RUNNING HEAD: MALTREATMENT, PERSONALITY, ATTACHMENT, RELATIONSHIPS

The Effect of Childhood Emotional Maltreatment on Romantic Relationships in Young Adulthood: A Double Mediation Model Involving Self-Criticism and Attachment

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Abstract

Objective: Despite growing recognition of the importance of childhood emotional maltreatment (CEM) on the development of psychopathology, very few studies have addressed its impact on adult romantic relationship functioning, particularly among otherwise relatively well-functioning individuals. In an attempt to further elucidate the mechanism underlying the negative impact of CEM on romantic relationships, we tested an integrative mediational model linking CEM to romantic relationships through the impact of CEM on the development of self-criticism and adult attachment. Recent work in this context suggests that while self-criticism concerns broad cognitive-affective schemas related to achievement and failure, attachment avoidance assesses the expression of these broad schemas in close relationships (Luyten & Blatt, 2011; Sibley & Overall, 2008, 2010). Method: This hypothesized mediational model was examined in a sample of young adult undergraduates (N = 99, 85 female), using structural equation modeling. Results: The mediational model was in large part supported. Attachment avoidance, but not attachment anxiety, fully accounted for the mediating role of self-criticism in the relationship between CEM and romantic relationship satisfaction, even when controlling for the potential role of concurrent levels of posttraumatic stress disorder severity. Conclusions: Understanding the long-term psychological dynamics related to CEM and identifying mediating vulnerability factors self-criticism and attachment avoidance—might have implications for both the assessment and treatment of individuals with a history of CEM, particularly as effective interventions to address self-criticism and attachment issues are available.

Keywords: childhood maltreatment, personality, self-criticism, attachment, romantic relationships

Childhood emotional maltreatment (CEM) involves abuse and neglect and is typically associated with persistent and extreme denial of a child's basic emotional needs (Barnett, Manly, & Cicchetti, 1993). CEM is highly prevalent, as demonstrated in both clinical and nonclinical samples, including college students (Egeland, 2009; Scher, Forde, McQuaid, & Stein, 2004; Spinazzola et al., 2014). For instance, CEM is reported by approximately onethird of university counseling center clients (Braver, Bumberry, Green, & Rawson, 1992; Wright, Crawford, & Del Castillo, 2009). Research has principally focused on more "objective" forms of childhood maltreatment, such as sexual and physical abuse, leaving CEM—an intrinsic aspect of most if not all forms of childhood maltreatment—being seriously under-studied (Egeland, 2009; Hart & Brassard, 1987; Spinazzola et al., 2014; Wright et al., 2009). Accumulating evidence from recent studies, however, points to the serious consequences of CEM (Bernstein, Measelle, Laurent, Musser, & Ablow, 2013; Egeland, 2009; Gibb, Chelminski, & Zimmerman, 2007; Spertus, Yehuda, Wong, Halligan, & Seremetis, 2003; Spinazzola et al., 2014; Yates, 2007). For instance, several studies have demonstrated a relationship between CEM and victimization (Crawford & Wright, 2007; Gobin & Freyd, 2009; Renner & Slack, 2006) as well as dating violence (Wekerle et al., 2009). Yet, few if any studies have addressed the potential significance of the more subtle. but no less serious, impact of CEM on romantic relationships more generally (Varia & Abidin, 1999). Specifically, the potential effect of CEM on romantic relationship dissatisfaction, a more subtle yet perhaps more widespread consequence of CEM, remains under-investigated, particularly in otherwise relatively well-functioning individuals.

To fill this gap, this study focuses on the effect of CEM on "normative" (nonviolent) romantic relationships in otherwise high-functioning individuals, that is, young adult undergraduates who are currently in a romantic relationship. Specifically, we focused on the personality dimension of self-criticism and attachment dimensions as potential mediators in

the association between CEM and relationship satisfaction in young undergraduates' romantic relationships. The reason for this focus stems first and foremost from research showing that self-criticism is a personality dimension that is implicated in vulnerability for a wide variety of disorders and psychological problems (Blatt, 2004, 2008; Luyten & Blatt, 2013), mainly through its influences on relationships (Mongrain, 1998; Shahar, 2013; Zuroff & Duncan, 1999). Self-criticism is characterized by elevated self-standards, accompanied by a self-punitive stance, shame, and self-blame when one's standards are not met (Blatt, 1995). Self-critical individuals tend to shy away from closeness and intimacy (Zuroff & Fitzpatrick, 1995). They are typically ambivalent, critical, and distrustful in relationships because they constantly fear criticism and disapproval from others. Therefore, they are likely to have ambivalent relationships, confirming their convictions, and generally experience dysfunctional transactional cycles in interpersonal relationships (Luyten, Fonagy, Lemma, & Target, 2012), and tend to "degenerate" their social support network (Mongrain, 1998).

Several studies have shown that CEM is associated with self-criticism in adulthood, suggesting that CEM is associated with a tendency to internalize a critical attitude toward the self that is, in turn, associated with adult psychopathology (e.g., Dunkley, Masheb, & Grilo, 2010; Gibb, 2002; Glassman, Weierich, Hooley, Deliberto, & Nock, 2007; Gross & Keller, 1992; Pagura, Cox, Sareen, & Enns, 2006; Sachs-Ericsson, Verona, Joiner, & Preacher, 2006; Soffer, Gilboa-Schechtman, & Shahar, 2008).

Self-criticism has also been shown to mediate the relationship between CEM and quality of romantic relationships in two samples of undergraduate students, even when controlling for other personality features such as dependency and self-efficacy as well as concurrent psychopathology including dissociative traits (Lassri & Shahar, 2012). However, this latter finding does not completely explain why self-criticism negatively impacts romantic relationships.

Recent research in this context suggests that personality and attachment perspectives can be integrated into a hierarchical model, ranging from relatively broad schemas to more relationship-specific working models of self and others (Luyten & Blatt, 2011; Sibley, 2007). Accordingly, the assessment measures that have been developed from within each perspective (e.g., personality, attachment) can be hierarchically organized, as such measures assess the same constructs at varying levels of abstraction (Luyten & Blatt, 2015).

Specifically, while the personality dimension of self-criticism refers to broad cognitive-affective schemas with regard to achievement and failure, attachment concerns the actual *expression* of these broad schemas in close relationships specifically. As per Sibley (2007), both self-criticism and attachment avoidance (namely, discomfort with closeness and dependence on others; Mikulincer & Shaver, 2007) pertain to the extent to which individuals seek or avoid closeness with others, while dependency and attachment anxiety (i.e., fear of rejection and abandonment; Mikulincer & Shaver, 2007) refer to the extent to which individuals worry and feel uncomfortable in relationships (Fraley, Waller, & Brennan, 2000). Based on these assumptions, Sibley and Overall (2008, 2010) subsequently showed the effects of both specific (person- and domain-specific) and global (personality-level) relational models on the subjective experience of social interactions and resulting interpersonal attributions.

In line with these assumptions, studies have suggested that the effect of self-criticism on romantic relationships is typically mediated by attachment avoidance in close relationships, but not by attachment anxiety (Sibley & Overall, 2008, 2010). Hence, these findings suggest that the ambivalent and critical interpersonal style typically associated with self-criticism may translate into an avoidant romantic attachment style. Hence, individuals who predominantly use attachment deactivation strategies may typically deny attachment

needs and assert their own autonomy, independence, and strength in an attempt to down-regulate stress (Luyten et al., 2012).

The current study

This is the first study to investigate whether CEM was associated with *self-criticism*, which in turn was expected to be related to *attachment avoidance*, which in turn was predicted to be negatively related to romantic relationship satisfaction, in a sample of 99 young adults. The theoretical model that guided this study is presented in Figure 1. In addition, in order to investigate the specificity of these associations, analyses controlled for the potential mediating roles of both attachment anxiety and severity of posttraumatic stress disorder (PTSD) symptoms, as such symptoms have previously been demonstrated to mediate the link between CEM and dating violence (Messman-Moore & Long, 2003; Wekerle et al., 2009). Specifically, given our focus on attachment avoidance (deactivation) tendencies, we considered it important to demonstrate the unique contribution of these tendencies above and beyond the effect of symptoms of avoidance that are related to PTSD (Foa, Riggs, Dancu, & Rothbaum, 1993).

Method

Participants and procedure

The sample was drawn from an earlier study (Study 2 in Lassri & Shahar, 2012). The participants were 108 undergraduate students enrolled in an introductory psychology course who were given course credit for taking part in the study. They were contacted through advertisements placed on noticeboards. Participants completed self-report questionnaires (described below, as well as on other factors not pertinent to the current report), following informed consent. Nine participants not meeting the sample requirements (i.e., who were single or had not been in a romantic relationship for at least 1 month) were excluded from the sample. The final sample size was N = 99 (85 female), aged between 18.5 and 39 years (M = 10.00).

23.32, SD = 2.46). The duration of their romantic relationship ranged from 2 to 228 months (M = 28.23, SD = 29.99). Ninety-one participants described their sexual orientation as heterosexual, 3 as homosexual, 3 as bisexual, and 2 as unspecified/other. Ninety-five participants reported being in a romantic relationship with a partner of a different gender, and 4 with a partner of the same gender. Participants came from different areas in Israel, including urban and rural regions (e.g., cities, kibbutzim [collective settlements], etc.). The sample was also highly varied in terms of ethnicity and religious and socioeconomic status. The study was approved by the Ethics Committee of the Department of Psychology of Ben-Gurion University of the Negev.

Measures

Childhood emotional maltreatment

CEM was assessed using the Childhood Trauma Questionnaire (CTQ; Bernstein et al., 1994), a 28-item self-report questionnaire validated for use in clinical and nonclinical populations (Scher, Stein, Asmundson, McCreary, & Forde, 2001). The CTQ has been shown to have high internal consistency and test–retest reliability, as well as a strong convergence with the Childhood Trauma Interview, exemplifying 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). Individuals are asked to indicate on a 5-point Likert scale how often (1 = never, 5 = frequently) they experienced emotional, physical, and sexual abuse, and emotional and physical neglect, in childhood (Bernstein & Fink, 1998). Internal consistency in this sample was $\alpha = .82$. In this study, only the emotional neglect and abuse subscales were used. As expected, emotional neglect and abuse were moderately correlated (r = .50, p < .001). Hence, a CEM variable was computed by averaging the emotional abuse and neglect scales. Given that this variable was skewed, a square root transformation was applied and the scores were standardized.

Personality

Self-criticism was assessed with the Depressive Experiences Questionnaire (DEQ; Blatt, D'Afflitti, & Quinlan, 1976), a 66-item self-report questionnaire 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 $\alpha = .82$.

PTSD severity

PTSD symptoms were assessed using the PTSD Symptom Scale-self report (PSS-sr; Foa et al., 1993), a 17-item self-report questionnaire designed to diagnose PTSD and assess the severity of PTSD symptoms. Individuals are asked to think about the most stressful event they have ever experienced and then indicate on a 4-point Likert scale how often ($0 = not \ at \ all/once$, $3 = most \ of \ the \ time$) they experienced each symptom within the past 2 weeks. The PSS-sr has shown satisfactory internal consistency, high test–retest reliability, and good concurrent validity (Foa et al., 1993). In this sample, Cronbach's $\alpha = .90$.

Romantic relationship satisfaction

Romantic relationship satisfaction was assessed by the Dyadic Adjustment Scale-4 (DAS-4; Sabourin, Valois, & Lussier, 2005) and the 15-item Intimate Relationship Questionnaire section 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. Studies have shown that the DAS-4 has similar psychometric features to the DAS-32. Additionally, it has exhibited strong stability over a two-year period (Sabourin et al., 2005). 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 $\alpha = .82$. The RJQ shows high internal consistency

and construct validity (Pines, 1998). 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 $\alpha = .85$. The DAS-4 and the RJQ (r = .67, p < .000) were highly correlated, and hence we standardized scores on both questionnaires and then created a "romantic relationship satisfaction" composite score as an average of both scales.

Adult attachment

Romantic attachment avoidance and anxiety were assessed using the Experience in Close Relationships scale (ECR-R; Brennan, Clark, & Shaver, 1998). The ECR-R is based on a combination of existing self-report measures that were condensed via factor analysis into 36 items that evince high construct validity (Brennan et al., 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 item. 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"). High test–retest and internal consistency reliability, as well as strong construct and predictive validity, were demonstrated for both scales (Crowell, Fraley, & Shaver, 1999). In this sample, Cronbach's $\alpha = .84$ for avoidance and $\alpha = .88$ for anxiety.

Data analysis

First, zero-order correlations between the study variables were calculated. Next, structural equation modeling (SEM) was used to test the theoretical model depicted in Figure 1 in three steps. First, the first-order mediation of self-criticism was tested, while controlling for the potential mediating effect of PTSD symptoms. The purpose of this step was to examine whether self-criticism mediated the relationship between CEM and romantic relationship satisfaction, and to ascertain whether the indirect effect leading from CEM to

romantic relationship satisfaction through self-criticism was statistically significant. In the next step, the possible second-order mediating roles of attachment avoidance, attachment anxiety, and PTSD symptoms were tested. The purpose of this step was to examine whether the indirect effect leading from self-criticism to romantic relationship satisfaction through attachment avoidance was statistically significant and whether this indirect effect fully or partially mediated this association. In the third step, a backward-elimination method was employed; namely, nonsignificant paths were removed from the previous model, leading to the final model. 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: $(\chi^2_{\text{[df=]}}, p > .05; \chi^2/\text{df} < 2.5; \text{NNFI} > .96; \text{RMSEA} < .06)$. The significance of the indirect paths was estimated using the AMOS bootstrapping procedure (bias-corrected percentile method). Akaike Information Criterion (AIC) was used to compare non-nested models.

Results

Means, standard deviations, and zero-order correlations

CEM was significantly correlated with romantic relationship satisfaction (see Table 1). Self-criticism and PTSD severity were associated with both CEM and romantic relationship satisfaction and therefore met criteria for the hypothesized first-order mediation effect (Baron & Kenny, 1986). In addition, attachment avoidance, attachment anxiety, and PTSD severity were associated with both self-criticism and romantic relationship satisfaction, so these variables could possibly act as second-order mediation effects in the association between self-criticism and romantic relationship satisfaction.

SEM

The first model provided a poor fit to the data ($\chi^2_{[1]} = 4.18$, p = .04; $\chi^2/df = 4.18$; NNFI = .93; CFI = .94; RMSEA = .18). In this model, self-criticism mediated the association

between CEM and romantic relationship satisfaction. CEM was significantly associated with self-criticism (β = .48, p < .001; SE = .082, C.R = 5.36), which, in turn, was negatively associated with romantic relationship satisfaction (β = -.25, p < .05; SE = .098, C.R = -2.37). While CEM was also associated with PTSD severity (β = .23, p < .05; SE = .096, C.R = 2.39), PTSD severity was not significantly associated with romantic relationship satisfaction (β = -.11, ns; SE = .083, C.R = -1.13).

In the next step, we tested the hypothesized mediating role of adult attachment avoidance in the association between self-criticism and romantic relationship satisfaction. This model provided a relatively good fit $[\chi^2_{[3]} = 4.41, p = .22; \chi^2/df = 1.47; NNFI = .97; CFI$ = .99; RMSEA = .07], even when controlling for the potential mediating effect of PTSD severity. In this model, CEM was significantly associated with both attachment avoidance (8) = .23, p < .05; SE = .097, C.R = 2.25), and self-criticism ($\beta = .48$, p < .001; SE = .082, C.R = .0825.36). In turn, self-criticism was significantly associated with attachment avoidance ($\beta = .33$, p < .001; SE = .105, C.R = 3.25), which, in turn, was negatively associated with romantic relationship satisfaction ($\beta = -.20$, p < .05; SE = .092, C.R = -2.00). In this model, the relationship between self-criticism and romantic relationships was no longer statistically significant ($\beta = -.12$, ns; SE = .115, C.R = -.99). Also, after taking into account the indirect effect leading from CEM to lack of satisfaction with romantic relationships via self-criticism and attachment avoidance, the direct association between CEM and romantic relationship satisfaction was no longer statistically significant ($\beta = -.17$, ns; SE = .092, C.R = -1.61). Despite being significantly related to CEM, self-criticism and romantic relationship satisfaction, attachment anxiety and PTSD severity did not mediate between CEM and relationship satisfaction ($\beta = -.13$, ns; SE = .094, C.R = -1.68).

In the third step, we removed attachment anxiety from the model, as well as the nonsignificant associations between PTSD severity and both CEM and romantic

relationships, resulting in the final model presented in Figure 2. This model showed a good fit to the data ($\chi^2_{[3]} = 2.564$, p = .46; $\chi^2/df = .85$; NNFI = .97; CFI = 1.00; RMSEA = .00), while also providing a more parsimonious model compared to the model with attachment anxiety included (AIC = 36.56 vs, AIC = 49.76, respectively). In addition, removing nonsignificant paths from CEM to PTSD severity and from PTSD severity to relationship satisfaction did not lead to a significantly worse fit ($\chi^2_{[I]} = .117$ with PTSD versus $\chi^2_{[3]} = 2.564$, $\Delta\chi^2 = 2.447$, p = .294, ns).

However, removing paths leading from CEM to relationship satisfaction (β = -.19, p = .058; SE = .102, C.R = -1.90) and from self-criticism to relationship satisfaction (β = -.17, p = .064; SE = .092, C.R = -1.85) did lead to a significantly worse fit. Hence, these paths were kept in the final model¹.

Discussion

This study sought to investigate whether self-criticism and adult attachment dimensions mediated the association between CEM and romantic relationship satisfaction in a sample of otherwise well-functioning young adult undergraduate students. The hypothesized mediational model tested was based on an emerging theoretical framework integrating personality and attachment in the study of romantic relationships (Luyten & Blatt, 2011; Sibley, 2007).

Results of this study showed that the negative association between CEM and romantic relationship satisfaction was fully mediated by self-criticism and attachment avoidance.

Specifically, CEM was found to be associated with elevated self-criticism, which in turn was related to higher levels of attachment avoidance, which in turn was negatively associated with

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¹This model was also tested among women only, and no differences were found in terms of either model fit or the strength of the direct/indirect paths.

romantic relationship satisfaction. Importantly, the second-order mediation effect was obtained even while controlling for the potential mediating role of PTSD severity. Findings from this study are consistent with earlier studies demonstrating that childhood maltreatment is associated with self-criticism (Pagura et al., 2006). Presumably as a result of the internalization of negative views regarding the self and others (Gross & Keller, 1992; Pagura et al., 2006; Rose & Abramson, 1992; Sachs-Ericsson et al., 2006; Soffer et al., 2008), and the child's attempt to understand the abusive behavior (Gibb, 2002), CEM is associated with a tendency to internalizing a critical attitude toward the self (Dunkley et al., 2010; Glassman et al., 2007). Other authors have similarly suggested that CEM may lead the child to identify with both the perpetrator's desire and guilt, internalizing both feelings and redirecting them into an accessible and controllable mechanism of self-blame (Ferenczi, 1949; Filipas & Ullman, 2006), or by adopting the defense mechanism of "turning against the self" in order to provide a sense of control without having to acknowledge the caregiver's deficiencies (McWilliams, 2011). This defensive posture of turning against the self might be the price these individuals pay for appeasing the parent or other familiar perpetrator(s) and distracting attention away from the emotional abuse or neglect. However unpleasant it is to be selfcritical, it is emotionally preferable to acknowledging a realistic threat to one's survival under conditions in which one is hopeless and helpless. Paradoxically, this stance enables a sense of control in emotionally complex and painful situations (Filipas & Ullman, 2006).

As such, it is not surprising that self-critical individuals tend to believe that others cannot be trusted (Fonagy, Luyten, & Allison, 2015), and emphasize self-esteem and achievement at the expense of interpersonal relatedness. Thus, self-critical individuals may overly focus on achievement and autonomy in an attempt to cope with negative affect, which may lead them to experience difficulties in establishing and maintaining close relationships (Luyten et al., 2012; Mongrain, 1998; Zuroff & Duncan, 1999; Zuroff & Fitzpatrick, 1995).

Specifically, highly self-critical individuals are likely to become highly critical toward themselves when evaluating their relationships, which may lead them paradoxically to become their own abuser, as it were. Serving as the default explanation or as a defensive attempt to cope with negative affect related to personal and interpersonal distress, self-criticism may derail relationships in general and romantic relationships in particular (Lassri & Shahar, 2012; Mongrain, 1998; Zuroff & Duncan, 1999; Zuroff & Fitzpatrick, 1995).

The finding that attachment avoidance mediated the relationship between self-criticism and relationship functioning replicates and extends Sibley's findings (Sibley, 2007; Sibley & Overall, 2008, 2010) to individuals with a history of CEM who are otherwise functioning relatively well. These findings are also consistent with the view that attachment avoidance reflects the expression of self-critical features in specific relationships (Luyten & Blatt, 2011; Sibley, 2007; Sibley & Overall, 2008, 2010). Self-criticism might thus manifest itself in attachment deactivating tendencies, that is, the tendency to dismiss the importance of emotions, deny attachment needs, reduce support-seeking behaviors, and assert one's own autonomy, thus suppressing negative affect (Luyten et al., 2012; Mikulincer & Shaver, 2007). This might make these individuals feel both guilty and emotionally detached from their partner, which might in turn partly explain the difficulties within romantic relationships, and general dissatisfaction, these individuals seem to experience.

Lastly, the current study also draws attention to a potentially lasting, and perhaps in the long term more serious, effect of CEM on romantic relationships. Specifically, CEM has been associated with *emotional* revictimization, that is, the tendency of victims of CEM to become involved in relationships marked by chronic dissatisfaction, which may be a predictor of future revictimization (Messman-Moore & Long, 2003).

Overall, this study suggest that CEM may be associated with a tendency to be hypercritical toward the self and to be overly focused on achievement and autonomy in an

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attempt to cope with negative affect, which in turn is related to the avoidance of intimacy and relatedness, which in turn is associated with lack of satisfaction in romantic relationships.

Limitations

Findings of this study should be evaluated in the light of several limitations. First, the cross-sectional design limits the ability to draw conclusions regarding causality. Longitudinal studies are required to further determine the direction of the associations depicted in this study. Furthermore, reporting biases related to personality and psychopathology might have influenced results. However, previous research attesting to the accuracy and reliability of recall among victims of child maltreatment (Bernstein et al., 1994; Dube, Williamson, Thompson, Felitti, & Anda, 2004) suggests that the likelihood of self-report biases may perhaps be less problematic than is often assumed. Specifically, Brewin, Firth-Cozens, Furnham, and McManus (1992) demonstrated that the association between self-criticism in adulthood and recall of parenting is not simply a function of a mood state or a socialdesirability response set. Second, participants had to be currently involved in a meaningful romantic relationship for at least 1 month; this limits the ability to generalize these findings to other populations, such as individuals with CEM who may not be capable of engaging in/maintaining romantic relationships. Third, the sample was relatively small, predominantly female and heterosexual, and consisted of high-functioning college students. Yet, as noted, this population has been under-studied in the literature on CEM. Further research in larger samples is needed, however, particularly as some nonsignificant trends in this study could reflect a lack of statistical power.

Implications

Findings of this study may have important implications for the assessment and treatment of individuals with a history of CEM. Young individuals seeking counseling for difficulties in romantic relationships should be screened for CEM and possibly associated

self-criticism and attachment avoidance. Several interventions have been developed and empirically evaluated to address the potential vicious cycle related to the effects of selfcriticism, and the often resulting attachment avoidance, on relationships. In this process, special attention should be directed to parallels in the effects of self-criticism on relationships both within and outside treatment (Shahar, Blatt, Zuroff, Krupnick, & Sotsky, 2004). In light of the difficulties self-critical individuals often experience in establishing a therapeutic alliance, special attention should be given to validating the perspective of these individuals and their need for control (Shahar, 2013). The findings from the second-order mediational model suggest the specificity of CEM associations with intimate relationships might be expressed via tendencies characterized by attachment avoidance. This finding might be pertinent not only to the need to address underlying issues of trust within these relationships, but also to the fact that these are likely to be re-enacted within the therapeutic relationship (van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). While presenting a potential obstacle within treatment, it might also serve as an opportunity for in vivo access to the recurring maladaptive cycle that affects patients' relational modalities. Thus, careful and supportive identification of the reactivation of this pattern in the therapeutic relationship (e.g., explicitly dismissing the need for help by emotional distancing, cancelling sessions, etc.) could help the patient explore the impact of this pattern in his/her life, paving the way for alternative ways of thinking about the self-in-relation-to-others in a manner that would promote more closeness and relationship satisfaction.

In the context of couples therapy, identifying the reactivation of this pattern *in vivo* in the therapeutic session might be particularly helpful in identifying and subsequently changing this pattern of relating to self and others by experimenting with a more open way of communicating their own needs and emotions in a context that promotes a more validating

and normalizing stance toward the discussion of what is often seen by these individuals as "weak" and "shameful".

Nevertheless, future studies should include different assessment methods besides self-report questionnaires, such as interviews, experimental designs, and physiological and neurobiological measures. For instance, further research could adopt conflict resolution paradigms to further investigate associations among CEM, romantic attachment style, self-critical perfectionism, and romantic relationships (Vrticka & Vuilleumier, 2012). In addition, more longitudinal research is needed assessing both partners' levels of CEM, as well as self-criticism, attachment avoidance, and romantic relationship satisfaction over time, to disentangle the causal interplay between these variables. Specifically, these studies should investigate potential scar-effects of relationship satisfaction on levels of attachment avoidance and self-criticism. Additionally, further research might benefit from also including assessments of criticism and victimization of others, in addition to self-criticism and relationship satisfaction.

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Table 1. Means, standard deviations, and zero-order correlations between childhood emotional maltreatment (CEM), self-criticism, posttraumatic stress disorder (PTSD) severity, adult attachment, and relationship satisfaction.

	1	2	3	4	5	6	M	SD
1. CEM							7.59	2.62
2. Self-criticism	.48***	1					45	.93
3. Attachment avoidance	.38***	.44***	1				3.14	.78
4. Attachment anxiety	.36***	.57***	.24*	1			3.29	.98
5. PTSD severity	.23*	.29**	.18, ns	.33***	1		8.73	8.61
6. Relationship satisfaction	37***	38***	36***	33***	23*	1	.05	.88

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

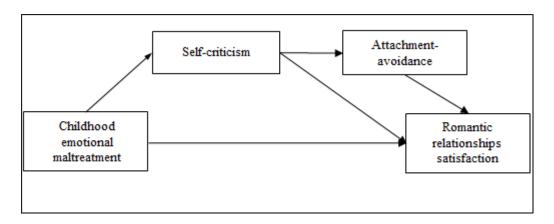


Figure 1. Hypothesized second-order mediational model relating CEM, self-criticism, attachment, and romantic relationships

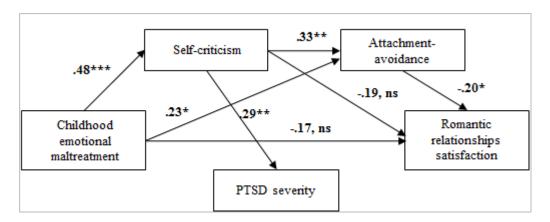


Figure 2. A SEM double-mediational model testing indirect effects leading from CEM to romantic relationship satisfaction via self-criticism, attachment-avoidance and PTSD severity.

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