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Mediators of the Association between Childhood Emotional Maltreatment and Young Adult Men's Life Satisfaction

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Abstract

Childhood emotional maltreatment has been linked to a wide range of deleterious physical and psychological adult health outcomes. The present study extends past research by examining the effects of childhood emotional maltreatment on young adult men's life satisfaction through its effects on hostility and perceptions of social relationships. Participants were 423 single men who completed two interviews one year apart. As hypothesized, the association between self-reported childhood emotional maltreatment and adult life satisfaction was mediated through general hostility, rejection sensitivity in romantic relationships, and perceptions of male friends' social support. These findings suggest that interventions which address distorted perceptions of romantic partners and friends might reduce the negative impact of childhood emotional maltreatment.

Keywords

childhood emotional maltreatment; hostility; social support; romantic relationships; life satisfaction

Childhood emotional maltreatment is generally described as caregivers' acts of commission (e.g., verbally berating) or omission (e.g., ignoring child's sadness) that cause emotional or psychological harm to the child or hinders achievement of developmental milestones (Baker, 2009; Glaser, 2002; Hart & Brassard, 1987). Baker and Maiorino (2010) found that 70% of participants in a community sample reported at least one emotionally neglectful experience as a child. Although many individuals are resilient, childhood emotional maltreatment has been linked to a wide range of deleterious physical and psychological adult health outcomes, including increased health care utilization, substance use problems, depression, anxiety, trauma symptoms, and poor life satisfaction (Festinger & Baker, 2010; Gavin, 2011; Hinnen,

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¹As noted in the Measures section, we followed the original authors' recommendations, and summed the number of acts experienced to form the childhood emotional maltreatment indicator. In preliminary analyses, we also computed a score that included the frequency information by computing the average frequency of maltreatment experiences. The two alternative scorings of child maltreatment were strongly, positively correlated with each other, $r = .86$, $p < .01$. Additionally, the magnitude of the correlation between the average frequency of experiences with the other study measures was comparable to those presented in Table 1 using the summed number of experiences.

Sanderman & Sprangers, 2009; Muller & Henderson, 2012; Rosenkranz, Miller-Perrin, Perrin & Kocur, 2009; Shi, 2013; Spertus, Yehuda, Wong, Halligan, & Seremetis, 2003; van Harmelen et al., 2010).

The present study explores the effects of childhood emotional maltreatment on young men's life satisfaction. We expect this association to be mediated through hostility and current perceptions of social relationships. The following sections review relevant literature and then the study's hypotheses are presented.

Links between Childhood Emotional Maltreatment and Perceptions of Social Relationships

Young (1990; 1999) theorized that negative childhood experiences promote the early development of maladaptive schema, defined as "a broad, pervasive theme or pattern comprised of memories, emotions, cognitions, and bodily sensations regarding oneself and one's relationships with others developed during childhood or adolescence, elaborated throughout one's lifetime, and dysfunctional to a significant degree" (Young, Klosko & Weishaar, 2003, p. 7). Young described several distinct types of maladaptive schema that can arise from childhood experiences. Relevant to the current study, Young et al. posited that childhood abuse and trauma contribute to the development of pervasive and damaging schema in which individuals expect their relationships to be cold, unstable and negative. Several studies provide support for the association between childhood emotional maltreatment and negative interpersonal schema (Calvete, 2014; MacDonald et al., 2015; McCarthy & Lumley, 2012).

Two early childhood experiences described by Young (1990; 1999) may be particularly relevant to the experience of emotional maltreatment: toxic frustration of needs and traumatization or victimization. With toxic frustration of needs, children experience "too little of a good thing....such as stability, understanding, or love" (Young et al., 2003, p. 10). As a result of these experiences, children may develop schemas in which their relationships with others are seen as unstable and unpredictable, as well as schemas that others will fail to provide nurturance, empathy and protection (Young et al., 2003). With traumatization or victimization, children may generalize these experiences, developing schemas that others will take advantage of and hurt them. These schemas encourage the propensity to make hostile attributions about anyone who gets close, defensively assuming that other people will take advantage of them and let them down. These associations are supported in previous research. For example, in a sample of healthcare providers (mostly men) referred to a remediation program for establishing professional boundaries, childhood emotional maltreatment was significantly positively correlated with several maladaptive schemas, including expectations of emotional deprivation, abandonment and mistrust/abuse (MacDonald et al., 2015). The present study did not directly test Young's theory, as the analyses were performed on a secondary data source. However, we identified three constructs that are associated with these early maladaptive schemas: hostility, rejection sensitivity, and perceptions of social support.

Hostility.

Hostility is the cognitive component of aggression, in which individuals experience “feelings of ill will and injustice” (Buss & Perry, 1992, p. 457). These sentiments can be pervasive and are not necessarily constrained to a specific type of relationship. Previous research demonstrates that a negative family environment during childhood is prospectively associated with increased hostility (Keltikangas-Järvinen & Heinonen, 2003; Matthews, Woodall, Kenyon & Jacob, 1996). Perceived parental rejection is associated with greater hostility in adolescent, college, and adult clinic and community samples (Meesters & Muris, 1996; Meesters, Muris & Esselink, 1995; Muris, Meesters, Morren & Moorman, 2004). Nicholas and Bieber (1996) found a significant positive association between perceptions of parental emotional abuse and hostility in a sample of female and male college students. Similarly, childhood emotional abuse and neglect were positively associated with hostility in adult male substance abuse dependent patients and alcoholics (Roy, 1999; 2001).

Rejection sensitivity.

Rejection sensitivity refers to the tendency to “anxiously expect, readily perceive, and overreact to rejection” (Downey & Feldman, 1996, pp. 1327–1328). Feldman and Downey (1994) posited that rejection sensitivity was the result of childhood experiences of rejection from parents and caregivers. In support of this assertion, Massing-Schaffer et al. (2015) found that the relationship between childhood emotional abuse and current depressive symptoms was mediated by rejection sensitivity in a sample of college students. Berenson and Anderson (2006) evaluated whether feelings of rejection from a parental figure would transfer to new relationships that elicit mental representations of that parent. They provided female college students with profiles of unknown individuals. When the profile activated participants’ parental representations (assessed in an earlier stage of the study), participants who experienced physical and emotional abuse from that parent subsequently expressed an expectation of rejection from the new individual presented in the profile. These findings suggest that rejection sensitivity is a dispositional tendency that is learned in early relationships and applied to new relationships in adulthood with people that are perceived as similar to the parent.

Previous research has also focused more generally on the link between childhood emotional maltreatment and romantic relationship functioning. Numerous studies have found a link between the quality of the parent-child relationship, including childhood emotional maltreatment, and adult romantic relationships (Black & Schutte, 2006; Bradbury & Shaffer, 2012; Dodge Reyome, 2010; Perry, DiLillo, & Peugh, 2007). For example, in a sample of male and female college students, participants who recalled more positive childhood relationships with their parents were more willing to seek comfort from romantic partners in adulthood (Black & Schutte, 2006). Overall, this research suggests that experiences in early life affect perceptions and functioning in adult intimate relationships. Rejection sensitivity may be a potent factor underlying this association (Downey and Feldman; 1996). Partial support for this interpretation comes from Downey and Feldman’s (1996) finding that rejection sensitivity was associated with diminished romantic relationship satisfaction. In a sample of young, heterosexual couples, both men’s and women’s rejection sensitivity was

associated with lower relationship satisfaction for themselves and their partner, after adjusting for their partner's level of rejection sensitivity (Downey & Feldman, 1996).

Perceptions of social support from friends.

Social support is “the perception or experience that one is loved and cared for by others, esteemed and valued, and part of a social network of mutual assistance and obligations” (Taylor, 2011, pp. 192). Perceptions of social support are subjective evaluations and may be affected by life experiences. According to the support deterioration model (Barrera, 1986), stressful life events can deteriorate perceived social support. Early family relationships, particularly emotional maltreatment inflicted by parents and caregivers, may be a significant source of stress that affects the way individuals process and perceive the quality of social support that they receive in adult relationships (Taylor, 2011). Previous research supports the assertion that recollections of childhood maltreatment are associated with less perceived social support in adulthood (Festinger & Baker, 2010; Frederick & Goddard, 2008; Muller, Gragtmans, & Baker, 2008; Pepin & Banyard, 2006; Punamäki, Komproe, Qouta, El-Masri, & de Jong, 2005). Furthermore, emotional maltreatment specifically is negatively associated with perceptions of social support in adulthood (Festinger & Baker, 2010; Loos & Alexander, 1997). For example, Festinger and Baker (2010) surveyed child welfare staff (predominately women) and found that childhood emotional abuse from parents and caregivers was negatively associated with current perceptions of social support in adulthood.

The impact of childhood emotional maltreatment on perceived social support has been explored for different types of relationships. Pepin and Banyard (2006) found that experiencing childhood maltreatment (including physical abuse, sexual abuse and physical neglect) was associated with reduced perceived social support in adulthood from both family and friends in a sample of male and female college students. Furthermore, social support from both family and friends mediated the association between childhood maltreatment and developmental outcomes such as intimacy development (Pepin & Banyard, 2006). Punamäki et al. (2005) explored the impact of emotional and physical childhood abuse on adult perceptions of social support in a random sample of Palestinian men and women between the ages of 16 and 60. Their findings suggest that exposure to childhood maltreatment was associated with lower perceived social support from family and friends.

Links between Perceptions of Social Relationships and Life Satisfaction

Several studies have found support for the premise that childhood emotional maltreatment is associated with lower life satisfaction (Festinger & Baker, 2010; Gavin, 2011; Hinnen et al., 2009). Gavin (2011) found that childhood emotional abuse was associated with lower life satisfaction in an adult sample (predominately women) recruited via advertisements on a college campus and surrounding residential areas. Hinnen et al. (2009) found that parental rejection was associated with lower life satisfaction in an adult convenience sample (predominately women) recruited via an advertisement posted on the webpage of a Dutch psychology magazine. This relationship was mediated by adult anxious attachment style (Hinnen et al., 2009).

As indicated by the findings of Hinnen et al. (2009), the relationship between childhood emotional maltreatment and life satisfaction may be mediated by perceptions of social relationships. Positive relationships with others are a core component of well-being (Ryff, 1989). Previous research supports the hypothesis that perceptions of social relationships are associated with life satisfaction. Froh et al. (2007) explored the association between interpersonal relationships, irrationality and life satisfaction among a sample of young adults. Most of the sample consisted of college students, although approximately 12% of the sample was recruited from an outpatient treatment center. They found that the perceived quality of close interpersonal relationships strongly predicted life satisfaction. Furthermore, the association between irrational cognitions (e.g., catastrophizing) and life satisfaction was mediated by perceptions of social relationships. The authors suggested that higher levels of irrational thinking impeded the establishment and maintenance of quality relationships; in turn, poorer perceptions of social relationships were related to lower reports of life satisfaction (Froh et al., 2007). Brannan, Biswas-Diener, Mohr, Mortazavi and Stein (2013) explored the association between perceived social support from friends and family and well-being among college students across three cultures. They found that perceived social support from both family and friends positively predicted life satisfaction among US college students.

Numerous studies demonstrate that individuals' perceptions of their social relationships have a stronger impact on life satisfaction than objective measures, such as relationship status or number of confidants (Birditt & Antonucci, 2007; Demir & Orthel, 2011; Diener, Suh, Lucas, & Smith, 1999; Lucas & Dyrenforth, 2006). Additionally, multiple types of relationships are important to well-being and life satisfaction (e.g., friends, intimate partners; Birditt & Antonucci, 2007). For example, Walen and Lachman (2000) found that family, friend and partner support all predicted increased life satisfaction in a sample of adult men and women. Thus, it is important to explore subjective accounts of social relationships in multiple domains. For young single men, their perceptions of relationships with their male friends and romantic partners are particularly relevant (Carbery & Buhrmester, 1998; Simon & Barrett, 2010).

The Present Study

This study extends past research in several ways. The present study focuses on childhood emotional maltreatment, which is less often included in research as compared to physical and sexual abuse, although its negative impact on adult health and well-being has been established (Hart & Brassard, 1987; Kendall-Tackett, 2002; Shi, 2013). Previous studies that assessed the impact of childhood emotional maltreatment on hostility, rejection sensitivity, and social support have used clinic or college samples (Massing-Schaffer, Liu, Kraines, Choi, & Alloy, 2015; Nicholas and Bieber, 1996; Pepin and Banyard, 2006; Roy, 1999; 2001). Studies investigating the association between childhood emotional maltreatment and adult life satisfaction have utilized predominately female samples (Festinger & Baker, 2010; Gavin, 2011; Hinnen et al., 2009). In contrast, this study examined a representative sample of young single men in one large metropolitan area. Furthermore, to our knowledge, no studies have concurrently explored the relationship between childhood emotional maltreatment and various perceptions of social relationships. Only one study could be found

that explored the relationship between childhood emotional maltreatment and adult life satisfaction as mediated by relationship functioning (i.e., attachment orientation; Hinnen et al., 2009). Thus, the study described in this paper expands the types of potential mediators of this relationship.

Secondary data analyses are conducted using a two wave study of young men to assess the relationship between childhood emotional maltreatment, perceptions of social relationships, and life satisfaction. We hypothesize that hostility, rejection sensitivity and perceived social support from friends will mediate the association between childhood emotional maltreatment and life satisfaction. As can be seen in Figure 1, we hypothesize that experiencing more forms of emotional maltreatment will be associated with higher general hostility at baseline. We then hypothesize that higher hostility will be associated with higher sensitivity to rejection from romantic partners and lower perceived social support from male friends one year later. Then, we hypothesize that higher rejection sensitivity and lower perceived social support from friends will be associated with lower concurrent life satisfaction.

Method

Participants

Participants were required to be male, between the ages of 18 and 35, single, and to have dated a woman in the past two years due to the original study's focus on young heterosexual men's dating experiences. At Wave 1, 470 men participated; 90.4% participated in the follow-up interview one year later ($n = 425$). Two participants provided questionable responses (e.g. long strings of data or large amounts of missing data) and their data were deleted. This left a final sample size of 423 (Wave 1: $M_{\text{age}} = 23.64$, $SD = 4.95$). Approximately 72% self-identified as White ($n = 305$), 17% as Black or African American ($n = 71$), 5% as mixed ethnicity ($n = 22$), 2% as Middle Eastern ($n = 9$), 1% as Hispanic ($n = 5$) and 3% as another ethnicity ($n = 11$).

Procedure

The Survey Research Center at the University of Michigan developed the sampling frame and conducted the interviews under contract. Telephone lists were used to efficiently identify a stratified random sample of young men in the Detroit Metropolitan area based on standard sampling procedures (Groves et al., 2009). This tri-county region of more than four million people spans the socio-economic spectrum and includes a broad range of suburban and semi-rural communities, as well as the city of Detroit (see Abbey, Jacques-Tiura, & LeBreton, 2011 for additional details).

Among those who were eligible, 89% agreed to participate. Trained interviewers met participants at a mutually agreeable location. Interviewers orally administered the first few sections of the survey that contained the least sensitive material. Participants completed the second portion of the survey independently on a laptop computer. Audio computer assisted self-interview was used for this portion of the study. Interviews lasted for approximately one hour. About one year later, participants were contacted regarding participation in the second

wave of data collection. The second survey was administered in the same format as the first. Participants were compensated \$50 for participation during the first wave of data collection; they were compensated \$60 for participating in the second wave. Both universities' institutional review boards approved the study's procedures.

Due to the sensitive nature of the questions, a Certificate of Confidentiality was obtained and its purpose and limits were described prior to survey administration. The consent form was fully discussed with the participants and they were provided with contact information for several local counseling centers. To insure that the interview was not upsetting, participants' current affect was assessed at the conclusion of each interview using a 5-point scale ranging from 1 (not at all) to 5 (very). At both waves, participants reported very low levels of sadness (Wave 1: $M = 1.33$; $SD = .64$; Wave 2: $M = 1.34$; $SD = .69$); embarrassment (Wave 1: $M = 1.29$; $SD = .61$; Wave 2: $M = 1.17$; $SD = .47$); and anger (Wave 1: $M = 1.15$; $SD = .48$; Wave 2: $M = 1.15$; $SD = .48$).

Measures

Due to time constraints in the original interview, most constructs were only assessed at one timepoint. Both Wave 1 and 2 measures were used in these analyses.

Childhood emotional maltreatment.—At Wave 1, experiences of childhood emotional maltreatment perpetrated by caregivers or parents were assessed using a 4-item scale modified from Bremner, Bolus, and Mayer's (2007) Early Trauma Inventory Self-Report. Participants were asked to indicate how often their parents or caregivers: (1) shouted or yelled at them; (2) ignored them or made them feel like they didn't count, (3) told them they were no good, and (4) put them down or ridiculed them. Response options ranged from 1 (never) to 5 (very often). Based on Bremner et al. (2007), the number of acts ever experienced was summed, resulting in a range of zero (no experiences) to 4 (experienced each act at least once). The original measure demonstrated high internal consistency and concurrent validity in a community sample (Bremner et al., 2007).

Hostility.—The 8-item hostility subscale from Buss and Perry's (1992) Aggression Questionnaire was used to assess hostility at Wave 1. Sample items include "I am suspicious of overly friendly strangers" and "When people are especially nice, I wonder what they want." Response options ranged from 1 (very unlike me) to 5 (very like me). The items were averaged to create a mean score. This scale demonstrated adequate internal consistency and test-retest reliability in a college sample (Buss & Perry, 1992). Cronbach's alpha for the present study was .78.

Rejection sensitivity.—At Wave 2, a subset of items from Downey and Feldman's (1996) Rejection Sensitivity Questionnaire was used to assess rejection sensitivity in romantic relationships. These 8 items assess participants' anxiety in situations with different potential romantic partners. A sample situation is: "You ask someone you don't know well out on a date." For each situation, two questions follow. The first question assesses participants' anxiety over how the other person would respond. For the above sample situation, the corresponding question is: "How concerned or anxious would you be over whether or not

she would want to go out with you?" The second question assesses how the participant would expect the other person to respond. For the above sample situation, the corresponding question is: "I would expect that she would want to go out with me." Expectancy items are reverse-scored. For both items, response options ranged from 1 (very unlikely) to 5 (very likely). The rejection sensitivity score for each item is calculated by multiplying the rejection expectancy item scores by the score for degree of anxiety (Downey & Feldman, 1996). Then a mean of the multiplied scores is computed. The original scale demonstrated high internal consistency and test-retest reliability in a college sample (Downey & Feldman, 1996). Cronbach's alpha for the present study was .72.

Perceptions of social support from friends.—Wave 2 included Sarason, Levine, Basham, and Sarason's (1983) measure of satisfaction with social support. The scale included 6 items that were modified by making the referent "your male friends." Sample items include: "How satisfied are you with the extent to which you can really count on your male friends to help you feel more relaxed when you are under pressure or tense?" and "How satisfied are you with the extent to which you can really count on your male friends to accept you totally, including both your best and worst points?" Response options ranged from 1 (not at all satisfied) to 5 (very satisfied). The items were averaged to create a mean score. The original scale demonstrated high internal consistency and high test-retest reliability in a college sample (Sarason et al., 1983). Cronbach's alpha for the present study was .92.

Adult life satisfaction.—At Wave 2, a subset of Andrews and Withey's (1976) global and domain-specific life satisfaction items were included (Abbey, Andrews, & Halman, 1994; Andrews & Robinson, 1991). The measure included 6 items. Sample items include: "How do you feel about the way you handle problems that come up in your life?" and "How do you feel about your life as a whole?" Response options ranged from 1 (terrible) to 7 (delighted). A mean score was computed. The original and modified versions of this scale exhibit high internal consistency and moderate test-retest reliability establishing its sensitivity to life changes over time (Andrews & Robinson, 1991). Cronbach's alpha for the present study was .73.

Analysis Plan

After data cleaning, descriptive statistics and bivariate correlations were examined using SPSS version 21. We used MPlus version 6.1 to test the fit of the hypothesized path model presented in Figure 1. The Chi-Square Test of Model Fit, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), the Root Mean Square Error of Approximation (RMSEA) and the Standardized Root Mean Square Residual (SRMR) were examined to determine model fit. CFI and TLI values that are at or above .95 indicate good fit. RMSEA values that are at or below .06 and SRMR values less than .08 indicate good fit (Hu & Bentler, 1999; West, Taylor & Wu, 2012). Path coefficients were assessed to determine direct and indirect effects. Modification indices were also evaluated to determine if adding additional paths would improve model fit. To assess the significance of indirect effects, we obtained 95% bias-corrected boot-strapped confidence intervals using 1,000 draws (Preacher & Hayes, 2008; McKinnon, Lockwood & Williams, 2004).

Results

Descriptive and Bivariate Analyses

Approximately 97% of participants had experienced at least one type of childhood emotional maltreatment at least once in childhood. Forty-three percent of participants had experienced only one of these behaviors from a parent or caregiver; 22% experienced two different types of emotionally abusive behaviors at least once; 13% experienced three different behaviors at least once; and 19% experienced all of these behaviors at least once. Participants were most likely to be yelled at, followed by ignored, ridiculed, and told they were no good.

Bivariate correlations were evaluated among all measures prior to assessing the multiple mediation model. As can be seen in Table 1, childhood emotional maltreatment was negatively associated with life satisfaction. It was also significantly positively associated with hostility and rejection sensitivity. Childhood emotional maltreatment was also negatively associated with perceptions of social support from friends.¹ Furthermore, life satisfaction was significantly negatively associated with hostility and rejection sensitivity. Life satisfaction was also positively associated with perceptions of social support from friends. All of the proposed mediators were significantly intercorrelated.

Path Analysis

The hypothesized model revealed adequate fit, $\chi^2(5, n = 423) = 23.81, p < .001$; CFI = .91; TLI = .82; RMSEA = .09; SRMR = .05. As can be seen in Figure 1, all of the hypothesized paths were significant. Childhood emotional maltreatment was associated with higher hostility. Hostility was associated with higher rejection sensitivity and lower perceptions of social support from friends. Higher rejection sensitivity was associated with lower life satisfaction and higher perceptions of social support from friends were associated with higher life satisfaction. This model accounted for 18.7% of the variance in life satisfaction. Modification indices suggested that estimating a direct relationship between hostility and life satisfaction would improve model fit. Thus, a second model was estimated with this adjustment.

The modified model is presented in Figure 2. This model revealed good fit, $\chi^2(4, n = 423) = 8.35, p = .08$; CFI = .98; TLI = .95; RMSEA = .05; SRMR = .03. All of the aforementioned direct paths remained significant. Additionally, higher hostility was associated with lower life satisfaction. The modified model accounted for 21.9% of the variance in life satisfaction. As shown in Table 2, indirect effects were significant for all hypothesized paths.

Discussion

Most participants reported that they experienced some childhood emotional maltreatment at least once, most commonly shouting and yelling. Although many instances of shouting and yelling would not be labeled maltreatment on their own, the fact that participants viewed these incidents as worth reporting suggests that they caused some degree of emotional harm. The few studies that examined the impact of parents' shouting and yelling found detrimental

effects. For example, McKee et al. (2007) found that shouting, yelling or screaming as a form of discipline was associated with internalizing and externalizing behavior among children. Thus, the present study adds to the current literature by demonstrating that even common forms of maltreatment can set in motion hostile schemas that have long-term detrimental effects on relationship quality and life satisfaction.

The hypothesized direct effects were significant in the path analysis. Childhood emotional maltreatment was associated with greater hostility and mistrust of others. This hostility was associated with higher expectation of rejection by romantic partners and more dissatisfaction with the social support that friends provide. These relationship-specific perceptions were associated with diminished satisfaction with life in adulthood. The modified model suggests that hostility also has a direct effect on life satisfaction, such that when individuals view others as untrustworthy and suspicious, they also report less satisfaction with life. The indirect effects revealed that the association between childhood emotional maltreatment and life satisfaction was transmitted through these hostile perceptions of social relationships. The significance of the indirect effect of each of the three mediators illustrates the importance of considering general as well as relationship specific perceptions when investigating how emotional maltreatment is related to adult psychological well-being.

Previous research strongly supports an association between childhood emotional maltreatment and poor perceptions of social relationships (Hart & Brassard, 1987). During childhood, individuals are forming lasting schemas of social relationships (Young et al., 2003). Emotional maltreatment is distinct from other forms of maltreatment in that it is pervasive and impacts the very essence of the child-caregiver relationship (Glaser, 2002). As children learn that their needs will go unnoticed or that important caregivers, who are supposed to provide love and support, instead take advantage of them or hurt them, they learn to expect similar experiences in other important relationships. As a result, maltreated individuals grow mistrustful of others, expect rejection, and become dissatisfied with the support they receive from others because they doubt its authenticity.

These negative perceptions of social relationships impact behavior (Crick & Dodge, 1994; de Castro, Veerman, Koops, Bosch, & Monshouwer, 2002; Downey & Feldman, 1996; Forgas, 2003). Hostility, rejection sensitivity and negative perceptions of social support may cause individuals to challenge and distance themselves from close others. This behavior may create a self-fulfilling prophecy by driving friends and partners away and confirming the individual's initial distrust. Thus, relationship functioning may deteriorate as a result of negative perceptions of social relationships. Establishing and maintaining healthy, satisfying relationships is associated with better well-being (Birditt & Antonucci, 2007; Brannan et al., 2013; Demir & Orthel, 2011; Froh et al., 2007; Ryff, 1989). Poor perceptions of and consequent difficulties in social relationships may result in overall dissatisfaction with life.

Limitations

The present study was conducted as secondary data analysis; consequently, the hypotheses were limited by the scope of relevant variables included in the dataset. Future research would benefit from incorporating other social perceptions, such as hostility in current close relationships in addition to general hostility, as well as perceptions of social support from

female friends. Additionally, surveys cannot establish causality. Childhood emotional maltreatment and hostility were assessed at Wave 1 and rejection sensitivity, perceptions of social support from friends, and life satisfaction were assessed one year later. When all the constructs are assessed during the same survey, mood or other transient factors can increase the magnitude of relationships. Although we view the longitudinal design as a strength, replication of these findings is needed in studies with at least four timepoints to better establish the presumed temporal ordering of the constructs.

The present study was also limited by the emotional maltreatment scale, which included only four items. Future research would benefit from including more comprehensive measures of childhood emotional maltreatment. The scale also focused only on the frequency with which these events occurred. Manly (2005) highlights the importance of assessing severity and multiple aspects of timing (e.g. duration, time of onset, time periods without abuse), as well as abuse subtypes. Thus, future research should also consider how these elements differentially relate to perceptions of social relationships and life satisfaction in adulthood.

Future Directions and Conclusions

Despite the finding that childhood maltreatment can lead to poor perceptions of social relationships and diminished adult life satisfaction, this association is not immutable. Many resilient individuals experience high life satisfaction in adulthood (Cicchetti, Toth & Rogosch, 2000). The moderate amount of variance explained by our model underscores the fact that numerous factors predict well-being outcomes for individuals who have experienced childhood maltreatment. Thus, research is needed that examines risk and protective factors associated with different trajectories of adjustment. For example, emotionally maltreated children's ability to recall some positive aspects of their relationships with their parents may be a protective factor (Rohner, Khaleque, & Cournoyer, 2005). Hostile schemas about caregivers may be less likely to generalize to other relationships if survivors of emotional maltreatment receive immediate support that demonstrates others are reliable and can be trusted. Childhood emotional maltreatment may be especially pernicious for young men, who are often socialized with traditional masculine norms that inhibit closeness and emotional expression (Oransky & Marecek, 2009). Emotionally maltreated young men raised with traditional norms of masculinity may view their hostility and unsatisfying relationships as normative, not realizing how much their early childhood experiences have negatively affected their current relationships and overall well-being (Mahalik, Good, Tager, Levant, & Mackowiak, 2012). Clinicians should evaluate the role of childhood emotional maltreatment and functioning in current relationships, as they work to promote clients' well-being in adulthood.

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Figure 1.

Path model displaying standardized direct paths. Note: *** $p < .001$. Model fit: $\chi^2 (5, n = 423) = 23.81, p < .001$; CFI = .91; TLI = .82; RMSEA = .09; SRMR = .05. Childhood emotional maltreatment and hostility were assessed at baseline. Rejection sensitivity, perceptions of social support from friends, and adult life satisfaction were assessed at the one year follow-up.

Figure 2.

Modified path model displaying standardized direct paths. Note: *** $p < .001$. Model fit: $\chi^2(4, n = 423) = 8.35, p = .08$; CFI = .98; TLI = .95; RMSEA = .05; SRMR = .03.

Table 1

Means, Standard Deviations and Bivariate Correlations for Study Variables

	Mean	SD	1	2	3	4
1. Childhood Emotional Maltreatment	2.02	1.19	--			
2. Hostility	2.47	.85	.30	--		
3. Rejection Sensitivity	9.97	3.99	.17	.23	--	
4. Perceptions of Social Support from Friends	3.74	.97	-.14	-.28	-.14	--
5. Adult Life Satisfaction	5.43	.79	-.15	-.31	-.35	.32

Note. All correlations significant at $p < .01$.

Table 2
Unstandardized Coefficients and Confidence Indirect of Indirect Effects in Modified Model

	Total Indirect Effect	Specific Indirect Effect	95% CI
CEM → Adult life satisfaction	-.06		[-.09, -.04]
CEM → Hostility → Adult life satisfaction		-.04	[-.06, -.02]
CEM → Hostility → Rejection Sensitivity → Adult life satisfaction		-.01	[-.03, -.01]
CEM → Hostility → Perceptions of Social Support from Friends → Adult life satisfaction		-.01	[-.02, -.01]
CEM → Hostility → Rejection Sensitivity		.23	[.13, .39]
CEM → Hostility → Perceptions of Social Support from Friends		-.07	[-.11, -.04]
Hostility → Adult life satisfaction	-.12		[-.17, -.08]
Hostility → Rejection sensitivity → Adult life satisfaction		-.06	[-.11, -.03]
Hostility → Perceptions of Social Support from Friends → Adult life satisfaction		-.06	[-.10, -.03]

Note. CI=Confidence Indirect; CEM=Childhood Emotional Maltreatment CI's not including 0 are statistically significant.