The Association Between Childhood Maltreatment and Coping Strategies: The Indirect Effect Through Attachment

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ABSTRACT

Maladaptive coping strategies represent a potentially treatable component of psychopathologies associated with childhood abuse and neglect. Coping strategies are relatively stable constructs that may be viewed as trait-like behavioral manifestations of larger, albeit less accessible, intra- and interpersonal processes, such as activation of the attachment system. The authors investigated a potential mediational pathway from childhood maltreatment (in the form of physical and emotional abuse experiences) to coping strategies developed in emerging adulthood through attachment organization in a sample of undergraduate psychology research participants at a public Midwestern university (N = 225). Avoidant attachment patterns helped to explain the relationship between increased instances of childhood maltreatment and a decreased use of adaptive coping strategies. Further, both anxious and avoidant attachment mediated the relationship between childhood maltreatment and an increased use of maladaptive coping. By utilizing an attachment theory–informed approach as an explanatory guide, researchers and clinicians may be better able to conceptualize, study, and treat complex cases by understanding the underlying relationships between childhood maltreatment, attachment, and coping.

Childhood maltreatment is associated with numerous, frequently comorbid negative psychological outcomes in adulthood, including decreased overall mental health (Edwards, Holden, Felitti, & Anda, 2003) and recurrent episodic depression (Nanni, Uher, & Danese, 2012). Several treatments exist for specific conditions such as cognitive behavioral therapy for depression (Beck, 1979); however, researchers have recently shifted focus to transdiagnostic processes that play a causal role in multiple disorders to target these dynamics in a more parsimonious and cost-effective manner (Aldao, Nolen-Hoeksema, & Schweizer, 2010; Insel et al., 2010). Maladaptive coping strategies are common pathogenetic and maintenance factors across diagnoses that may serve as a target of such cross-cutting approaches (Aldao & Nolen-Hoeksema, 2012; Webb, Miles, & Sheeran, 2012).

Coping strategies entail a host of behaviors that serve as regulatory responses, both adaptive and maladaptive in response to psychological stressors, situations, and emotions (Carver, Scheier, & Weintraub, 1989; Folkman, 1997), and have been equated with strategies demonstrating emotion regulation (Aldao, Nolen-Hoeksema, & Schweizer, 2010). Adaptive coping strategies, such as positive reframing of situations or seeking emotional support, are associated with positive long-term developmental consequences, whereas maladaptive strategies, such as substance abuse or engaging in self-blame, are associated with a negative developmental impact (Skinner, Edge, Altman, & Sherwood, 2003).

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Researchers have found that sexual abuse in childhood is related to the use of maladaptive coping strategies later in life (Rind, Tromovitch, & Bauserman, 1998; Ullman & Filipas, 2005). Yet, less is known about the coping strategies used by individuals who had experienced physical or emotional abuse in childhood or the possible mechanisms that might underlie the relationship between maltreatment and later coping. An attachment theory–informed approach may help to explain the relationship between childhood maltreatment and later-life maladaptive coping strategies.

Attachment theory maintains that real and internalized elements of the emotional bond between a child and caregiver have lasting implications for life course development (Bowlby, 1973). Secure attachments provide the framework for the effective development of healthy relationships and understandings of intra- and interpersonal interactions through the shaping of critical skills such as emotion regulation (Murphy, Laible, Augustine, & Robeson, 2015). Later in life, children with secure attachments are able to depend on their significant attachment relationships (e.g., with an intimate partner or spouse, or close friend) in times of need or vulnerability (Bowlby, 1973; Hazan & Shaver, 1987). Based on real attachment relationships, persons develop internal working models that include both actual and perceived elements of the primary caregiver–child relationship, or in other words, the creation of long-term representations of the self and important others (Thompson, 2000; Zimmerman, 1999).

Childhood maltreatment and abuse have been implicated as potential causal factors in the development of insecure attachment styles or organizations (Baer & Martinez, 2006; Cassidy & Mohr, 2001). Insecure attachment is often associated with numerous negative sequelae in later development, including severe adult psychopathology (Bakermans-Kranenburg & van Ijzendoorn, 2009). Given the range and breadth of problems that have been associated with both childhood abuse and insecure attachment, it is plausible that there might be common pathways through which the pairing of abuse and attachment follow in the development of multiple pathologies. Indeed, researchers have demonstrated that dimensions of attachment insecurity are often associated with maladaptive emotional development, specifically in terms of coping strategies implemented in response to perceived stress (Dawson, Allen, Marston, Hafen, & Schad, 2014; Panfile & Laible, 2012). More specifically, attachment avoidance has been tentatively linked to a lack of adaptive coping in distressing situations (Kobak & Scery, 1988; Mikulincer, Shaver, & Pereg, 2003), whereas attachment avoidance and anxiety have both been implicated in increased maladaptive coping use and self-regulation (Marganska, Gallagher, & Miranda, 2013; Mikulincer et al., 2003; Wei, Volge, Ku, & Zakalik, 2005).

Coping strategies are an important focus in psychotherapy, where maladaptive coping strategies (e.g., substance use, behavioral disengagement, self-blaming) are often viewed as antecedents of psychopathologies and treatments often focus on teaching and promoting more positive and adaptive coping strategies (cf. Aldao et al., 2010). Furthermore, child maltreatment has also been identified as an antecedent of maladaptive emotional regulation strategies and the development of various psychopathologies (Hyman, Paliwal, & Sinha, 2007; Lansford et al., 2002).

Although there is strong support for linkages of childhood maltreatment (e.g., emotional and physical abuse, attachment insecurity, coping strategies), there is no known research, which combines these findings into a single model. Understanding the combined influences of these variables would inform research and treatment, especially for patients presenting with a history of childhood maltreatment. Understanding the development of coping strategies by taking an attachment theory–informed approach (Lopez & Brennan, 2000) may serve to enhance transtheoretical and idiographic case formulations. Hence, in the present study we sought to investigate the association between emotional and physical abuse in childhood with the use of adaptive and maladaptive coping strategies in emerging adulthood, and the indirect role of attachment insecurity in helping to explain this developmental relationship.

**Attachment theory: Effects of childhood maltreatment**

Given Bowlby’s explanations of the life course nature of attachment organization and the central importance of early child-caregiver interactions in the development of an individual’s attachment style, childhood trauma involving adult figures or caretakers as perpetrators of abuse has been examined as an important predictor of insecure attachment organizations (Baer & Martinez, 2006; Cassidy & Mohr,
Indeed, Styron and Janoff-Bulman (1997) surveyed 879 college students and found that those who reported experiencing child abuse also reported less secure relationships in childhood and adulthood than peers who did not report abuse in childhood. Using a longitudinal design, the researchers of the Minnesota Mother-Child Project (Weinfield, Sroufe, & Egeland, 2000) assessed and tracked attachment in 57 young adults for familial functioning and attachment variables since infancy and found that childhood maltreatment predicted attachment insecurity into young adulthood (19 years of age).

Indeed, a number of studies have already conceptually and empirically linked varying forms of child abuse experiences to insecurity in adult attachment organizations (Cicchetti & Toth, 1995; Main & Goldwyn, 1984; Styron & Janoff-Bulman, 1997). Shapiro and Levendosky (1999) utilized a structural equation modeling approach to find support for an indirect effect of attachment style as a mediator between sexual abuse in childhood and later coping strategy use in a sample of 80 adolescent girls. It should be noted that a significant portion of the research examining childhood maltreatment, attachment theory, and psychological outcomes limits focus to childhood sexual abuse (Bal, Van Oost, De Bourdeaudhuij, & Crombez, 2003; Rumstein-McKean & Hunsley, 2001; Shapiro & Levendosky, 1999), leaving physical and emotional maltreatment relatively understudied in comparison (MacMillan et al., 2001; Norman et al., 2012). This discrepancy in examination is concerning, as physical and emotional abuse demonstrate negative and pervasive life course effects on a variety of longitudinal outcomes (for a review, see Kaplan, Pelcovitz, & Labruna, 1999), and appear to be at least as (if not more) prevalent as childhood sexual abuse in nationally representative samples (Sedlak et al., 2010). As such, the current state of the literature is less informed about the maladaptive effects of physical and emotional abuse within the context of attachment, which is a notable dearth.

**Coping and psychopathology: Attachment as a developmental link**

Similar to patterns in the attachment system, prior research has suggested a long-term stability inherent in individuals’ default use of coping strategies/emotion regulatory processes (Compas Malcarne, & Fon dacaro, 1988; Steele et al., 1999). Attachment and coping strategies have been functionally linked through a number of biopsychosocial outcomes (Chow, Buhrmester, & Tan, 2014; Cooper, Katona, Orrell, & Livingstone, 2008; Schmidt, Blank, Bellizzi, & Park, 2012). There is evidence that the foundation and maintenance of coping strategies are rooted in intra- and interpersonal attachment processes (Dawson et al., 2014; Seiffge-Krenke & Beyers, 2005). Indeed, Seiffge-Krenke and Beyers (2005) found that the various attachment organizations may shape various specific strategies that individuals employ to cope with life events perceived as stressful. Other researchers have asserted that attachment security corresponds to the successful development of emotion regulation, and therefore, adaptive coping (Panfile & Laible, 2012).

Cassidy (1994) asserted that the employment of self-regulatory processes is influenced by the attachment system via attachment-affiliated processes of emotional heightening and suppression and regulation of attention. Researchers have furthered the empirical connection between attachment styles or organizations and coping strategies to clinically meaningful behavioral and emotional outcomes often representing psychopathology (e.g., depression; Wei, Heppner, Russell, & Young, 2006) or indicative of the later formation of psychopathology (e.g., externalizing behaviors, general distress, social-emotional responses; Dawson et al., 2014; Murphy et al., 2015). Although the occurrence of past abuse and neglect experiences cannot be changed, coping strategies may be thought of as more psychologically malleable processes that may be a direct consequence of the attachment system. This perspective may help to inform clinical interventions and lay a foundation for transtheoretical treatment approaches. Psychotherapies targeting coping skills may benefit from a more complete theoretical background on the interdependent relationship between maladaptive coping and attachment-related distress.

**Present study**

Research indicates that individuals who experience childhood maltreatment may experience negative effects on their self-regulatory systems (such as the attachment system), where the brain’s response to stress is fundamentally altered, resulting in an increased reliance on maladaptive coping skills (Hyman...
et al., 2007) to maintain emotional homeostasis. Therefore, understanding the relationship between childhood maltreatment, attachment style, and the development of adaptive and maladaptive coping skills provides clinicians with a viable treatment target to help prevent or treat psychological problems when working with individuals of this population.

In the present study we hypothesized a model to help understand the relationship between emotional and physical abuse in childhood and adaptive and maladaptive coping strategies in emerging adulthood. Specifically, we examined whether two major dimensions of attachment insecurity (avoidance and anxiety) in emerging adulthood helped to explain this link in a sample of college undergraduates. Based on prior research (Kobak & Sceery, 1988; Marganska et al., 2013; Mikulincer et al., 2003; Shapiro & Levendosky, 1999; Wei et al., 2005), we formulated two main hypothesized mediational models in terms of adaptive and maladaptive coping strategies. First, we hypothesized that attachment avoidance would mediate the relationship between childhood maltreatment and a lack of adaptive coping. Second, we hypothesized that both attachment avoidance and attachment anxiety would mediate the relationship between childhood maltreatment and the increased use of maladaptive coping strategies.

**Method**

**Participants**

Participants were recruited from the undergraduate psychology research participant pool at a public Midwestern university. Participants earned one research credit for completing an online survey. Only participants who completed measures central to this study were retained for the current project. Participants consisted of 225 undergraduate students (75.8% women) 18–25 years old (M age = 19.34 years, SD = 1.54 years), who were primarily Caucasian (88.9%), in their first two years of college (82.3%), exclusively heterosexual (90.2%), and primarily in some type of intimate relationship (ranging from casual dating to married; 80.4%).

**Measures**

Participants completed the following questionnaires as part of a single online survey. Prior to completing this survey, participants were required to provide informed consent with a digital acknowledgement. This study was approved by the university’s Social-Behavioral Institutional Review Board.

**Predictor variables: Child maltreatment**

The 25-item self-report measure Childhood Trauma Questionnaire (Bernstein et al., 2003), a screener for adults to report on histories of childhood abuse and neglect, was used to assess childhood maltreatment. Respondents reported the level of childhood maltreatment they incurred when they were 12 years old or younger by responding to items (e.g., “I was hit hard enough to see a doctor”) on a 5-point Likert-type scale ranging from 1 (never true) and 5 (very often true). Only the physical abuse (5 items; Cronbach’s α = .827) and emotional abuse (5 items, α = .865) subscales were used for the purposes of the present study. Although this report relies on retrospective reporting, it purports to measure a construct that occurred temporally before the mediator and outcome variables. Notably, in the present study, approximately 25.3% of participants acknowledged at least some experience (i.e., one item making up the scale was marked above never true) of physical abuse in childhood and 54.5% of participants acknowledged at least some experience of emotional abuse in childhood. Although prior literature (Shapiro & Levendosky, 1999) has demonstrated a mediational function of attachment between childhood sexual abuse and coping strategies, the current dataset did not appear adequate for further testing of these linkages as only 10.6% of participants endorsed any experiences of sexual abuse in childhood. Further, these endorsements were largely skewed to minimal reporting of sexual abuse experiences. As such, we do not feel that our sample fully captured a significant, representative view of the life course effects of sexual abuse in childhood.
**Mediator variables: Attachment**

The 12-item Experiences in Close Relationships–Short Form (ECR-SF; Wei, Russell, Mallinckrodt, & Vogel, 2007) was used to measure adult attachment style relative to individual’s intimate partner relationships in adulthood. This measure is a psychometrically sound 12-item variant of the original ECR (Brennan, Clark, & Shaver, 1998). Using self-report ratings on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree), the ECR-SF measures two dimensions of attachment: avoidance and anxiety. Avoidance items relate to the attachment dimension of fear of closeness and dependence in intimate relationships (e.g., “I am nervous when partners get too close to me” and “I try to avoid getting too close to my partner”). Anxiety items relate to the attachment dimension of concern related to rejection, abandonment, and desires for excessive comfort from partners (e.g., “I worry that romantic partners won’t care about me as much as I care about them” and “I need a lot of reassurance that I am loved by my partner”). Within the present study, both attachment subscales had acceptable internal consistency (i.e., anxiety: $\alpha = .709$; avoidance: $\alpha = .803$).

**Outcome variables: Coping**

The use of coping strategies was assessed using the 28-item Brief COPE questionnaire (Carver, 1997). This measure assessed 14 different constructs indicative of the various functional and dysfunctional ways individuals respond to stressful situations. Participants respond to each item stem on a 4-point Likert-type scale ranging from 1 (I usually don’t do this at all) to 4 (I usually do this a lot). The subscales and the alphas in the present study are as follows: active coping ($\alpha = .518$), planning ($\alpha = .693$), positive reframing ($\alpha = .765$), acceptance ($\alpha = .552$), humor ($\alpha = .824$), emotional support ($\alpha = .773$), instrumental support ($\alpha = .842$), self-distraction ($\alpha = .545$), denial ($\alpha = .572$), substance use ($\alpha = .927$), behavioral disengagement ($\alpha = .755$), religion ($\alpha = .824$), venting ($\alpha = .565$), and self-blame ($\alpha = .799$). Considering the limitations of two-item subscales, only subscales with an acceptable alpha coefficient (i.e., at or above .70) were retained for analyses. Planning was also retained because it approached an acceptable alpha, although we acknowledge this limitation. Additionally, to examine an individual’s tendency to use adaptive or maladaptive coping strategies in general, two subscales were created using principal component analysis (PCA), where coping subscales were only retained on the larger component if they had a component loading of .40 or above to ensure fit. This was done, in part, to reduce the number of parameters to have a more parsimonious investigation into the general types of coping. The adaptive coping component consisted of planning (loading = .764), positive reframing (loading = .680), emotional support (loading = .789), and instrumental support (loading = .796). The maladaptive coping component consisted of substance use (loading = .770), behavioral disengagement (loading = .778), and self-blame (loading = .624). Humor and religion did not load sufficiently on to either component; therefore, they were dropped from individual analysis as well. The items from each subscale obtained a sufficient alpha coefficient for each component (i.e., adaptive: $\alpha = .857$; maladaptive: $\alpha = .795$), and together the components accounted for 50.0% of the original variance. Notably, similar procedures to create such components from these coping scales have been used in previous research (e.g., Dawson et al., 2014).

**Analytic plan**

To examine the associations among all study variables, bivariate correlations were computed. To test our proposed simple mediation models we used the PROCESS macro (Hayes, 2013), which provides a path analysis-based mediation approach within SPSS (version 22) allowing for the examination of multiple mediators. Both anxiety and avoidance attachment dimensions were analyzed together as mediators to uniquely assess each association while controlling for the effects of the other dimension of attachment. Separate mediation analyses were conducted with respect to each outcome variable analyzed (i.e., each component of coping and each subscale of coping within that component). A bootstrapping method was employed in each analysis using 1,000 bootstrap resamples, providing 95% confidence intervals around each indirect effect. If the confidence interval does not include zero, then the indirect effect is assumed...
to be significant. Notably, it has been demonstrated that the predictor and outcome variables are not required to be significantly or robustly associated to examine mediation (cf., Hayes, 2013). Therefore, despite some nonsignificant bivariate correlations between the predictors and some of the outcomes, we examined all possible mediation models to maintain parsimony and the ability to compare results across the models examined. Additionally, some research has suggested that mediators can be examined even in the absence of direct effects, and perhaps, serve to illuminate the intricate associative path between variables (Rucker, Preacher, Tormala, & Petty, 2011; Shrout & Bolger, 2002). Because coping strategies and attachment were assessed at the same time point, these variables are not temporal in occurrence and could be interleaved in analyses. However, coping strategies were chosen as the outcome variable for theoretical reasons outlined above, and in line with the path of previous research where attachment organization precedes the development of coping strategies (e.g., Dawson et al., 2014; Seiffge-Krenke & Beyers, 2005).

Results

See Table 1 for descriptive statistics and correlations among all variables of interest. On the level of zero-order correlations, physical abuse was only associated with the avoidance type of attachment, whereas emotional abuse was associated with both avoidance and anxiety attachment types. Physical abuse was only associated with coping through substance use and the broad maladaptive coping component, whereas emotional abuse was associated with all of the coping subscales that made up the maladaptive coping component, as well as the maladaptive coping component. Avoidant attachment had a small to moderate association and anxious attachment had a small to moderate association with each coping variable examined with the exception of planning, and anxious attachment was not significantly correlated with the adaptive coping component.

Mediation analyses

Because the sample size was consistent for all analyses, the relationship observed between the childhood maltreatment variables and the attachment mediators was consistent across all mediation analyses. Throughout, childhood physical abuse was significantly related to avoidance attachment ($b = .799$, $p < .01$).
SE = .213, p < .001; b represents an unstandardized beta), but not anxious attachment (b = .262, SE = .203, p = .198) and childhood emotional abuse was significantly related to both avoidance attachment (b = .630, SE = .121, p < .001) and anxious attachment (b = .519, SE = .114, p < .001). For all following analyses, only direct and indirect effects will be discussed, and direct effects will only be discussed when significant or when a significant bivariate correlation was detected (see Table 2 for complete analyses).

### Adaptive coping

When examining the adaptive coping component, it is notable that no significant bivariate correlations were detected between physical or emotional abuse and adaptive coping strategies; thus, significant indirect effects may serve to clarify a muddled and complex association among childhood abuse, attachment, and coping, but should be interpreted with some caution as direct effects were not detected (see Table 2). A significant indirect effect emerged for both of the predictor variables examined, physical abuse and emotional abuse, through the attachment classifications examined (total indirect effect: attachment −.164, 95% CI [−.272, −.072]). However, this effect was likely attributable to significant indirect effect through avoidant attachment (physical abuse: indirect effect = −.191, 95% CI [−.306, −.106]; emotional abuse: indirect effect = −.145, 95% CI [−.261, −.076]) as a significant indirect effect through anxious attachment did not emerge. Thus, avoidant attachment appeared to help to explain the relationship between child maltreatment and the subsequent decreased use of adaptive coping strategies. That is, greater instances of child maltreatment contributed to greater levels of avoidant attachment, which in turn help to explain a decrease of reported adaptive coping strategies. Each subscale within the adaptive coping component is discussed subsequently; see Figure 1 for a depiction of the significant paths for the adaptive coping strategies.

### Planning

Similar to the larger component capturing adaptive coping, there was a significant indirect effect through avoidant attachment (but not anxious attachment) helping to explain the association between physical abuse and the decrease in use of planning as a coping strategy (indirect effect = −.030, 95% CI [−.058, −.004]). However, neither avoidant nor anxious attachment served to clarify a relationship between emotional abuse and the use of planning as a coping strategy.

### Positive reframing

Unlike the previously reported results, neither avoidant nor anxious attachment emerged with a significant indirect effect to help elucidate any association between physical or emotional abuse and the adaptive coping strategy of positive reframing. However, in both cases, the combined indirect effect of anxious and avoidant attachment helped to explain the association with both physical abuse and child abuse in the same general direction; in that, when anxious and avoidant attachment are considered together, they help to explain the association between physical and emotional abuse and the decrease in use of positive reframing as a coping strategy.

### Emotional support

Similar to the larger component capturing adaptive coping, there was a significant indirect effect through avoidant attachment helping to explain the association between physical abuse and emotional abuse and the decrease in use of seeking emotional support as a coping strategy (physical abuse: indirect effect = −.075, 95% CI [−.116, −.043]; emotional abuse: indirect effect = −.059, 95% CI [−.093, −.037]). That is, avoidant attachment helped to clarify the decreased use of the emotional support as a coping strategy in the presence of increased levels of childhood emotional support. In addition, for childhood emotional abuse (but not childhood physical abuse) there was a significant indirect effect through anxious attachment helping to explain the association between emotional abuse and decrease in use of seeking support as a coping strategy (indirect effect = .033, 95% CI [.012, .060]).
Table 2. Direct and indirect effects of mediational models using attachment as a mediator.

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Child physical abuse</th>
<th>Child emotional abuse</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indirect effect of avoidant attachment</td>
<td>Indirect effect of anxious attachment</td>
<td>Total indirect effect</td>
</tr>
<tr>
<td>Overall adaptive coping</td>
<td>b = [-.191, [-.306, -.106])</td>
<td>b = .027 [-.007, .112]</td>
<td>b = -.164 [-.272, -.072]</td>
</tr>
<tr>
<td>Planning</td>
<td>b = -.027 [-.058, -.004]</td>
<td>b = .001 [-.009, .018]</td>
<td>b = -.026 [-.055, -.003]</td>
</tr>
<tr>
<td>Positive reframing</td>
<td>b = -0.023 [-.057, .003]</td>
<td>b = -.009 [-.037, .003]</td>
<td>b = -.032 [-.070, -.003]</td>
</tr>
<tr>
<td>Emotional support</td>
<td>b = -.075 [-.116, -.043]</td>
<td>b = .018 [-.007, .054]</td>
<td>b = -.057 [-.101, -.017]</td>
</tr>
<tr>
<td>Instrumental support</td>
<td>b = -.065 [-.110, -.035]</td>
<td>b = .0164 [-.005, .056]</td>
<td>b = -.049 [-.091, -.014]</td>
</tr>
<tr>
<td>Behavioral disengagement</td>
<td>b = .051 [.026, .084]</td>
<td>b = .011 [-.003, .034]</td>
<td>b = .062 [.029, .102]</td>
</tr>
<tr>
<td>Self-blame</td>
<td>b = .019 [-.004, .053]</td>
<td>b = .023 [-.008, .066]</td>
<td>b = .042 [-.000, .093]</td>
</tr>
</tbody>
</table>

Note. ^ Trend p < .10. * p < .05 or CI interval does not straddle zero.
**Instrumental support**

Avoidant attachment served to help explain the relationship between both physical and emotional abuse (physical abuse: indirect effect $=-.065$, 95% CI $[-.110, -.035]$; emotional abuse: indirect effect $=-.050$, 95% CI $[-.084, -.027]$) in a pattern similar to that of the other adaptive coping strategies. That is increased levels of avoidant attachment, help explain the decrease in the use of seeking instrumental support when experience stress in the presence of increasing levels of childhood maltreatment. Consistent with emotional support coping, anxious attachment served to help explain the relationship between childhood emotional abuse and instrumental support coping (indirect effect $=.031$ [.013, .062]); however, a significant indirect effect for anxious attachment did not emerge for childhood physical abuse.

**Maladaptive coping**

When examining the overall maladaptive coping component, a significant indirect effect emerged for both of the predictor variables examined, physical abuse and emotional abuse. Avoidant attachment appeared to be the only attachment subscale that facilitated the relationship between physical abuse and the utilization of maladaptive coping strategies (indirect effect $=.112$, 95% CI [.054, .190]). In contrast to the significant bivariate correlations detected, when abuse was considered in the presence of the attachment subscales, physical abuse was not significantly related to maladaptive coping strategies in general per the component ($b = .099$, $SE = 1.07$, $p = .353$). Similarly, for emotional abuse in the presence of attachment there was no longer a significant direct effect ($b = .094$, $SE = .07$, $p = .151$) and both avoidant attachment (indirect effect $=.085$, 95% CI [.043, .140]) and anxious attachment (indirect effect $=.102$, 95% CI [.054, .171]) appeared to help explain the association between childhood emotional abuse and the use of maladaptive coping strategies. In summary, greater instances of child maltreatment were associated with an increased use of maladaptive coping strategies, and in turn, greater levels of anxious or avoidant attachment, helped to explain those relationships, where appropriate. Each subscale within the maladaptive coping component is discussed subsequently; see **Figure 2** for a depiction of the significant paths for the maladaptive coping strategies.

**Substance use**

Similar to the larger component, there was a significant indirect effect through avoidant attachment helping to explain the association between physical abuse and coping through substance use (indirect effect $=.043$, 95% CI [.016, .076]) and physical abuse did not retain a significant direct association with coping through substance use ($b = .079$, $SE = .05$, $p = .147$) as indicated in the bivariate associations. However, both avoidant attachment (indirect effect $=.036$, 95% CI [.017, .063]) and anxious attachment (indirect effect $=.038$, 95% CI [.018, .072]) helped to explain the relationship between emotional abuse and coping through substance use, and emotional abuse did not retain a significant direct association with coping through substance use ($b = .014$, $SE = .03$, $p = .677$).
Figure 2. The significant indirect paths for the maladaptive coping subscales. The dotted lines are those from physical abuse and the solid lines are those from emotional abuse. Only lines that had significant indirect effects are depicted.

**Behavioral disengagement**

As previously shown, in the presence of both attachment subscales, avoidant attachment appeared the only variable that served to mediate the relationship between physical abuse and behavioral disengaged coping (indirect effect = .051, 95% CI [.026, .084]), but both avoidant (indirect effect = .034, 95% CI [.021, .063]) and anxious attachment (indirect effect = .022, 95% CI [.007, .045]) helped to explain the relationship between emotional abuse and behavioral disengaged coping. Further, the initial bivariate association between emotional abuse and behavioral disengaged coping disappeared when the attachment variables were considered (b = .010, SE = .03, p = .708).

**Self-blame**

Unlike the previous maladaptive coping subscales, the mediating role of attachment played out somewhat differently in their relationship to self-blame. Neither attachment subscale produced a significant indirect effect in the relationship between physical abuse and self-blame coping; however, only anxious attachment (indirect effect = .042, 95% CI [.019, .072]), and not avoidant attachment, produced a significant indirect effect between emotional abuse and the use of self-blame coping. Notably, however, emotional abuse retained its significant association with this coping strategy, even in the presence of both attachment subscales (b = .07, SE = .03, p = .026).

**Discussion**

In the present study we examined attachment and coping strategies to build on related literature that established links between specific attachment dimensions (avoidant and anxious) and differential patterns in affect regulation (Mikulincer et al., 2003; Shaver & Mikulincer, 2002; Wei et al., 2005). When examining avoidant and anxious attachment as mediators between physical and emotional abuse in childhood and coping strategies, an overall pattern emerged, such that avoidant attachment most consistently mediated the relationship between experiences of childhood abuse and adult adaptive and maladaptive coping. Specifically, avoidant attachment, and not anxious attachment, mediated the relationship between physical abuse in childhood and coping strategies. Whereas avoidant attachment also mediated the relationship between emotional abuse in childhood and several adaptive coping strategies, both avoidant and anxious attachment mediated the relationship between emotional abuse in childhood and maladaptive coping strategies. These results were consistent with our hypotheses in that avoidant attachment, but not anxious attachment, primarily mediated the relationship between both childhood physical and emotional maltreatment and the use of both adaptive and maladaptive coping strategies. Anxious attachment was found to mediate the relationship between childhood emotional abuse and maladaptive coping strategies.

In the present study we found significant and positive bivariate relationships between childhood emotional and physical abuse and both overall and specific forms of maladaptive coping. This is consistent with a body of literature linking experiences of maltreatment to increased maladaptive coping later in
life (Hyman et al., 2007; Walsh, Fortier, & DiLillo, 2010). However, there were no direct relationships between maltreatment in childhood and adaptive forms of coping, a finding which is also consistent with prior research (Leitenberg, Gibson, & Novy, 2004).

In addition, at the bivariate level, physical abuse and emotional abuse in childhood were associated with increased avoidant attachment. This is consistent with previous research, in which individuals who have experienced abuse in childhood (particularly sexual abuse) report that they devalue partners, have difficulty maintaining healthy relationships, and believe that they cannot or should not rely on or trust others (Coleman & Widom, 2004; DiLillo, 2001). In contrast with avoidant attachment, anxious attachment was associated with emotional abuse, but not physical abuse, in childhood. This is consistent with evidence that adults who experienced emotional abuse in childhood may enact emotionally discordant patterns, such as excessive reassurance seeking, into later-life interpersonal relationships (Riggs, 2010).

Adaptive coping

Avoidant attachment mediated the relationship between physical and emotional abuse and overall adaptive coping, emotional support, and instrumental support, such that these forms of child abuse were associated with increased avoidant attachment, which was associated with decreased adaptive coping. This may relate to a tendency for individuals high on avoidant attachment to preclude themselves from seeking out emotional support from close others as a way to cope with stressors (Wei et al., 2005).

In addition, avoidant attachment mediated the relationship between physical abuse and planning. Individuals with avoidant attachment styles may try to suppress/mask feelings (as well as disengage behaviorally). This withdrawal from processing feelings may stem from early rejection experiences implicit with childhood physical abuse experiences and translate into attachment avoidance. In adulthood, this may lead to issues in effective planning, which requires successful processing of feelings. Avoidant attachment, however, did not mediate the relationship between childhood physical and emotional abuse and the use of positive reframing as an adaptive coping strategy.

In contrast, anxious attachment did not mediate a relationship between childhood physical abuse and any forms of adaptive coping. Individuals who are characterized by high attachment anxiety may be more sensitive to negative emotions and are likely to vent frustrations (Jerome & Liss, 2005), seek social support, and actively attend to distress (Fuendeling, 1998). Although high anxiety may reduce the effectiveness of coping, the occasional use of adaptive coping strategies in anxiously attached individuals may explain the lack of mediational relationship within our sample.

Maladaptive coping

Similar to adaptive coping models, avoidant attachment mediated the relationship between physical abuse and a variety of maladaptive outcomes (overall maladaptive attachment, substance use, and behavioral disengagement). Prior research has also found a strong link between physical abuse in childhood and attachment avoidance (Finzi, Har-Even, Shnit, & Weizman, 2002) but not attachment anxiety (Unger & De Luca, 2014).

However, when models related to emotional abuse were tested, both avoidant and anxious attachment mediated the relationship between emotional abuse and maladaptive coping. Early experiences of emotional maltreatment may be characterized by elements of both caregiver rejection and negative involvement. Prior literature has tied both avoidant and anxious attachment to risky behaviors, which bear significant overlap with maladaptive coping through high levels of impulsivity (Oshri, Sutton, Clay-Warner, & Miller, 2015). This may translate into the externalizing behaviors (and not the internalizing self-blame technique) of maladaptive coping found within the model.

In addition, anxious attachment mediated the relationship between emotional abuse in childhood and self-blame. This is consistent with previous literature among individuals with a history of childhood abuse (Cloitre, Stovall-McClough, Zorbas, & Charuvastra, 2008; Riggs, 2010). Anxious attachment, often characterized by worry, impulsivity, negative self-evaluations, and dependence on others, is a common outcome of parent–child dynamics in which children are chronically derogated by their caregivers and
invalidated within their homes. As stated previously, individuals with anxious attachment styles are more likely to have a negative self-view Mikulincer (1998) and may be more likely to utilize self-blame coping through evaluative, self-conscious emotions such as guilt and shame (Muris & Meesters, 2014).

**Transtheoretical treatment implications of attachment-based coping**

Coping strategies are important outcomes to assess as maladaptive coping strategies are often implicated as associates or antecedents to a number of psychopathologies (e.g., generalized anxiety, Mennin, Turk, Heimberg, & Carmin, 2004; attention-deficit/hyperactivity disorder, Bunford et al., 2015; depression, Millgram, Joormann, Huppert, & Tamir, 2015; eating disorders, Pugh, 2015; borderline personality disorder; Linehan, 1993) and, therefore, are often main targets of intervention within various approaches to therapy. For instance, as highlighted in a meta-analysis conducted by Aldao et al. (2010), dialectical behavioral therapy, acceptance and mindfulness-based therapies, emotion-focused psychotherapy, and cognitive behavioral approaches often address maladaptive coping strategies (e.g., avoidance, rumination, suppression).

Given the central inclusion of coping strategies in several evidence-based treatments, as well as their link to the development or maintenance of various psychopathologies, the benefits of focusing on coping strategies are likely to be informative in numerous contemporary treatments. Interestingly, Aldao et al. (2010) found in their review that the presence of maladaptive coping strategies appeared to contribute more to the development of psychopathology than the absence of adaptive coping strategies. This perhaps calls particular attention to the role that insecure attachment organizations or styles may play in forming maladaptive coping strategies and to the importance of targeting, preventing, or intervening on these coping style formations.

Assessing and understanding individuals’ attachment styles may assist in treatment plan development and case conceptualization. Broadly speaking, interventions for those with a history of childhood abuse and issues with maladaptive coping may benefit from the inclusion of attachment theory in therapy in the form of processing interpersonal schemas and patterns. For example, clients with difficulties in effective planning, which requires the processing of feelings, may find that these issues are maintained in avoidant attachment.

Taking a cognitive behavioral therapy (Beck, 1979) approach may involve the challenging of a client’s attachment-based assumptions of excessive reliance on or avoidance of close others. Within a behavioral framework, a therapist could design individualized behavioral experiments involving attachment and dimensions of trust. Dialectical behavior therapy (Linehan, 1993) places an explicit focus on behavioral elements of coping (often with trauma). These treatment components have been adapted for a number of psychosocial issues, so further adaptation could potentially extend coping to target coping behaviors involved in attachment relationships. It should be noted that further empirical research is needed to determine specific best practices related to the incorporation of attachment into established treatment protocols.

**Limitations**

The present study was limited by the single time point measurement of the data. All participants retrospectively reported on childhood abuse and neglect experiences as adults, which may impact recall in both validity and severity of reported experiences (Hardt & Rutter, 2004). Participants were drawn from a fairly racially and ethnically homogenous psychology subject pool from a large, Midwestern undergraduate university setting. As such, reported experiences may not generalize to fully encapsulate the complex relationship between abuse, attachment, and coping experiences of individuals ascribing to other sociodemographic groups. This study was further limited in a lack of assessment for emotion regulation, which may play a unique role in the overall relationship between childhood maltreatment, attachment, and coping. As such, the role of emotion regulation as discussed in this article is strictly theoretical and is not included in the proposed empirically based model. As a further theoretical limitation, attachment was not a perfectly consistent mediator between all forms of maltreatment and all reported coping
outcomes. Specifically, avoidant attachment did not mediate the relationship between childhood maltreatment and the decreased use of positive reframing. Mikulincer (1998) found that avoidant individuals showed more positive self-views than individuals characterized by alternative insecure attachment styles. This may be one reason for the lack of mediation with this particular coping variable. This prior research also highlights the nuance and specificity that best characterizes the complex, multifaceted relationships between maltreatment in childhood, attachment, and coping strategies.

**Future directions**

It will be critical for future researchers to link maladaptive coping more specifically with other outcomes of clinical interest (besides the development of psychopathology) such as occupational or academic functioning or performance, relationship satisfaction, and maintenance of psychological distress. Additionally, some studies examining childhood sexual abuse find gender differences in coping, perceived severity, and adjustment later in life (Ullman & Filipas, 2005). It stands to reason that there may also be gender differences for victims of physical and emotional abuse in childhood. Further research in this area may help elucidate any potential gender differences in other forms of childhood maltreatment to better understand interpersonal patterns between maltreatment, attachment, and coping, in relation to gender. Other researchers have asserted that emotion regulation is a vital element in the use and stability of coping (Aldao et al., 2010). Therefore, studies within this area may aide in understanding the potentially intertwined role of emotion regulation and attachment in mediating the relationship between childhood maltreatment and later-life coping strategies. Finally, although this line of research supports the idea that attachment may help explain the relationship (in terms of indirect effects) between decreased adaptive and increased maladaptive coping strategies in an adult sample who experienced maltreatment in childhood, there is no empirical information on potential direct effects. Future research on resilience (Mrazek & Mrazek, 1987) may help to elucidate and focus clinical attention on critical protective factors that prevent the development of negative psychosocial outcomes in those who face early life adversity.

**References**


