Experiential Avoidance as a Mediator in the Relationship Between Childhood Psychological Abuse and Current Mental Health Symptoms in College Students

Madhavi K. Reddy  
Scott M. Pickett  
Holly K. Orcutt

ABSTRACT. Psychological abuse in childhood has been linked to psychological distress in adulthood, although the interceding variables or possible mediators for the adult distress have not been adequately examined. Identification of mediating variables may provide important opportunities for targeting intervention and prevention efforts following psychological abuse. Experiential avoidance, a response style characterized by avoidance of negative private events, was examined as a potential mediator of the relationship between reports of childhood psychological abuse and current mental health symptoms in a cross-sectional sample of 987 college undergraduates. Utilizing structural equation modeling techniques, experiential avoidance was found to significantly mediate the relationship between childhood psychological abuse and current mental health symptoms, reducing the direct effect by 77%. A history of childhood psychological abuse was related to increased levels
of experiential avoidance and current mental health symptoms, and experiential avoidance was also directly related to increased levels of current mental health symptoms. Implications for treatment following psychological abuse are discussed.

The consequences of experiencing childhood sexual abuse and childhood physical abuse have received relatively more attention than the consequences of psychological abuse. While physical and sexual abuse have been found to have long-term negative consequences (see e.g., Briere & Elliot, 2003; Steel, Sanna, Hammond, Whipple, & Cross, 2004), psychological abuse often occurs in conjunction with the more overt forms of violence (Claussen & Crittendon, 1991). Moreover, the effects of psychological abuse have been found to be just as damaging and long-term as the physical forms of violence (Hart & Brassard, 1987).

Psychological abuse has not been studied as extensively as physical violence, perhaps because physical violence has more easily observable effects on the victims. The discrepancy in size between the literatures on psychological abuse and physical abuse may also be explained by the difficulty in operationalizing psychological abuse (Shaver, Goodman, Rosenberg, & Orcutt, 1991). Childhood psychological abuse can take many forms. In an effort to identify the topography of psychological abuse, Hart and Brassard (1991) empirically tested a definition of psychological abuse comprised of five subtypes of parental behavior that are psychologically damaging. Specifically, the subtypes include spurning, terrorizing, isolating, exploiting/corrupting, and denying emotional responsiveness. These five subtypes may occur in conjunction with each other or can be present separately.

The experience of psychological abuse in childhood from a primary caretaker has been found to be related to negative outcomes such as depression and other Axis I disorders (Zelikovsky & Lynn, 2002). Others studies have shown, using retrospective data, that college students who report childhood psychological abuse have more symptoms in adult-
hood of anxiety, depression, and borderline personality traits than those who do not report any childhood psychological abuse (Briere & Runtz, 1988; Gross & Keller, 1992). Dissociative experiences in adulthood have also been found to be greater among those reporting psychological abuse in childhood (Chu & Dill, 1990; Ferguson & Dacey, 1997).

The experience of psychological abuse has been correlated with negative outcomes regardless of the relationship between perpetrator and victim. However, when a child is psychologically abused by a primary caretaker, the negative consequences seem to be especially problematic (Eisenberg, Fabes, & Murphy, 1996). Primary caretakers, especially parents, are thought to model emotional regulation and perception for their children. Eisenberg et al. (1996) have shown that negative parental responses to children’s emotions (which are considered a form of psychological abuse) have been predictive of an avoidant coping response and predictive of increased negative psychological symptoms. Simons and colleagues (Simons, Ducette, Kirby, Stahler, & Shipley, 2003) found that women who had a history of psychological abuse as well as physical and sexual abuse were more likely to engage in avoidance coping in adulthood.

While the link between psychological abuse and negative outcomes has been established, the mechanism through which childhood psychological abuse leads to adult psychopathology is not yet well understood. One possible mechanism through which childhood psychological abuse results in later negative mental health outcomes for adults may be via experiential avoidance. Experiential avoidance as defined by Hayes and colleagues (Hayes, Wilson, Strosahl, Gifford, & Follette, 1996) is the “phenomenon that occurs when a person is unwilling to remain in contact with particular private experiences (e.g., bodily sensations, emotions, thoughts, memories, behavioral predispositions) and takes steps to alter the form or frequency of these events and the contexts that occasion them” (p. 1154). Avoidance coping, for example, can be viewed as a form of experiential avoidance. An experientially-avoidant response style is characterized by an unwillingness to be in contact with negative private events (such as thoughts, memories, emotions, body sensations) and taking steps to alter the manner of these experiences. Individuals may attempt to suppress thoughts, memories, and emotions related to a stressful emotional experience. While employing an experientially-avoidant coping style and attempting to inhibit thoughts and feelings may be adaptive in the short term, it often leads, paradoxically, to increased rumination of the very thing sought to be avoided, as demonstrated by Wegner in his “white bear” studies (1989). In addition, the cost of inhibition may have a
cumulative physiological effect on the body, which may lead to illness (Pennebaker, 1997).

Experiential avoidance has also been found to be related to negative behavioral outcomes such as substance abuse (Stasiewicz & Maisto, 1993), binge eating (Krause, Robins, & Lynch, 2000) and negative mental health outcomes such as depression (Hayes et al., 1996). Posttraumatic stress disorder symptomatology (Boeschen, Koss, Figueredo, & Coan, 2001) has been linked to the utilization of experiential avoidance as a coping strategy and the withholding (avoidance) of emotions (Roemer, Litz, Orsillo, & Wagner, 2001). Polusny and colleagues (Polusny, Rosenthal, Aban, & Follette, in press) found that experiential avoidance mediated the relationship between adolescent sexual victimization and negative adult outcomes such that women who employ an experientially-avoidant coping style after sexual victimization are at greater risk for psychological distress. Thus, although there are several studies demonstrating that experiential avoidance is linked to various negative outcomes in populations of sexually abused women, the relations between childhood psychological abuse, experiential avoidance, and psychological distress in adulthood have not been adequately studied.

One recent study, however, by Krause, Mendelson, and Lynch (2003) provides an important first attempt to examine potential mechanisms related to experiential avoidance in the relationship between psychological abuse and later emotional distress. Specifically, Krause et al. examined emotional inhibition as a mediator in the relation between reports of childhood psychological abuse and adult psychological distress in a cross-sectional sample of 127 college undergraduates. Emotional inhibition is subsumed under the construct of experiential avoidance; experiential avoidance contains the elements of emotional inhibition as assessed by Krause et al. but also contains unique elements such as avoidance of body sensations related to emotions (both positive and negative). Using structural equation modeling, Krause et al. created an emotional inhibition latent variable that contained four manifest indicators: (1) ambivalence over emotional expressiveness, (2) thought suppression, (3) avoidance coping, and (4) avoidance for a specific distressing event that was experienced in their laboratory (exposure to distressing pictures). In their sample, Krause et al. found that emotional inhibition significantly mediated the relationship between reports of childhood psychological abuse and adult psychological distress. The present study aimed to extend and expand the Krause et al. study in several ways. First, Krause et al. did not control for physical and sexual abuse history in their model. In order to focus on the unique effects
of psychological abuse, we intended to control for exposure to a history of other forms of childhood abuse. Second, unfortunately with 127 subjects and a model that includes three latent variables, the model in Krause et al. was likely underpowered. Our sample of 987 participants allowed us greater power to test for mediation and the flexibility to perform multiple-group modeling separately for gender and race if appropriate. Third, as is often the case in undergraduate samples, relatively low levels of psychological symptomatology were reported by the participants in the Krause et al. study on the Beck Depression Inventory and Beck Anxiety Inventory. We used a measure of mental health symptomatology (DASS-21) that has been shown to perform well in non-clinical samples and may be more sensitive to lower levels of symptomatology. Fourth, Krause et al. included measures they labeled as emotional inhibition while the present study includes assessments of experiential avoidance, an overlapping but broader construct than emotional inhibition. Finally, although Krause et al. reported significant mediation effects, their study did not report the strength of the direct effect between the psychological abuse latent variable and the psychological distress latent variable without the emotional inhibition latent variable in the model, nor did they specifically assess the significance of the mediated effect using a test such as the Sobel test (MacKinnon, Warsi, & Dwyer, 1995). Thus, overall the Krause et al. study provides important evidence that constructs related to experiential avoidance may serve an important mediating role in the relation between childhood psychological abuse and later distress.

The Present Study

In order to inform prevention and possible intervention efforts, it is important to identify factors that may influence the relationship between childhood psychological abuse and psychological distress in an adult population. An individual’s response to distressing emotions concomitant with psychological abuse may increase or decrease the likelihood of negative outcomes following childhood psychological abuse. Using structural equation modeling, we examined whether reports of childhood psychological abuse and current mental health symptomatology were mediated by experiential avoidance. It was predicted that childhood psychological abuse would be positively related to both experiential avoidance and current mental health symptomatology. Further, it was predicted that experiential avoidance would be positively related to current mental health symptomatology. With regard to evidence of mediation, we predicted that the direct effect between childhood psychological abuse and current mental health symptomatology would be decreased when the mediator is included in the model.
abuse and current mental health symptoms would be significantly reduced when experiential avoidance was included in the structural equation model. Finally, because of our interest in the unique effects of psychological abuse, we predicted that these relationships would hold when the effects of childhood physical and sexual abuse history were partialed out of the model.

**METHOD**

**Participants and Procedure**

Participants included 987 college undergraduates at a large Midwestern university enrolled in an introductory psychology course who received partial course credit for their participation in experimental research. The sample was 52.5% male (n = 518) and was predominantly White (65% of participants identified as Caucasian/White, 15.9% African American/Black, 7% Latino/Latina, 8% Asian American, 0.1% American Indian, 3.3% Other, and seven participants did not indicate their ethnicity). The sample was relatively representative of a college population in that 93% of the participants were under the age of 22.

Participants completed a series of pencil-and-paper questionnaires in single-sex groups due to the sensitive nature of a number of the questionnaires included in the data collection packet (e.g., sexual behavior, history of abuse). The questionnaires were completed in groups of less than 30 students in a single session of approximately 90 minutes. Informed consent was given by participants at the beginning of the session. Upon the completion of the packets, participants were debriefed and given resources for area counseling agencies. The present study examines a subset of questionnaires specifically focusing on psychological abuse, other abuse history, experiential avoidance, and current mental health symptoms.

**Measures**

**Potential Covariates.** Gender and two dummy-coded race variables (White vs. non-White and Black vs. non-Black) were calculated to examine as potential covariates. Because psychological abuse may covary with other forms of childhood abuse experiences, we included history of physical or sexual abuse history in our analyses. Participants completed the Traumatic Life Events Questionnaire, a brief broad-spectrum
measure of trauma exposure (Kubany, Haynes, Leisen, Owens, Kaplan, Watson, & Burns, 2000). Participants indicate the frequency of experiencing twenty-two potentially traumatic events including items assessing abuse history. A dichotomous variable was created in which participants who indicated that they had ever experienced (1) physical punishment “in a way that resulted in bruises, burns, cuts, or broken bones” and/or (2) being touched or fondled in a sexual way or being made to touch or fondle another person in a sexual way before the age of 15, were considered to have experienced physical or sexual abuse and received a 1 on the variable (all others were coded as 0).

Psychological Abuse. Psychological abuse, in the current study, is defined as verbal communications from a caregiver to his/her child that undermine the child’s sense of self worth and social competence. Psychological abuse was measured using the Family Experiences Questionnaire (FEQ; Briere & Runtz, 1990). Seven different questions from the FEQ were used to measure psychological abuse and each question was assessed using a seven-point scale (i.e., 0 = Never, 1 = Once a Year, 2 = Twice a year, 3 = 3-5 times a year, 4 = 6-10 times a year, 5 = 11-20 times a year, and 6 = More than 20 times a year). Specifically, participants were asked, before the age of 14, how often the primary and/or secondary caregiver yelled at the participant, insulted the participant, criticized the participant, tried to make the participant feel guilty, ridiculed or humiliated the participant, embarrassed the participant in front of others, and made the participant feel like they were a bad person. For each item, if participants indicated both a primary and a secondary caregiver, a score was calculated that represented the highest score between the two caregivers.

Experiential Avoidance. Four questionnaires were used to form the latent construct of experiential avoidance, an unwillingness to remain in contact with negative private experiences such as thoughts, feelings, memories, and bodily sensations (Hayes et al., 1996). The first two questionnaires used to measure experiential avoidance were the Acceptance and Action Questionnaire (AAQ; Hayes et al., in press), and the Experiential Avoidance Scale (EAS), which was developed by the authors. The EAS, comprised of 14 items, was designed specifically to supplement the nine-item AAQ, due to suboptimal internal consistency of the AAQ in the current college student population. Both scales are on 7-point Likert-type scales and assess both an individual’s desire to avoid contact with negative private experiences as well as the steps an individual may take to alter the form of these experiences (e.g., from the AAQ, “If I could magically remove all the painful experiences I’ve
had in my life, I would do so,” and from the EAS, “My body reacts strongly to upsetting thoughts and feelings”). A mean score was computed based on participants’ responses to the 23 items (after reverse scoring any appropriate items). The coefficient alpha for the 23 items was .85 with corrected item-to-total correlations ranging from .10 to .67. The AAQ correlated .60 with the EAS in the present sample.

The third questionnaire, the White Bear Thought Suppression Inventory (WBSI; Wegner & Zanakos, 1994), contains 15 items assessing an individual’s tendency to have unwanted thoughts and to employ strategies to keep unwanted thoughts from entering consciousness (e.g., “I often have thoughts that I try to avoid”). This scale is on a 7-point Likert scale and had an internal consistency of .92 in the present sample.

The final questionnaire, the Toronto Alexithymia Scale (TAS: Bagby, Parker, & Taylor, 1994), contains 20 items assessing an individual’s inability to identify and describe emotional experience or the physiological arousal concomitant with emotion (e.g., “I am confused about what emotion I am feeling”). This scale is on a 7-point Likert scale and had an internal consistency of .80 in the present sample.

Although the experiential avoidance construct was modeled as a latent variable with three indicators (AAQ/EAS, WBSI, and TAS), for descriptive purposes (see Table 1) a total experiential avoidance score was computed as a mean of the three scales (Cronbach’s alpha = .93). The correlations among the three scales ranged from .53 to .66.

Depression Anxiety Stress Scale-21 (DASS-21). The DASS-21 (Lovibond & Lovibond, 1995a) is a brief measure of depression (7 items; e.g., I felt that I had nothing to look forward to), anxiety (7 items; e.g., I felt I was close to panic), and stress (7 items; e.g., I found it hard to wind down) symptoms. Each symptom is rated on a 4-point scale ranging from 0 (did not apply at all) to 3 (applied to me very much, or most of the time) using the past week as a referent point. Subscale scores were obtained by computing a mean score for each of the items on the subscale. Internal consistencies were .87, .78, and .83, for the depression, anxiety, and stress subscales, respectively. This measure is appropriate for use in non-clinical samples; Lovibond and Lovibond (1995b) note that the factor structure and performance of items is similar in clinical and non-clinical samples. Although this construct was modeled as a latent variable with the three DASS-21 subscales as manifest indicators, for descriptive purposes (see Table 1) a total current mental health symptoms score was computed as a mean of the three subscales (Cronbach’s alpha = .92). The correlations among the three subscales ranged from .66 to .74.
TABLE 1. Means, Standard Deviations, and Correlations for Study Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender (% male)</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Race (% White)</td>
<td>.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Race (% Black)</td>
<td>-.13*</td>
<td>-.60*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Physical or sexual abuse history (% endorsed)</td>
<td>-.06</td>
<td>-.10*</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Childhood psychological abuse*</td>
<td>.03</td>
<td>-.02</td>
<td>-.02</td>
<td>.31*</td>
<td>.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Experiential avoidance composite score</td>
<td>.01</td>
<td>-.02</td>
<td>-.04</td>
<td>.11*</td>
<td>.25*</td>
<td>.93</td>
<td></td>
</tr>
<tr>
<td>7. Current mental health symptoms (DASS-21 composite score)</td>
<td>.03</td>
<td>-.02</td>
<td>-.04</td>
<td>.20*</td>
<td>.27*</td>
<td>.62*</td>
<td>.92</td>
</tr>
</tbody>
</table>

| $M$     | .52 | .65 | .16 | .28 | 1.31 | 3.67 | .64 |
| $SD$    | .50 | .48 | .37 | .45 | 1.65 | .81  | .52 |
| Min-Max | 0-1 | 0-1 | 0-1 | 0-1 | 0-6  | 1.36-6.11 | 0-3 |
| $n$     | 987 | 979 | 979 | 969 | 987  | 987  | 976 |

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Coefficient alphas (where appropriate) are on the diagonal. *Average of three items (insult, ridicule, and make you feel like a bad person). Min = Minimum endorsed value on variable. Max = Maximum endorsed value on variable.

**RESULTS**

*Descriptive Statistics and Preliminary Analyses*

Before proceeding with our mediational model, we were interested in examining the performance of the childhood psychological abuse items in our non-clinical sample. Specifically, we were interested in identifying items that were most consistent with our definition of psychological abuse and had good discrimination in our sample. We examined the frequency distributions of these seven items as well as the item-total correlations in an internal consistency analysis (see Table 2). The three items with the lowest endorsement (insult you, ridicule or humiliate you, and make you feel like a bad person) also had three of the four highest item-to-total correlations. In addition, these three items are consistent with the Hart and Brassard (1991) definition. We opted not to include “criticize you” in our final item pool although it had a high item-to-total correlation because of the relatively high endorsement (10% of the sample endorsed that this happened 20 or more times a year) and concern that this may be more reflective of a child rearing style than psychological abuse. Specifically, we were more confident that a report of being
insulted by a parent was more clear-cut psychological abuse than a report of being criticized by a parent.1

Means, standard deviations, and correlations for gender, the two dummy-coded race variables, childhood physical and sexual abuse history, a composite of the three childhood psychological abuse items, a composite of the three experiential avoidance scales, and a composite of the three mental health symptom scales are presented in Table 1.

**Mediational Analyses**

Experiential avoidance was examined as a possible mediator of the relationship between a history of psychological abuse and mental health symptoms. Childhood psychological abuse, experiential avoidance, and mental health symptoms were modeled as latent variables. The three items assessing frequency of childhood psychological abuse (i.e., insult you, ridicule or humiliate you, and make you feel like a bad person) were used as the three manifest indicators of the childhood psychological abuse latent variable. The three experiential-avoidance scales (AAQ/EAS, WBSI, and TAS) were used as manifest indicators of the experiential avoidance latent variable. The three DASS-21 scales (i.e., depression, anxiety, and stress) were used as manifest indicators for the mental health symptoms latent variable. Childhood physical and sexual abuse history was modeled as causal indicator with a dichotomous score (i.e., did the person experience physical or sexual abuse?). Structural equation modeling analyses were conducted with the AMOS program.

<table>
<thead>
<tr>
<th>Items</th>
<th>Yell at you?</th>
<th>Insult you?</th>
<th>Criticize you?</th>
<th>Make you feel guilty?</th>
<th>Ridicule or humiliate you?</th>
<th>Embarrass you in front of others?</th>
<th>Make you feel like you were a bad person?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Never</td>
<td>47 (4.8)</td>
<td>482 (48.8)</td>
<td>324 (32.8)</td>
<td>368 (37.3)</td>
<td>608 (61.6)</td>
<td>445 (45.1)</td>
<td>553 (56.0)</td>
</tr>
<tr>
<td>1. Once a year</td>
<td>54 (5.5)</td>
<td>422 (42.4)</td>
<td>121 (12.3)</td>
<td>134 (13.6)</td>
<td>116 (11.8)</td>
<td>170 (17.2)</td>
<td>133 (13.5)</td>
</tr>
<tr>
<td>2. Twice a year</td>
<td>61 (6.2)</td>
<td>94 (9.5)</td>
<td>105 (10.6)</td>
<td>97 (9.8)</td>
<td>71 (7.2)</td>
<td>100 (10.1)</td>
<td>75 (7.6)</td>
</tr>
<tr>
<td>3. 3-5 times a year</td>
<td>188 (19.0)</td>
<td>114 (11.6)</td>
<td>143 (14.5)</td>
<td>122 (12.4)</td>
<td>73 (7.4)</td>
<td>117 (11.9)</td>
<td>66 (6.7)</td>
</tr>
<tr>
<td>4. 6-10 times a year</td>
<td>165 (16.7)</td>
<td>52 (5.3)</td>
<td>99 (10.0)</td>
<td>98 (9.9)</td>
<td>45 (4.6)</td>
<td>66 (6.7)</td>
<td>58 (5.9)</td>
</tr>
<tr>
<td>5. 11-20 times a year</td>
<td>160 (16.2)</td>
<td>48 (4.9)</td>
<td>90 (9.1)</td>
<td>95 (9.6)</td>
<td>37 (3.7)</td>
<td>46 (4.7)</td>
<td>49 (5.0)</td>
</tr>
<tr>
<td>6. More than 20 times a year</td>
<td>312 (31.6)</td>
<td>75 (7.6)</td>
<td>104 (10.5)</td>
<td>73 (7.4)</td>
<td>37 (3.7)</td>
<td>43 (4.4)</td>
<td>53 (5.4)</td>
</tr>
</tbody>
</table>

Corrected item-to-total correlation: .50 .78 .77 .74 .78 .72 .76
Arbuckle & Wothke, 1999) and maximum likelihood estimation. Parameters were estimated using all available data (incomplete data were assumed to be missing at random and thus included in the parameter estimates).

**Measurement Model.** In the initial measurement model, the three latent variables plus the four potential covariates (gender, both race variables, and childhood physical and sexual abuse history) were included. The initial measurement model was estimated with covariances among all variables freely estimated; paths between manifest indicators and error terms were constrained to 1 while error variances were freely estimated. Gender and both race variables were not significantly related to any of the primary variables of interest (psychological abuse, experiential avoidance, and mental health symptoms) while childhood physical and sexual abuse history was significantly related to all primary variables of interest. In the interests of parsimony, gender and both race variables were dropped and the final measurement model was estimated (see Table 3 for correlations among variables in the measurement model). Further, because gender and race were not significantly related to the latent variables of interest, multiple-group models comparing fit across gender and race groups were not conducted.

Childhood psychological abuse was modeled as a latent variable with three manifest indicators; the path from the “insult” item to the latent variable was constrained to 1 for identification purposes. All items loaded highly with “insult you” loading .83, “ridicule/humiliate you” loading .85, and “make you feel like a bad person” loading .82 (all critical ratios greater than 27.00). Experiential avoidance was modeled as a latent variable with the AAQ/EAS, WBSI, and TAS scales as the manifest indicators (the WBSI path was constrained to 1). All three scales loaded well with AAQ/EAS loading at .84, WBSI loading at .77, and TAS loading at .68 (all critical ratios greater than 20.00). Finally, mental health symptoms were modeled as a latent variable with depression, anxiety, and stress scales as the manifest indicators (the path from the stress scale was constrained to 1). All three scales loaded well with depression loading at .86, anxiety loading at .77, and stress loading at .87 (all critical ratios greater than 27.00). The model fit was quite good, \( \chi^2 (30) = 95.07, p > .001 \), root mean square error of approximation (RMSEA; Steiger, 1990) was .05 with a 90% confidence interval of .04 to .06, comparative fit index (CFI; Bentler, 1990) = .99, and normative fit index (NFI; Bentler & Bonett, 1980) = .99.
Structural Model. As can be seen in Table 1, childhood psychological abuse, experiential avoidance, and current mental health symptoms were significantly related to each other in the predicted direction. To examine the significance of experiential avoidance as a mediator in the relationship between childhood psychological abuse and current mental health symptoms, we estimated the model depicted in Figure 1. Controlling for childhood physical and sexual abuse history, childhood psychological abuse was significantly related to increased experiential avoidance ($\beta = .29, t = 7.26, p < .05$) which in turn was associated with increased current mental health symptoms ($\beta = .70, t = 18.48, p < .05$). Importantly, the relationship between childhood psychological abuse and current mental health symptoms ($\beta = .06, t = 1.75, p < .05$) was no longer significant when experiential avoidance was in the model and the direct effect of psychological abuse on mental health symptoms was reduced by 77% (.26 to .06) when controlling for the effect of experiential avoidance. Because the model is fully identified, the fit of the structural model was the same as the measurement model.

Our model contains one indirect path between childhood psychological abuse and current mental health symptoms, specifically the indirect path through experiential avoidance. As noted above, one indication of mediation is the percent reduction in the direct effect when the mediator is in the model, which is 77% in the present model. In addition, however, using the Sobel test (see MacKinnon et al., 1995, for a complete description of this technique) to test whether the indirect effect of psychological abuse on current mental health symptoms via experiential avoidance is significantly different than zero, we found a significant effect (critical ratio = 6.70, $p < .001$). Finally, as further evidence of mediation, we removed the direct path between psychological abuse and current mental health symptoms and re-estimated the model to explore whether deleting this path damaged the fit of the model. The change in

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Physical or sexual abuse history (% endorsed)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2. Childhood psychological abuse latent variable</td>
<td>.33*</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3. Experiential avoidance latent variable</td>
<td>.13*</td>
<td>.30*</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>4. Current mental health symptoms latent variable</td>
<td>.23*</td>
<td>.31*</td>
<td>.74*</td>
<td>–</td>
</tr>
</tbody>
</table>

*Critical value greater than 1.96 (corresponds to $p < .05$). $\chi^2 (30) = 95.07, p < .001$, RMSEA = .05, CFI = .99, TLI = .99, NFI = .99
FIGURE 1. Experiential avoidance as a potential mediator of the relation between childhood psychological abuse and current mental health symptoms. Coefficients are standardized. The numbers in parentheses represent the significance level of the path coefficients and values < 1.96 are significant at p < .05. The model is estimated controlling for childhood physical or sexual abuse history. For each latent variable, the underlined factor loading was set to 1 for identification purposes. N = 987. $\chi^2 (30) = 95.07, p < .001$, RMSEA = .05, CFI = .99, NFI = .99. AAQ/EAS = Acceptance and Action Questionnaire/Experiential Avoidance Scale. WBSI = White Bear Thought Suppression Inventory. TAS = Toronto Alexithymia Scale. * The coefficient for the direct effect of childhood psychological abuse on current mental health symptoms without experiential avoidance in the model.

$\chi^2$ between the two nested models was not significant, $\chi^2 (1) = 3.03, p = .08$, providing additional evidence for mediation. Thus, in the present cross-sectional data, we find evidence of a significant mediating effect on experiential avoidance on the relationship between childhood psychological abuse and current mental health symptoms.

DISCUSSION

The present study explored the relationship between childhood psychological abuse, experiential avoidance, and current levels of mental health symptoms (i.e., depression, stress, and anxiety). We hypothesized that experiential avoidance would mediate the relationship between psy-
chological abuse and current mental health symptoms. Psychological abuse and experiential avoidance were related to current symptoms of psychological distress in the predicted direction. In addition, psychological abuse was also related to experiential avoidance in the predicted direction. Experiential avoidance significantly mediated the relation between childhood psychological abuse and adult psychological distress; that is, once experiential avoidance was included in our model, the previously significant path between childhood psychological abuse and current mental health symptoms was no longer significant.

Consistent with previous findings (e.g., Krause et al., 2003; Simons et al., 2003), individuals reporting higher levels of psychological abuse in childhood also reported higher levels of current experiential avoidance. Increasingly, experiential avoidance is being examined as a potential risk factor for numerous negative mental health outcomes (Hayes et al., 1996; Polusny et al., in press). In the present study, the results from the mediation analyses suggest a history of psychological abuse is associated with increased risk for psychological distress in adulthood via the pathway of increased experiential avoidance. These findings are consistent with the notion that experiential acceptance, the converse of experiential avoidance, may serve to buffer against the potential long-term negative outcomes associated with psychological abuse.

How might childhood psychological abuse serve to increase experiential avoidance? Psychological abuse from a primary caretaker is likely to be associated with negative and painful thoughts, feelings, and bodily sensations. Because the child may be unable to “escape” the abusive situation by physically leaving, experientially-avoidant strategies may allow a child to “escape” mentally from the negative private events concomitant with the abuse. In the current model, if an individual avoids or is unwilling to be in contact with the private negative experiences following abuse, a cycle may ensue in which avoidance of the negative private experiences paradoxically results in the increased dysphoria and other distress symptoms. Thus, in our conceptualization, the ability to be present with the negative experiences, without judgment, may serve to short circuit the escalation of negative private experiences. Obviously, the present findings do not represent a definitive test of this model. Our cross-sectional data are consistent with this model and further research is needed with longitudinal data in order to test the validity of this model.

The results from the present study are in accordance with the growing literature linking experiential avoidance to negative mental health and
behavioral outcomes for a variety of populations (Hayes et al., 1996; Stasiewicz & Maisto, 1993). The present findings highlight the potential utility of acceptance-based psychotherapeutic interventions such as Dialectical Behavior Therapy (Linehan, 1993) and Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999) as well as mindfulness-based approaches (e.g., Teasdale, Segal, Williams, Ridgeway, Soulsby, & Lau, 2000). Acceptance-based approaches, by reducing experiential avoidance, may lessen the potential negative impact of psychological abusive experiences in childhood.

Psychological abuse covaries with other forms of childhood abuse. To provide a more stringent test of the unique effects of psychological abuse on current symptomatology, we controlled for reports of childhood physical and sexual abuse history in the present analyses. Importantly, the pattern of the present findings was essentially unchanged when this covariate was removed, suggesting the present findings are robust to the influence of other forms of abuse.

Interestingly, gender was not strongly related to our variables of interest. Robust gender differences have been found in the area of major depression (e.g., American Psychiatric Association, 2000) and the fact that we were studying less severe symptomatology may account for the lack of gender differences in the mental health symptomatology. Further, although our sample was primarily White (65%), we did examine potential race differences; our three-level categorical race variable was not significantly related to childhood psychological abuse, experiential avoidance, and current mental health symptoms. Further research is needed with more diverse populations to ensure the generalizability of these findings.

Despite the pattern of clear and theoretically meaningful findings in the present study, several limitations should be acknowledged. First, as noted above, it would be prudent to obtain longitudinal data in order to further investigate the directionality and strength of the relationships between psychological abuse and experiential avoidance and the role they play in influencing negative mental health outcomes, such as depression, stress, and anxiety. Future research might productively examine the trajectories of experiential avoidance and mental health symptomatology across time following childhood abuse experiences. Second, the present study relies on self-report data as well as retrospective data for the psychological abuse variable. Childhood memories of psychological abuse may not be entirely accurate in adulthood and could be influenced by some of the other variables of interest, such as depressive symptoms.
Third, the present study utilized a college sample of limited ethnic diversity, which may not be the primary population of interest when examining psychological abuse and symptoms of depression, stress, and anxiety. The present findings should be replicated in a clinical sample with more severe symptomatology as well as a non-clinical community sample. Further, it will be important to examine whether the present findings replicate in a more ethnically-diverse sample. In the present study, the symptoms on average may not have been very severe in a clinical sense. In addition, it is important to consider the levels of psychological abuse. Although we had a fair amount of variability in our measure, future studies might examine whether particular types of psychological abuse experiences are particularly predictive of increased experiential avoidance and more negative mental health outcomes.

In conclusion, the present findings are consistent with the extant literature on childhood psychological abuse and experiential avoidance and provide an important link between the childhood psychological abuse and experiential avoidance. Our findings are consistent with the idea that utilizing an experientially-avoidant coping style may increase the likelihood that psychologically abused children will experience mental distress such as depression in adulthood, and further, that an experientially-accepting coping style may hold the possibility of buffering children who experience psychological abuse from negative outcomes. Although it is critical to work to eliminate psychological abuse, it is also imperative to identify strategies and interventions that may serve to increase or decrease negative outcomes following an abusive experience. Experiential avoidance holds promise as one such factor, and it is our hope that future research will further explore this possibility.

NOTE

1. The model was also estimated including “criticize you” as a fourth indicator of the psychological abuse latent variable and the results were essentially unchanged.

REFERENCES


