoctoral research fellowship from The Haruv Institute. Peter Fonagy is in receipt of a National Institute for Health Research (NIHR) Senior Investigator Award (NF-SI-0514-10157). Peter Fonagy was in part supported by the NIHR Collaboration for Leadership in Applied Health Research and Care (CLAHRC) North Thames at Barts Health NHS Trust. The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health.

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Abstract

Background: Studies have consistently demonstrated the negative impact of childhood sexual abuse (CSA) on intimate relationships. The majority of studies have focused on revictimization in at-risk or clinical samples, with very few addressing the impact of CSA on otherwise well-functioning adults and even fewer investigating the psychological mechanisms involved. To fill this gap, this study focuses on the effect of CSA on “normative” (nonviolent) romantic relationships in otherwise well-functioning young women and the mediating role of personality dimension self-criticism and attachment in this regard. Specifically, we investigate whether self-criticism and attachment avoidance mediate the relationship between CSA and romantic relationship satisfaction, while also examining the potential reciprocal associations between these variables. *Method:* The hypothesized mediation model was examined in a two-wave 6-month cross-lagged longitudinal design, using structural equation modeling. Participants were 59 well-functioning (psychologically, socially, occupationally) young women drawn from an earlier study that purposefully oversampled for CSA survivors. For the purpose of the current study, data from women who had been either sexually abused by a familiar perpetrator ($n = 30$) or had no history of sexual trauma ($n = 29$) were included. *Results:* Consistent with expectations, self-criticism mediated the association between CSA and romantic relationship satisfaction over time. In addition, a scarring effect of romantic relationship satisfaction on attachment avoidance was demonstrated. *Conclusions:* Findings suggest that CSA may lead to elevated levels of self-criticism, which in turn may be linked with reduced satisfaction in romantic relationships, setting in motion a vicious cycle involving relationship satisfaction and attachment avoidance.

Key words: Childhood sexual abuse, personality, self-criticism, attachment, romantic relationships.

Undetected Scars? Self-criticism, Attachment, and Romantic Relationships among
Otherwise Well-Functioning Childhood Sexual Abuse Survivors

The importance of childhood sexual abuse (CSA) in the development of psychopathology and later sexual revictimization among CSA survivors has been amply demonstrated (Messman-Moore & Long, 2003). The negative effect of CSA has been demonstrated primarily in the context of abusive relationships, sexual assaults, dating violence, and emotional and sexual revictimization more generally (Barnes, Noll, Putnam, & Trickett, 2009; Messman-Moore & Long, 2003; Widom, Czaja, & Dutton, 2008). Despite the high prevalence of CSA in both clinical (i.e., individuals experiencing significant psychopathological symptoms) and nonclinical samples, including well-functioning individuals and college students (Braver, Bumberry, Green, & Rawson, 1992; Filipas & Ullman, 2006; Gilbert et al., 2009; Scher, Forde, McQuaid, & Stein, 2004), there is a paucity of studies (Godbout, Briere, Sabourin, & Lussier, 2014) addressing the impact of CSA on romantic relationship difficulties among otherwise well-functioning young women, that is, female survivors of CSA who are currently not experiencing severe psychopathology and are functioning well psychologically, socially, and occupationally. Hence, while the impact of CSA on the recurrence of sexual victimization has been widely reported, the more subtle—yet potentially widespread—effects of CSA on romantic relationships in well-functioning samples has been insufficiently investigated. As studies (Messman-Moore & Long, 2003) suggest that relationship dissatisfaction might prompt later victimization among CSA survivors, there is an urgent need for research investigating the potential negative effect of CSA on interpersonal relationships in general and romantic relationships in particular.

The current study aims to elucidate the underlying mechanism that might account for the impact of CSA on romantic relationships, focusing on the interplay between personality and attachment. Recent research suggests that the personality dimension of self-criticism

might be of particular importance in these relationships, given its well-demonstrated negative effects on interpersonal relationships and specifically romantic relationships (Shahar, 2015; Zuroff & Duncan, 1999) and its role in explaining vulnerability for a wide range of disorders, ranging from depression and anxiety to personality disorder (Blatt, 2004; Luyten & Blatt, 2013). Self-criticism is characterized by high personal standards in combination with a tendency to adopt a punitive stance toward the self when these standards are not met, followed by feelings of failure, low self-worth, and self-blame (Blatt, 1995). Self-critical individuals tend to fear criticism from others, and worry that they will disappoint others and lose their approval and acceptance (Luyten, Fonagy, Lemma, & Target, 2012). They tend to be more ambivalent, critical, and distrustful in relationships, shy away from closeness and intimacy, and are apt to emphasize self-esteem and achievement at the expense of interpersonal relatedness (Zuroff & Fitzpatrick, 1995). Thus, their relationships are often characterized by doubts and dysfunctional transactional cycles, further confirming their conviction that others do not like them and disapprove of them (Luyten et al., 2012).

Research has demonstrated that childhood maltreatment, including CSA, may give rise to elevated self-criticism in adulthood, suggesting a tendency to internalize a critical attitude toward the self in the face of childhood maltreatment that in turn is associated with emotional difficulties (Pagura, Cox, Sareen, & Enns, 2006; Sachs-Ericsson, Verona, Joiner, & Preacher, 2006). Studies have shown that self-criticism may mediate the association between childhood emotional maltreatment and adult psychopathology (Glassman, Weierich, Hooley, Deliberto, & Nock, 2007; Sachs-Ericsson et al., 2006; Soffer, Gilboa-Schechtman, & Shahar, 2008), as well as between childhood emotional maltreatment and young adults' romantic relationships (Lassri, Luyten, Cohen, & Shahar, 2016; Lassri & Shahar, 2012). Similarly, feelings of guilt, shame, and self-blame constitute virtually intrinsic components of the self in CSA survivors (Gibb, 2002). However, studies testing the mediating effect of self-

blame in sexual revictimization produced contradictory results (Arata, 2000; Filipas & Ullman, 2006). These findings suggest that studies addressing more general aspects of the self (e.g., personality vulnerability), rather than focusing merely on abuse-related self-blame, might prove beneficial. However, no study to date has investigated the potential mediating role of self-criticism in the link between CSA and young adults' romantic relationships.

Further, self-criticism has also been associated with a tendency to avoid intimacy and closeness more generally in relationships (Mongrain, Vetteuse, Shuster, & Kendal, 1998; Zuroff, Sadikaj, Kelly, & Leybman, 2016). This is an important finding, as attachment avoidance has been shown to mediate the association between abusive experiences in childhood and relationship difficulties in adulthood (McCarthy & Taylor, 1999). Recent models involving both self-criticism and attachment measures have argued that this personality dimension encompasses broad cognitive-affective schemas related to achievement and failure, whereas attachment avoidance refers to the actual expression of these tendencies in close relationships (Luyten & Blatt, 2011; Sibley, 2007). Specifically, Sibley (2007) and others (Luyten & Blatt, 2016; Mikulincer & Shaver, 2007) have argued that both self-criticism and attachment avoidance basically involve a tendency to experience discomfort with closeness and dependence on others. Studies in this area suggest that the effect of self-criticism on romantic relationships is primarily mediated by attachment avoidance in close relationships (Sibley & Overall, 2008, 2010). That is, the critical and ambivalent interpersonal style that characterizes self-critical individuals may translate into an avoidant romantic attachment style in their close and intimate relationships.

The Current Study

This is the first study to examine whether self-criticism and attachment avoidance mediate the impact of CSA on prospective romantic relationship satisfaction among otherwise well-functioning young individuals. The hypothesized mediational model was

tested using structural equation modeling (SEM) in a 6-month prospective follow-up study of young adult females, including CSA survivors who had been sexually abused by a familiar perpetrator ($n = 30$) or women who reported the absence of any sexual trauma ($n = 29$). The use of a cross-lagged design enabled the examination of reciprocal relationships between self-criticism, attachment avoidance, and romantic relationship satisfaction, and allowed the opportunity of testing potential scarring effects. According to the scar model, personality might be influenced by episodic symptoms; namely, symptoms may leave “scars” on individuals’ personality factors, as consistently been exemplified in the implications of depression on self-esteem (Lewinsohn, Steinmetz, Larson, & Franklin, 1981). In addition, to investigate whether the observed effects were uniquely related to self-criticism and adult attachment avoidance, we controlled for the potential confounding effects of psychopathology, as increased levels of psychopathology have previously been reported to mediate the link between CSA and revictimization (Messman-Moore & Long, 2003).

Method

Participants and Procedure

The sample was drawn from a larger project focusing on the impact of childhood experiences on young adults’ well-being (Lassri et al., 2016; Lassri & Shahar, 2012). The current study reports on an independent sample of 135 young women that was purposefully oversampled for CSA survivors. Participants were sought via announcements on websites and internet forums for CSA survivors, bulletin boards posted throughout universities, rape crisis centers, public psychological service clinics, therapists’ clinics, and service centers for sexually abused women. General inclusion criteria for the study were: (a) young adult (aged 18–39); (b) for those with a history of CSA, the abuse had to have involved a known, non-peer perpetrator, as assessed using multiple measures (as detailed in Measures, below); and (c) being engaged in a meaningful romantic relationship (with a partner either of a different

or of the same gender) for at least 1 month within the past 3 months. In order to sample well-functioning individuals, participants completed a screening questionnaire at the beginning of the study, addressing their function on occupational, educational, physical, social, romantic, and psychological aspects. Then, the first author, a psychologist, under the supervision of the last author, a certified clinical psychologist, has screened individuals according to their level of functioning, based on the “Global Assessment of Functioning (GAF) Scale” from Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (2000). Exclusion criteria included being currently hospitalized in an inpatient psychiatric ward or currently experiencing severe psychological symptoms or being involved in an abusive romantic relationship. The sample was demographically varied. Assessment was conducted using self-report questionnaires administered by e-mail or in person according to the participant’s preference. At baseline (Time 1), the participants first completed a consent form and then completed the surveys. Upon completion of the surveys, the participants were financially compensated with \$20 for their time. At Time 2 (6 months later), participants were contacted by e-mail and/or telephone and invited to participate in the next step. Time 2 questionnaires were attached to the contact e-mails. Upon completion of the Time 2 questionnaires, participants were financially compensated with \$20 for their time. All 135 participants at Time 1 were contacted by e-mail and/or telephone, and 92 (68 %) responded and volunteered to participate at Time 2 within 1 to 4 weeks.

For the purpose of the current report, only women who either (a) reported having a history of CSA by a known, non-peer perpetrator or (b) did not report any history of sexual trauma were selected from the total sample. Of the total of 135 participants, 49 women reported a history of CSA by a known perpetrator; however, four of these did not meet the inclusion criteria as they had not consistently reported having been abused by a familiar non-peer perpetrator in all measures. The remaining 86 women who completed the study protocol

included 30 participants who reported sexual trauma (either not in childhood and/or not by a familiar perpetrator) and 56 women who reported a complete absence of any history of sexual trauma. Thus, 45 women met the CSA survivor inclusion criteria and 56 women the non-CSA inclusion criteria; data from the remaining 34 participants, who did not match criteria for this study, were omitted. As the current study focuses on the implications of CSA for *prospective* romantic relationships, only data gathered from participants who also reported having been engaged in a significant romantic relationship for at least 1 month within the past 3 months at Time 2 were used. Consequently, participants in the current study were 30 young adult females reporting a history of CSA and 29 young adult females reporting no such history, all of whom reported having been in a meaningful romantic relationship for at least 1 month within the past 3 months at Time 2. There were no significant differences between participants with and without a history of CSA in age ($t_{(57)} = -1.22, ns; M = 26.22, SD = 4.83$ for CSA; $M = 24.99, SD = 2.64$ for non-CSA) and years of education ($t_{(56)} = -.86, ns; M = 13.62, SD = 1.68$ for CSA; $M = 13.28, SD = 1.36$ for non-CSA). The study was approved by the Ethics Committee of the Department of Psychology at Ben-Gurion University.

Measures

Child sexual abuse. Childhood sexual trauma was assessed using three questionnaires: the Childhood Trauma Questionnaire (CTQ; Bernstein et al., 1994), the Sexual Experiences Survey – Short Form Victimization Revised (SES-SFV; Koss & Gidycz, 1985), and the Post-Traumatic Stress Diagnostic Scale – Part I (PDS; Foa, 1995). The CTQ is a 28-item retrospective self-report questionnaire. Individuals are asked to indicate on a 5-point Likert scale how often (1 = *never*, 5 = *frequently*) they experienced certain events as children/adolescents. These items yield five different subscales of childhood trauma: emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect (Bernstein & Fink, 1998). The CTQ has been found to be valid for use in clinical and

nonclinical populations (Scher, Stein, Asmundson, McCreary, & Forde, 2001) and has been shown to have high internal consistency and test–retest reliability, as well as a strong convergence with the Childhood Trauma Interview, evidencing that reports of child abuse and neglect based on the CTQ were highly stable over time and across types of instruments (Bernstein & Fink, 1998; Bernstein et al., 1994). In this study, only the sexual abuse subscale was used, ranging from a minimum of 5 (replying *never* in all five items assessing sexual abuse) to a maximum of 25. Internal consistency was $\alpha = .95$. Participants scoring 6 and above were further examined to meet study criteria for CSA, namely, whether the perpetrator was both known and not a peer. In cases where participants scored higher than 6, but also reported on different measures that the abuse was perpetrated by either a non-familiar person or a peer, or during adulthood, they were omitted from the study. Also, only participants who scored 5 on the levels of sexual abuse subscale were included as non-CSA participants. The SES-SFV is a shortened, modified version of the Sexual Experiences Survey (Koss & Gidycz, 1985). Participants were asked if they had ever (as children, adolescent, or adults) undergone any of 11 sexual experiences, their age at the time, the perpetrator relationship (stranger, acquaintance, family member), and the frequency of the experience (four categories: *none*, *once*, *few*, and *many*). The SES-SFV was also used to gain additional information regarding the age when the abuse began and ended, its frequency, and the perpetrator’s relationship to the survivor (stranger, acquaintance, family member, etc.). Data collected using this questionnaire were employed for screening for either the CSA survivors or the non-CSA participants. The latter group included only women scoring zero on the SES-SFV, indicating the absence of any form of sexual trauma. In this sample Cronbach’s $\alpha = .84$. The PDS (Foa, 1995) asks respondents to read through a list of traumatic events and checkmark any event they had witnessed/experienced. Only women who checked the events *sexually assaulted/abused by a familiar perpetrator or engaged in a sexual relationship with someone*

more than 5 years older (in this case, a clarification was initiated in order to assess whether the relationship was considered to be sexual abuse) were included in the sample as CSA survivors. In this sample Cronbach's $\alpha = .94$. Based on the described criteria, participants were assigned to a binary CSA dummy-variable: (a) CSA survivors and (b) non-CSA.

Self-criticism. Self-criticism was assessed via the Depressive Experiences Questionnaire (DEQ; Blatt, D'Afflitti, & Quinlan, 1976), an extensively used self-report measure composed of 66 items assessing self-criticism (e.g., "It is not who you are but what you have accomplished that counts"), dependency, and efficacy. Individuals are asked to indicate on a 7-point Likert scale the extent to which they agree (0 = *completely disagree*, 7 = *completely agree*) with each of the 66 items. In this study, only the self-criticism factor was used. In this sample Cronbach's $\alpha = .85$.

Adult attachment. Romantic attachment avoidance and anxiety were assessed using the Experiences in Close Relationships scale (ECR-R; Brennan, Clark, & Shaver, 1998). Individuals are asked to indicate on a 7-point Likert scale the extent to which they agree (1 = *completely disagree*, 7 = *completely agree*) with each of the 36 items. Two higher order dimensions are derived from the ECR-R: attachment avoidance (e.g., "I get uncomfortable when a romantic partner wants to be very close") and attachment anxiety (e.g., "I worry about being abandoned"). In this sample, Cronbach's $\alpha = .85$ for avoidance and $\alpha = .90$ for anxiety.

Psychopathology. Psychopathology was assessed using the Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983; Derogatis & Spencer, 1982), a 53-item scale used to assess a wide range of self-reported psychopathological symptoms. Individuals are asked to indicate on a 5-point Likert scale how often (0 = *not at all*, 4 = *frequently*) they had experienced a symptom within the past month. A global BSI score was computed by averaging the 53 items. In this sample, Cronbach's $\alpha = .96$.

Romantic relationship satisfaction. Romantic relationship satisfaction was assessed

using two questionnaires, the Dyadic Adjustment Scale-4 (DAS-4; Sabourin, Valois, & Lussier, 2005) and the 15-item Intimate Relationship Questionnaire derived from the Romantic Jealousy Questionnaire (RJQ; Pines & Aronson, 1983). The DAS-4 is a 4-item version of the original 32-item Dyadic Adjustment Scale. Individuals are asked to estimate their relationship satisfaction (e.g., “In general, how often do you think things between you and your partner are going well?” and “Do you confide in your mate?”). In this sample, Cronbach’s $\alpha = .77$. This 15-item questionnaire requires individuals to rate the quality of their relationship (e.g., “What is your general feeling about your partner?”) on a 7-point Likert scale. The items were averaged to create a relationship quality measure. In this sample, Cronbach’s $\alpha = .86$. The DAS-4 and the RJQ measures were highly correlated ($r = .78, p < .000$ at both Time 1 and Time 2). Hence, we standardized scores on both questionnaires and created a “romantic relationship satisfaction” composite score as an average of both scales.

Analytic Strategy

Zero-order correlations between all the study variables were calculated. Then, SEM was used to test the theoretical model in three steps, evincing three models, as follows. First, a base model was examined. This model tested stability effects of all the targeted variables (namely, romantic relationship satisfaction, self-criticism, and attachment avoidance, assessed at both Time 1 and Time 2), as well as direct paths leading from CSA to Time 1 romantic relationship satisfaction, Time 1 self-criticism, and Time 1 attachment avoidance, in addition to auto-correlations and correlations between all error estimates. In the second model, all potential cross-lagged effects were added, namely, paths leading from Time 1 romantic relationship satisfaction to both Time 2 self-criticism and Time 2 attachment avoidance; paths leading from Time 1 self-criticism to both Time 2 romantic relationship satisfaction and Time 2 attachment avoidance; and paths leading from Time 1 attachment avoidance to both Time 2 romantic relationship satisfaction and Time 2 self-criticism. Next,

the third model was tested using a backward-elimination method, removing all nonsignificant paths from the second model (Bentler & Mooijaart, 1989). The significance of the differences between these aforementioned nested models was examined using χ^2 tests.

All SEM analyses were conducted using AMOS 7.0 (Arbuckle, 2006). The Maximum Likelihood method was used. Goodness of fit was determined by the following fit indices: ($\chi^2_{[df=]}$, $p > .05$; $\chi^2/df < 2.5$; non-normed fit index [NNFI] $> .96$; root mean square error of approximation [RMSEA] $< .06$). The significance of the indirect paths was estimated using the AMOS bootstrapping procedure (bias-corrected percentile method).

Results

Means, Standard Deviations, and Zero-Order Correlations

CSA was significantly negatively correlated with romantic relationship satisfaction at both Time 1 and Time 2 (see Table 1). Self-criticism was correlated positively with CSA and negatively with Time 2 romantic relationship satisfaction. Attachment avoidance was correlated positively with Time 1 self-criticism and negatively with Time 2 romantic relationship satisfaction. Time 1 attachment avoidance was not correlated with CSA.

Structural Equation Modeling

The base model provided a poor fit to the data ($\chi^2_{[9]} = 29.54$, $p = .001$; $\chi^2/df = 3.28$; NNFI = .86; CFI = .90; RMSEA = .20). In this model, CSA was significantly negatively associated with Time 1 romantic relationship satisfaction ($\beta = -.30$, $p < .05$; $SE = .23$, Critical Ratio [C.R.] = -2.43), and significantly positively associated with Time 1 self-criticism ($\beta = .49$, $p < .001$; $SE = .23$, C.R. = 4.29); however, CSA was not significantly associated with Time 1 attachment avoidance ($\beta = .12$, ns; $SE = .27$, C.R. = .93). There was very a high stability across Time 1 and Time 2 for romantic relationship satisfaction ($\beta = .99$, $p < .01$; $SE = .24$, C.R. = 3.16) and for self-criticism ($\beta = .79$, $p < .001$; $SE = .15$, C.R. = 4.53). The association between Time 1 and Time 2 attachment avoidance was not significant ($\beta = 1.20$,

ns; $SE = .67$, $C.R = 1.27$). In the second model, when all potential cross-lagged effects were entered, only three cross-lagged paths were significant. A negative association was found between Time 1 self-criticism and Time 2 romantic relationship satisfaction ($\beta = -.21$, $p < .01$; $SE = .06$, $C.R = -2.51$). In addition, the negative paths leading from Time 1 attachment avoidance to Time 2 romantic relationship satisfaction ($\beta = -.22$, $p < .01$; $SE = .05$, $C.R = -3.00$), and from Time 1 romantic relationship satisfaction to Time 2 attachment avoidance ($\beta = -.20$, $p < .05$; $SE = .08$, $C.R = -2.29$), were both significant. This model provided a relatively good fit [$\chi^2_{[3]} = 6.63$, $p = .09$; $\chi^2/df = 2.21$; $NNFI = .97$; $CFI = .98$; $RMSEA = .14$].

In the third model, all nonsignificant paths (i.e., all nonsignificant cross-lagged effects and nonsignificant stability effect of attachment avoidance: $\beta = .26$, *ns*) were removed from the model. In addition, when this model was examined, AMOS (Arbuckle, 2006) suggested fixing the nonsignificant path leading from CSA to Time 1 attachment avoidance to zero. This resulted in the final, most parsimonious, model presented in Figure 1, which had a good fit [$\chi^2_{[7]} = 9.69$, $p = .21$; $\chi^2/df = 1.39$; $NNFI = .96$; $CFI = .99$; $RMSEA = .08$] and provided a more parsimonious model than the model that included the stability effect of attachment avoidance [$\chi^2_{[6]} = 9.33$, $p = .16$; $\chi^2/df = 1.55$; $NNFI = .96$; $CFI = .98$; $RMSEA = .10$]. Also, the previously significant stability effect of Time 1 and Time 2 romantic relationship satisfaction was no longer significant when the cross-lagged paths were added, although clearly there was still a trend ($\beta = .54$, $p = .063$, vs. $\beta = .99$, $p < .01$ in the base model).

In addition, in order to investigate the potentially confounding effect of psychopathology, we assessed the potential contribution of symptomatic distress to the model by adding all paths leading from BSI psychopathology at Time 1 and Time 2 to all variables in the model. Despite Time 1 BSI psychopathology being correlated with both CSA and Time 2 romantic relationship satisfaction, the path leading from BSI psychopathology to Time 2 romantic relationship satisfaction was nonsignificant, and adding these paths to the model

resulted in a worse fit to the data. Finally, to assess the specificity of the obtained meditational model, we added attachment anxiety as an additional mediator in the relationship between CSA and romantic satisfaction. Again, despite having a statistically significant correlation with Time 2 romantic relationship satisfaction, attachment anxiety did not mediate in this effect; that is, the path leading from attachment anxiety to Time 2 romantic relationship satisfaction was nonsignificant. Both BSI psychopathology and attachment anxiety were thus not included in the final model, which is presented in Figure 1.

Discussion

The aim of this study was to explore the mechanism underlying the negative impact of CSA on prospective romantic relationship satisfaction. An integrative perspective that encompasses both personality vulnerability and adult attachment (Luyten & Blatt, 2011; Sibley, 2007) was examined in a two-wave cross-lagged follow-up study of otherwise well-functioning young women comprising survivors of CSA by a known perpetrator and women who reported never having been exposed to sexual trauma. Two sets of major findings emerged from this study. The first set suggested that CSA had a direct negative effect on romantic relationship satisfaction, as well as an indirect effect via its effect on self-criticism, which in turn was negatively related to romantic relationship satisfaction over time. The second set of findings suggested an interplay between the quality of romantic relationships and attachment avoidance, in that romantic relationship satisfaction was negatively related prospectively to attachment avoidance, while attachment avoidance was related prospectively with decreased levels of romantic relationship satisfaction. This scarring effect with romantic relationship satisfaction may also explain the relatively modest levels of stability of attachment avoidance, as it may lead to substantial changes in attachment avoidance over time. These results held even when controlling for symptomatic distress and attachment anxiety, thus attesting to both the significance of these results and their specificity.

To the best of our knowledge, this is the first study to demonstrate the mediating role of self-criticism in the negative impact of CSA on romantic relationships. These findings further emphasize the potential role of self-criticism as a mediator in the association between childhood maltreatment and adults' well-being (Glassman et al., 2007; Pagura et al., 2006; Sachs-Ericsson et al., 2006; Soffer et al., 2008). Specifically, by presenting a longitudinal mediational effect of self-criticism, our results expand on previous findings that have shown a cross-sectional mediational effect of self-criticism in the association between childhood (emotional) maltreatment and young adults' romantic relationships (Lassri & Shahar, 2012).

Studies in this area converge to suggest that childhood maltreatment promotes a tendency to internalize a critical attitude toward the self (Glassman et al., 2007; Lassri & Shahar, 2012), develop negative self-schemas, and experience self-blame (Gibb, 2002; Pagura et al., 2006; Sachs-Ericsson et al., 2006; Soffer et al., 2008). Presumably, in an attempt to find some reason and control, without having to acknowledge the abuser's deficiencies, the child might direct feelings of shame, blame, and criticism inward—either by identifying and internalizing both the perpetrator's desire and guilt and redirecting them into a more manageable mechanism of self-blame (Ferenczi, 1949; Filipas & Ullman, 2006), or as a defense-mechanism of “turning against the self”.(McWilliams, 2011). This might be especially relevant for children who have been sexually abused by a known, and ostensibly trustworthy, perpetrator, where the identification of CSA is very difficult—not only on the part of the authorities but also by the victims themselves (Spinazzola et al., 2014). Finding it virtually impossible to distinguish such abuse from care, these children cannot identify the “aggressor”. Plausibly, the subjective sense of control that self-criticism brings is emotionally preferable to the unbearable feelings resulting from CSA (Filipas & Ullman, 2006).

In turn, individuals whose personality is characterized by a self-critical style are likely to believe that others cannot be trusted and may be overly focused on achievement and

autonomy in an attempt to cope with negative affect (Luyten et al., 2012; Zuroff & Fitzpatrick, 1995). They are prone to direct massive criticism toward the self and thus become their own “abuser”, so to speak. Over time, this tendency might serve as a coping mechanism for dealing with negative affect related to personal and interpersonal distress. Specifically, when evaluating their intimate relationships self-critical individuals might tend to become critical toward themselves (Luyten et al., 2012). This may lead them to experience difficulties in establishing and maintaining close relationships and may also negatively impact on their romantic relationships (Lassri et al., 2016; Lassri & Shahar, 2012; Mongrain et al., 1998; Zuroff & Duncan, 1999; Zuroff & Fitzpatrick, 1995; Zuroff et al., 2016).

Importantly, however, our results also show that CSA has a specific direct impact on the emergence of self-criticism, but not on attachment avoidance. Both self-criticism and attachment avoidance refer to the extent to which individuals avoid closeness with others (Sibley, 2007), but they represent different levels of abstraction (Luyten & Blatt, 2016). Our findings suggest that CSA has a direct effect on the more global, broad cognitive-affective self-schema (i.e., self-criticism) but not on the relationship-specific expression of this schema in a close relationship (i.e., attachment avoidance) (Luyten & Blatt, 2011; Sibley, 2007). At the same time, the stability effect of the more relationship-specific model of self–other, namely attachment avoidance, was indeed nonsignificant, as potentially can be explained by the scarring effect of romantic relationship dissatisfaction. That is, the levels of satisfaction from the participants’ specific romantic relationships might be causing changes in their levels of attachment avoidance over time—specifically, on the expression of the broader self-critical schema in a close relationship. Consistently, despite a significant association between the broad schema (i.e., self-criticism) and its relationship-specific expression (i.e., attachment avoidance) in the mediational model, while controlling for levels of relationship satisfaction and for stability effects, this association (cross-lagged effect) was no longer significant.

Taking these results together, a potential vicious cycle may emerge wherein CSA leads to elevated levels of self-criticism, which in turn erodes romantic relationship satisfaction. In the face of this lack of satisfaction, individuals with a tendency to be more focused on autonomy in an attempt to cope with negative affect might then employ attachment deactivating tendencies—that is, the tendency to dismiss the importance of emotions, suppress negative affect, reduce support-seeking behaviors, and exhibit distrust in close relationships (Brennan et al., 1998; Mikulincer & Shaver, 2007). These avoidant tendencies might render those individuals unable to deal with the difficulties in, or lack of satisfaction from, their current relationship, leaving them with a sense of guilt and detachment from their partner. This might then translate into even greater dissatisfaction from romantic relationships over time, as evidenced in our study. This pattern might partially explain the difficulties in romantic relationships, and more general dissatisfaction, that individuals who have a history of CSA and higher levels of self-criticism seem to be experiencing. In other words, CSA might lead to a chronic vicious cycle related to romantic relationships, via an indirect effect leading from self-criticism to unsatisfying romantic relationships. Relationship dissatisfaction might then further increase attachment avoidance tendencies; these tendencies in turn might lead to an additional decrease in relationship satisfaction over time. In order to confirm this hypothesized vicious cycle additional waves of measurement are needed. Finally, our findings imply that it is possible that CSA survivors are functioning well in various aspects of their lives, and on the surface may seem to be functioning well in terms of romantic relationships. However, at the same time, the fact that CSA is a relational trauma means that they might find it difficult to maintain a satisfying romantic relationship. The current study, focusing on the impact of CSA on apparently “normative” (nonviolent) romantic relationships, evidences those unseen scars on these women’s relational vulnerability. Given the violation of basic trust embodied within the

experience of being sexually abused by a known perpetrator, it is not surprising that new relationships may be regarded with fear and even anticipation of interpersonal trauma rather than as a form of benevolent interaction (Ornduff, Kelsey, & O'Leary, 2001).

Limitations

Our findings should be evaluated in light of the methodological limitations of the study. First, our sample was small in size, gender biased (focusing only on women), and had only a relatively modest retention rate; thus, replication of our findings in a larger sample comprising both men and women is required to enable the findings to be generalized to CSA survivors and to young adults in general. The inclusion criterion for participation of having been engaged in a meaningful romantic relationship similarly limits the study's findings, precluding generalization to individuals whose experiences of CSA have either prevented them from engaging in any romantic relationship, or predisposed them to incidents of sexual revictimization. Previous research has demonstrated the accuracy and reliability of recall among victims of childhood maltreatment (Bernstein et al., 1994; Dube, Williamson, Thompson, Felitti, & Anda, 2004) and CSA survivors specifically (Barnes et al., 2009), thus minimizing the likelihood of self-report bias. Nevertheless, reporting biases and shared method variance might still exist in our study. Future studies might thus benefit from the use of alternative assessment methods, such as interviews, as well as an assessment of romantic relationships as perceived by the participants' partners. Finally, while our two-wave design is helpful for understanding the effects of change in variables over time, tracking changes in romantic relationships for a longer period of time and including additional waves of measurement would improve the design. This is particularly important in light of the scarring effect seen in this study and the potential vicious cycle discussed herein.

Implications

To the best of our knowledge, this is the first study examining self-criticism as a

vulnerability dimension within the association between CSA and prospective romantic relationship satisfaction among otherwise well-functioning young women. Its findings enable a better understanding of the psychological dynamics accruing in light of CSA and provide insights for assessment and intervention. As actual disclosure of a CSA history often occurs only during young adulthood (Pilkington & Kremer, 1995), and as many young adults seek counseling for non-psychopathological problems, such as the difficulty of establishing and maintaining a satisfying romantic relationship (Hunt & Eisenberg, 2010), focusing on difficulties in romantic relationships might serve as a valuable pathway through which to address the continuing effects of CSA on subsequent romantic relationships. In clinical/counseling settings, individuals seeking counseling and presenting difficulties in romantic relationships should be screened for CSA, self-criticism and attachment avoidance. If these features are identified, an array of psychotherapeutic techniques should be adopted to help short-circuit the vicious cycle involving past trauma, self-concept pathology, attachment avoidance, and problematic relationships, with consideration given to the ways in which this vulnerability might affect relationships within and outside treatment (Shahar, 2015; Shahar, Blatt, Zuroff, Krupnick, & Sotsky, 2004). In light of the difficulties self-critical individuals experience in establishing therapeutic alliances, a further validating of their perspective and need for control might be essential, as well as a longer than usual period of treatment (Shahar, 2015). The findings showing a scarring effect of relationship satisfaction on attachment avoidance also suggest the specificity of indirect effects of CSA on close relationships, manifested in attachment avoidance tendencies. This might have additional implications for the nature of the therapeutic relationship, as these difficulties might be re-enacted in treatment (Miller et al., 2015; van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). Despite potentially being a hindrance, this might actually provide an important opportunity to directly address the maladaptive cycles that disrupts these patients' interpersonal modalities.

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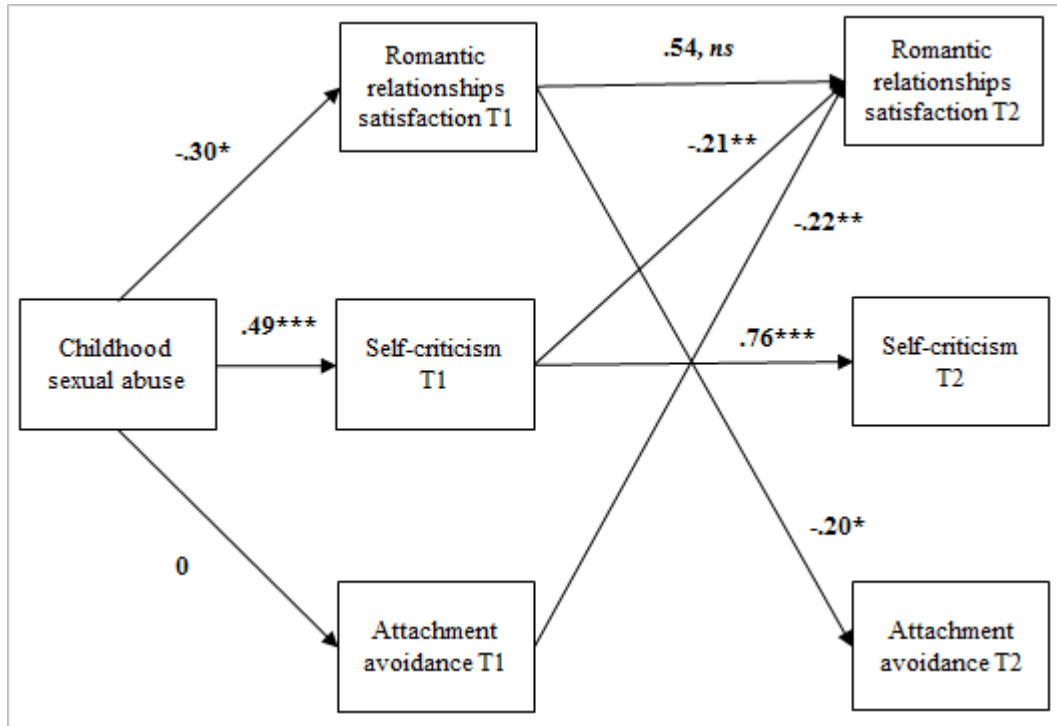


Figure 1. A SEM cross-lagged model testing indirect effects leading from CSA to romantic relationship satisfaction via self-criticism and attachment avoidance.

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

RUNNING HEAD: CSA, SELF-CRITICISM, ATTACHMENT, RELATIONSHIPS

Table 1. Means, standard deviations, and zero-order correlations between childhood sexual abuse (CSA), and Time 1 and 2 self-criticism, adult attachment, BSI psychopathology, and romantic relationship satisfaction.

	1	2	3	4	5	6	7	8	9	10	11	<i>M</i>	<i>SD</i>
1. CSA													
2. Self-criticism T1	.49***	1										-.34	1.02
3 Self-criticism T2	.37**	.79***	1									-.35	.91
4. Attachment avoidance T1	.12, <i>ns</i>	.33**	.31*	1								2.99	.88
5 Attachment avoidance T2	.14, <i>ns</i>	.35**	.38**	.75***	1							2.91	.80
6. Attachment anxiety T1	.39**	.62***	.46***	.21, <i>ns</i>	.23, <i>ns</i>	1						3.51	1.07
7 Attachment anxiety T2	.09, <i>ns</i>	.45***	.47***	.16, <i>ns</i>	.30*	.56***	1					3.72	1.24
8. BSI psychopathology T1	.66***	.57***	.42**	.31*	.32*	.59***	.35**	1				.93	.59
9. BSI psychopathology T2	.55***	.59***	.60***	.27*	.38**	.38**	.46***	.72***	1			.87	.65
10. Relationship satisfaction T1	-.30*	-.21, <i>ns</i>	-.24, <i>ns</i>	.01, <i>ns</i>	-.20, <i>ns</i>	-.22, <i>ns</i>	-.16, <i>ns</i>	-.18, <i>ns</i>	-.12, <i>ns</i>	1		.15	.72
11. Relationship satisfaction T2	-.29*	-.40**	-.46***	-.27*	-.46***	-.36**	-.29*	-.31*	-.32*	.77***	1	.097	.92

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

T1= Time 1

T2= Time 2