Coping and Dissociation Among Female College Students: Reporting Childhood Abuse Experiences

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This study examined the relationship among coping strategies, dissociation, and childhood abuse experiences of female college students. Results provided support for the theoretical links between 3 types of child abuse experience (sexual abuse, physical abuse, and negative home environment) and coping style and dissociation. The study’s results add to an increased understanding of the relationship between coping strategies and dissociation as these processes relate to specific types of childhood abuse experiences among female college students.

Transition into college life is an inherently stressful time, and a history of childhood abuse can negatively affect multiple aspects of a female college student’s life. Childhood abuse survivors may be overly reliant on maladaptive coping styles or underuse adaptive coping styles. Female college students newly separated from their families may feel safe to explore different adaptations; thus, college counselors are very likely to encounter clients presenting with increasingly complex and problematic issues, among them histories of child abuse (Stone & Archer, 1990). For example, a recent review of 47 retrospective studies on childhood sexual abuse (CSA) found that between 15% to 30% of women and 3% to 15% of men reported exposure to unwanted sexual attention during childhood (Fergusson & Mullen, 1999). The present study focused on female college students because child abuse prevalence is higher for this group (Peters & Range, 1995). Increased use of counseling services by students with these presenting issues calls for improvement in the ability of counselors to understand childhood abuse survivors’ coping mechanisms. This awareness could inform interventions aimed at assisting female college students with unresolved childhood abuse issues.

Abuse of children has been documented throughout history. According to DeMause (1974), “the further back in history one goes, the lower the level of child care, and the more likely children are to be killed, abandoned, beaten, terrorized, and sexually abused” (p. 1). Child abuse can be defined as the violation of trust and boundaries perpetrated by adults charged with protecting a child (Finkelhor & Browne, 1985) and can include physical and sexual abuse as well as a negative home environment. Physical abuse refers to the nonaccidental use of force against a child and
includes kicking, biting, punching, hitting or trying to hit with an object, beating, and threatening with or using a weapon by a caregiver. Sexual abuse refers to unwanted sexual acts to which a child is exposed via exhibitionism or unwanted sexual comments or acts to which a child is subjected via physical contact, regardless of whether there is deception or whether the child understands the sexual nature of the activity. A negative home environment is one in which the child experiences emotional neglect and psychological maltreatment (Garbarino & Vondra, 1987). Emotional neglect is an act of omission in which a child is not given positive emotional support and may take the form of an adult being emotionally unavailable to the child. Psychological maltreatment denotes acts of commission, such as yelling, ridiculing, and humiliating in a repeated pattern of behavior that conveys to a child that she or he is worthless, unloved, or only of value in meeting another's needs (Garbarino, Guttman, & Seeley, 1986).

To date, theories of the effects of child abuse have largely focused on various aspects of CSA. However, research indicates that various forms of maltreatment do not occur independently, nor are they independent in their effect. A negative home environment, with its emotional neglect and psychological maltreatment components, commonly occurs alongside CSA (Chu & Dill, 1990; Gross & Keller, 1992). Additionally, over the past 2 decades, childhood abuse research has shown that each type of abuse often results in similar long-term effects (Chu & Dill, 1990; Gross & Keller, 1992). Thus, researchers (e.g., Becker-Laussen & Mallon-Kraft, 1997) have cited a need for a unifying approach to investigations on the effects of abuse. To address this concern, Briere (1992) proposed a three-stage model known as the Integrative Model of the Impacts of Child Abuse (IMICA).

IMICA (Briere, 1992) proposes that regardless of the type of child abuse, potentially traumatic effects are likely to manifest in three stages: (a) initial reactions to victimization, (b) accommodation to ongoing abuse, and (c) long-term elaboration and secondary accommodation. Basic to IMICA is the concept that the effects of child abuse are dynamic and interactive. Initial reactions to abuse may become less intense during childhood only to generalize and emerge as psychological disturbances (e.g., dissociation) later in life. Although some research (e.g., Luthar & Zigler, 1991) failed to identify a significant statistical relationship between childhood abuse and later psychological disturbances, others (e.g., Ellason & Ross, 1997) found the psychological disturbance of dissociation to be one of the most common responses to all types of childhood abuse.

According to Finkelhor and Browne's (1985) traumagenic theory of dissociation (TTD), dissociation is seen as an unconscious attempt to preserve the integrity of the psyche in spite of overwhelming stress. Among people who experience abuse, it is hypothesized that dissociation provides a psychological distance or barrier between the individual's sense of self and the full impact of the abuse (Goodwin & Sachs, 1996). Dissociation may give the individual a false sense of control and thus relief from the abusive experience (Herman, 1992). Researchers propose that dissociation may explain why a traumatized individual may act as if the stressful event is not happening at the time of its occurrence and later have no recall of the traumatic event (Maldonado & Spiegel, 1997). Terr (1991) hypothesized that dissociation begins as a conscious effort to block out
the abuse and through repetition becomes an unconscious and automatic response to stimuli associated with abuse. If such is the case, adaptive coping processes, which involve conscious selection, may undergo a qualitative shift and become spontaneous, unconscious dissociative experiences (Collins & Ffrench, 1998). In the following paragraphs, we explore coping mechanisms and theory in greater depth in order to understand the relationship between these unconscious dissociative experiences and adaptive coping strategies.

Coping is a conscious process engaged in by an individual to manage a problem and regulate the attendant emotion. Three distinct coping strategies have emerged from research on coping: avoidance, problem solving, and seeking social support (Amirkhan, 1990). Avoidance coping is defined as the purposeful attempt at withdrawal or distraction. It is not an unconscious process such as when individuals use defense mechanisms, but rather a conscious effort to move away or retreat from unpleasant stimuli. Problem solving coping focuses on instrumental manipulation, including reflection and application of instrumental responses (e.g., compromise, self-control, and positive thinking), rather than simple awareness of the stressor. Seeking social support involves efforts to contact or reach out to others for comfort or advice.

According to the process approach to coping theory (Lazarus & Folkman, 1984), one's choice of coping strategy is influenced by the degree of threat posed by a situation and one's perception of the degree of control one has over the threatening situation. To date, the research on coping and childhood abuse has focused on CSA. Steel, Wilson, Cross, and Whipple (1996) found that college students reporting CSA had higher scores on instruments measuring avoidance coping. DiPalma (1994) found that high-functioning incest survivors reported using avoidance coping strategies during the active period of abuse. Among these women, early use of avoidance coping later facilitated the adult process of separation, self-discovery, and revisiting the past trauma. However, it was also noted that the use of avoidance coping may be adaptive during the onset of abuse but may become maladaptive with prolonged use (DiPalma, 1994). Conversely, a minority of women who experienced CSA have demonstrated healthy psychological functioning (Finkelhor, Hotaling, Lewis, & Smith, 1990). This higher level of functioning has been linked to the use of seeking social support and problem solving coping strategies (DiPalma, 1994; Draucker, 1989).

The purpose of the present study was to clarify the relationship among dissociation, coping strategies, and childhood abuse experiences of female college students. Specifically, we sought to determine if types of coping mediated or moderated the relationship between childhood abuse and dissociation. The mediator (i.e., coping strategies in this study) may function as a third variable, which "represents the generative mechanism through which the focal independent variable [child abuse in this study] is able to influence the dependent variable [dissociation in this study] of interest" (Baron & Kenny, 1986, p. 1173). We elected to conceptualize coping strategies as a mediating variable on the basis of Koss's (1990) writings, which indicate that the use of coping strategies may mediate the effects of abuse on dissociation. That is, coping strategies were conceptualized as mediators between childhood abuse experiences and dissociation. In other words,
the influence of childhood abuse experiences on dissociation may manifest through
the individual’s distinctive use of coping strategies (i.e., problem solving, seeking
social support, and avoidance).

Alternatively, on the basis of the findings of DiPalma (1994), we also posited
that coping strategies may function as a moderator between the child abuse and
dissociation variables. The moderator (i.e., coping strategies in this study) func-
tions as a third variable, which “partitions a focal independent variable [child
abuse] into subgroups that establish its domains of maximal effectiveness in re-
gard to a given dependent variable” (Baron & Kenny, 1986, p. 1173). The test
for moderation in this study involved evaluating the nine interactions between
three types of child abuse variables and three types of coping strategies. For
example, the moderation hypothesis would hold if (a) under low negative home
environment conditions, no differences between the high and low avoidance
coping groups exist on the criterion variable of dissociation while (b) at greater
negative home environment levels, high avoidance coping individuals report
greater dissociation than low avoidance coping persons.

To examine how coping and dissociative processes relate to types and severity
of childhood abuse as perceived by female college students, we specifically
tested whether the components of coping strategies would mediate the rela-
tionship between the types of child abuse and dissociation among female col-
lege students. Additionally, we tested a competing hypothesis that coping strat-
egies would moderate the relationship between types of child abuse and the
level of dissociation, namely, that coping styles would have a moderating effect
if their interaction with the predictors (types of child abuse) significantly ac-
counts for the criterion variable (dissociation).

Method

Participants

The participants were female college students, ages 17 to 23 years, who were
enrolled at a large university in the southeastern United States. Convenience
sampling procedures were used to distribute 407 research packets in classroom
settings. Because this study focused solely on female undergraduates, packets
completed by male students were excluded from the final analysis. Incomplete
packets (those without a response to two or more items on an instrument or
the demographic page) were also omitted. After exclusions, 311 research pack-
et (76%) were included in the statistical analysis. The mean age of participants in
years was 20.71. The racial/ethnic composition of the participants was 8.7%
African American, 1.6% Asian American, 74.9% Caucasian American, 10.3%
Hispanic American, and 4.5% mixed racial/ethnic composition.

Instrumentation

Coping Strategy Indicator (CSI; Amirkhan, 1990). The CSI is a 33-item self-
report instrument designed to access the degree to which three coping strate-
gies (problem solving, seeking social support, and avoidance) have been used in response to a specific stressful life experience. Three subscales, each with 11 corresponding items, measure the three coping strategies. Amirkhan reported convergent and discriminant validity in terms of the CSI's (a) covariation with other coping measures (e.g., the Ways of Coping Checklist [Folkman & Lazarus, 1985]) and (b) independence from measures of social desirability (e.g., the Crowne-Marlowe Social Desirability Scale [Crowne & Marlowe, 1960]). Keeping the stressor in mind, respondents are asked to rate the extent to which they used the coping behaviors on a Likert-type rating scale ranging from 1 to 3, in which 1 = not at all, 2 = a little, and 3 = a lot. We found relatively high internal reliability for all three subscales, which was reflected in Cronbach’s alpha coefficients of .85 for the Problem Solving Coping subscale, .91 for the Seeking Social Support subscale, and .76 for the Avoidance subscale.

**Dissociative Experiences Scale (DES; Bernstein & Putnam, 1986).** The DES is a 28-item self-report questionnaire that measures the frequency with which an individual experiences six different types of dissociation: (a) amnestic experiences (e.g., finding evidence of having done things you do not remember doing), (b) gaps in awareness (e.g., listening to someone talk and suddenly realizing that you did not hear part or all of what was said), (c) depersonalization (e.g., looking in a mirror and not recognizing yourself), (d) derealization (e.g., being in a familiar place and finding it strange and unfamiliar), (e) absorption (e.g., becoming so absorbed in watching TV or a movie that you are unaware of what is happening around you), and (f) imaginative involvement (e.g., not being sure whether things that you remember really happened because you may have dreamed them). The response scale ranges from 0 to 100 and is measured in units of 10 (i.e., 0, 10, 20, and so on). The respondent is instructed to circle the number that best describes the percentage of time he or she has had the experience indicated by each of the 28 items. The DES has been reported to have very good validity and reliability, good overall psychometric properties (Carlson & Armstrong, 1994), and excellent construct validity (Ross, 1996). In this study, Cronbach’s alpha for all items of the DES was .92.

**Child Abuse Trauma Scale (CAT; Sanders & Becker-Lausen, 1995).** The CAT is a 38-item questionnaire related to childhood experiences of (a) sexual maltreatment, (b) physical abuse (physical mistreatment and punishment), (c) psychological abuse, (d) physical or emotional neglect, and (e) negative home environment. The CAT allows for computation of an overall score as well as subscale scores reflecting the three distinct but intercorrelated variables of sexual abuse, physical abuse, and negative home environment. Respondents are asked to indicate how often subscale items occurred in their home environment. The items on the CAT are scored by using a rating scale ranging from 0 (never) to 4 (always). Measuring childhood maltreatment presents several problems. One is that of social desirability. Admitting to child abuse is difficult and contributes to the underreporting of these experiences. Another problem is the potential invasiveness of questionnaire items, especially those pertaining to sexual abuse. To address these problems, the CAT is presented as a home environment questionnaire, and questions are worded in a
purposefully mild fashion. For example, instead of asking pointed questions such as “Were you sexually molested?” and “Did it involve anal or vaginal penetration?” the CAT asks, “Were there traumatic or upsetting sexual experiences when you were a child or teenager that you couldn’t speak to adults about?” We found relatively moderate internal reliability for all three subscales. Cronbach’s alpha was .74 for the Sexual Abuse subscale, .66 for the Physical Abuse subscale, and .88 for the Negative Home Environment subscale.

Data Analyses

Seven variables were investigated in this study: three variables that rated perceived severity of abuse as measured by the CAT, three variables that rated coping strategy as measured by the CSI, and one variable that rated frequency of dissociation as measured by the DES. The relationships among these variables were analyzed using multiple regression/correlation analyses. Specifically, the Baron and Kenny (1986) model was used for identifying mediating and moderating relationships between coping and dissociation processes as they relate to types and severity of childhood abuse as perceived by female college students.

Results

Tests of mediation suggested by Baron and Kenny (1986) were used to determine whether three types of coping strategies play a role as mediator variables between dissociation and the three types of childhood abuse variables (sexual abuse, physical abuse, negative home environment) measured by the CAT. This three-step test for mediation involved (a) regressing the mediator on the predictor variable, (b) regressing the criterion variable on the predictor variable, and (c) regressing the criterion variable on both the predictor and mediator variables. In the first step, the predictor variables must affect the mediator. In the second step, the predictor variables must affect the criterion variable. Finally, the effect of the predictor variable on the criterion variable must be less in the third equation. In this study, the three-step test for mediation involved (a) regressing the mediators (avoidance, seeking social support, and problem solving coping, as measured by the CSI) on the predictor variables (sexual abuse, physical abuse, and negative home environment, as measured by the CAT), (b) regressing the criterion variable (dissociation) on the predictor variables (sexual abuse, physical abuse, and negative home environment, as measured by the CAT), and (c) regressing the criterion variable (dissociation) on both the predictors (sexual abuse, physical abuse, and negative home environment, as measured by the CAT) and mediators (avoidance, seeking social support, and problem solving coping, as measured by the CSI).

For the first step in the mediation model, a partial correlation analysis was used to measure the relationship between perceived severity of three types of abuse and three coping strategies. When controlling for physical abuse and negative home environment variables, only sexual abuse was significantly posi-
tively correlated with an avoidance coping strategy \((r = .15, p < .01)\). When controlling for sexual abuse and negative home environment variables, no significant correlation was found between physical abuse and the three CSI variables. When controlling for sexual abuse and physical abuse, a significant negative correlation was found between negative home environment and seeking social support \((r = -.15, p < .01)\) and problem solving coping \((r = -.24, p < .01)\). However, no significant correlation was found between negative home environment and an avoidance coping strategy.

For the second step in the mediation model, a multiple regression analysis was used to test the relationship between dissociation (criterion variable) and the three types of childhood abuse predictor variables (i.e., sexual abuse, physical abuse, and negative home environment). The overall model was statistically significant, \(F(3, 307) = 15.09, p < .01\). Significant main effects were shown for physical abuse \((\beta = .17, p < .01)\) and negative home environment \((\beta = .22, p < .01)\) on dissociation. No significant effect was shown for sexual abuse.

In the first step of Baron and Kenny’s (1986) mediation model, sexual abuse (predictor variable) significantly correlated with avoidance (mediator variable). Negative home environment (predictor variable) also significantly related to both seeking social support and problem solving coping (mediator variable). In the second step, physical abuse and negative home environment (predictor variables) were significantly related to dissociation (criterion variable). Because physical abuse (predictor variable) is not related to any types of coping strategies (mediator variables) in Step 1 and avoidance (mediator variable) is not related to dissociation (criterion variable) in Step 2, physical abuse and sexual abuse (predictor variables) and avoidance (mediator variable) were not considered for further analysis in the next step. Table 1 summarizes the final step of mediating for seeking social support and problem solving coping strategies. As can be seen in Table 1, a significant main effect was shown only for negative home environment (predictor variable; \(\beta = 0.19, p < .05\)). No significant effects were shown for seeking social support and problem solving coping strategies (mediator variables). According to the results of the three-step model, the types of coping strategies did not mediate the relationship between the types of child abuse and dissociation among female college students.

A moderator is a variable that affects the direction and strength of the relation between an independent and a dependent variable. A primary purpose for identifying and constructing moderators is to increase predictive effectiveness (Abrahams & Alf, 1972). The test for moderation involved evaluating the interaction between variables (Baron & Kenny, 1986). The moderator model tested the dependent variable of dissociation and the three moderator variables of the CSI and the independent variables of the CAT as well as their interactions (i.e., Avoidance \(\times\) Sexual Abuse, Avoidance \(\times\) Physical Abuse, Avoidance \(\times\) Negative Home Environment, Seeking Social Support \(\times\) Sexual Abuse, Seeking Social Support \(\times\) Physical Abuse, Seeking Social Support \(\times\) Negative Home Environment, Problem Solving Coping \(\times\) Sexual Abuse, Problem Solving Coping \(\times\) Physical Abuse, and Problem Solving Coping \(\times\) Negative Home Environment).
### TABLE 1

Multiple Regression Analysis of Dissociation (Criterion Variable) by Seeking Social Support Coping and Problem Solving Coping (Mediator Variables) and Negative Home Environment (Predictor Variable)

<table>
<thead>
<tr>
<th>Source and Variable</th>
<th>$R^2$</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>$F$</th>
<th>B</th>
<th>SE</th>
<th>$\beta$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td>.22</td>
<td>6</td>
<td>5,494.87</td>
<td>915.65</td>
<td>14.29**</td>
<td></td>
<td></td>
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<tr>
<td>Residual</td>
<td>304</td>
<td>19,477.98</td>
<td>64.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Corrected total</td>
<td>310</td>
<td>24,971.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative home environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.72</td>
<td>.89</td>
<td>.19</td>
<td>3.07*</td>
</tr>
<tr>
<td>Seeking social support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-1.13</td>
<td>1.03</td>
<td>-.06</td>
<td>-1.10</td>
</tr>
<tr>
<td>Problem solving coping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.44</td>
<td>1.24</td>
<td>.65</td>
<td>1.17</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.
To evaluate the model tested by regression, the amount of variance ($\Delta R^2$, the effect size) accounted for by the CSI and CAT scores and their interactions as well as the statistical significance of the change in $F$ produced by entering the CSI and CAT scores and their interactions were considered. When the interaction increased the $\Delta R^2$ by a statistically significant amount, the two variables were moderating each other's relationship with dissociation. As seen in the dissociation level shown in column 2 of Table 2, entry of the interaction between the avoidance coping strategy and physical abuse increased the explained variance ($\Delta R^2 = 0.011$) by a statistically significant amount. In column 3, entry of the interaction between avoidance coping strategy and negative home environment increased the explained variance ($\Delta R^2 = 0.015$) by a statistically significant amount. In column 6, entry of the interaction between seeking social support and negative home environment increased the explained variance ($\Delta R^2 = 0.025$) by a statistically significant amount. In column 9, entry of the interaction between problem solving coping strategy and negative home environment increased the explained variance ($\Delta R^2 = 0.013$) by a statistically significant amount. The application of the moderator model revealed statistically significant interactions between (a) dissociation, avoidance coping, and physical abuse; (b) dissociation, avoidance coping, and negative home environment; (c) dissociation, seeking social support coping, and negative home environment; and (d) dissociation, problem solving coping, and negative home environment.

### TABLE 2

Child Abuse Experience and Dissociation: The Moderating Effect of Coping and Three Types of Child Abuse Experiences

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVO x SA</td>
<td>-0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVO x PA</td>
<td>0.61**</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVO x NEG</td>
<td></td>
<td>0.59**</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>SSS x SA</td>
<td></td>
<td></td>
<td>-0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSS x PA</td>
<td></td>
<td></td>
<td></td>
<td>-0.34</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>SSS x NEG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.71**</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>PSC x SA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.19</td>
<td></td>
<td></td>
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<tr>
<td>PSC x PA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSC x NEG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.53**</td>
<td></td>
</tr>
</tbody>
</table>

$R^2$           0.220**  0.231**  0.236**  0.220**  0.224**  0.245**  0.221**  0.220**  0.233**

$\Delta R^2$     0.000  0.011**  0.015**  0.000  0.002  0.025**  0.001  0.000  0.013**

Note. AVO = avoidance; SSS = seeking social support; PSC = problem solving coping; SA = sexual abuse; PA = physical abuse; NEG = negative home environment.

*p < .05. **p < .01.
Discussion

Results from the present study contribute to an increased understanding of the relationship between coping strategies and dissociation as these processes relate to specific types of childhood abuse among female college students. There are several significant implications for theory, training, and practice for the profession of college counseling. In support of TTD (Finkelhor & Browne, 1985), it is a noteworthy outcome of the present investigation that negative home environment was found to be a stronger contributor to dissociation than physical abuse and sexual abuse among female college students. TTD conceptualizes dissociation as a response to overwhelming stress that may provide a false sense of control sufficient to bring relief from abuse-related distress (Herman, 1992). Given that the sample for the current study focused on a high-functioning subset of young female college students, it is understandable that a negative home environment would be a significant predictive factor for dissociation. Unlike sexual abuse and physical abuse, which most often occur as discrete events, the home environment is a dynamic environment in which individuals live close together and form emotional attachments; thus, it may be more pervasive in its influence and more diverse in its nuances and effects over time.

Unlike previous studies' findings (Briere, 1992; Ferguson & Dacey, 1997), no significant relationship was found between sexual abuse and dissociation in the regression analysis. Whereas most previous research focused on the direct relationship between CSA and dissociation, it is important to note that the present study included the relationship between dissociation and other types of childhood abuse. The large contributions of other variables (negative home environment and physical abuse) may have decreased the expected significant influence of the sexual abuse variable on dissociation. For example, we found a significant relationship between sexual abuse and dissociation in the bivariate correlation (simple correlation) analysis. However, when analyzed with other variables in the regression model, the effect of the sexual abuse variable was reduced and did not show much effect on the dissociation variable.

Findings from the current study support the theoretical link between IMICA (Briere, 1992) and coping strategies. Avoidance coping was significantly and positively related to sexual abuse. This indicates that the use of avoidance coping increased with the severity of sexual abuse. Although avoidance coping was also significantly and positively related to dissociation, there is no significant relationship between sexual abuse and dissociation. Avoidance coping is not a mediator between types of child abuse and dissociation. Seeking social support and problem solving coping were significantly and negatively related to negative home environment. This indicates that the use of seeking social support and problem solving coping decreased as the severity of negative home environment increased. However, no significant relationships were found between dissociation and seeking social support and problem solving coping strategies. Therefore, the seeking social support and problem solving coping strategies are not mediators between types of child abuse and dissociation.
Although coping styles had no mediation effect, the findings of this study show some moderation effects. As shown in Table 2, avoidant coping style does positively moderate the relationship between physical abuse and dissociation ($\beta = 0.61$, $p < .01$) as well as the relationship between negative home environment and dissociation ($\beta = 0.59$, $p < .01$). Significant findings reflect that when female college students who use an avoidant coping style reported childhood experiences of physical abuse and negative home environment, their reported dissociation levels were high as well. Conversely, according to Table 2, the seeking social support coping strategy does negatively moderate the relationship between negative home environment and dissociation ($\beta = -0.71$, $p < .01$). Unlike avoidance coping, when female college students reported negative home environment and used a seeking social support coping style, they reported lower levels of dissociation. Similarly, lower levels of dissociation were found among those students who reported negative home environment and used a problem solving coping style ($\beta = -0.53$, $p < .01$).

**Implications for College Counselors**

College counselors need effective knowledge and skills in the treatment of childhood abuse and its long-term effects. Child abuse, and CSA in particular, has been discovered, suppressed, and rediscovered repeatedly in the United States for over a century (Olafson, Corwin, & Summit, 1993). This cultural/political tendency to deny or minimize the existence and effects of child abuse might be countered by a core course related to abuse and trauma in counselor education and psychology programs. Such educational courses would help college counseling professionals (a) understand the dynamics of child abuse, (b) identify the interactive effects of types of child abuse, (c) understand the role of long-term effects (e.g., dissociation) on a client’s current functioning, (d) identify moderator variables (e.g., coping strategies) that aid or block treatment, and (e) learn how to plan interventions with their clients.

The study’s findings also have important implications for the clinical assessment of child abuse. For example, college counselors could administer a brief coping instrument such as the CSI and, based on the score, be able to predict high or low use of dissociation by the client. Conversely, counselors could administer a brief dissociative measure, such as the DES, and from the score be able to predict a student’s coping style.

In the clinical treatment of child abuse, the study’s findings have important implications for college counseling practice. Once a client’s types of abuse experiences and coping style have been established, we recommend that college counselors educate the client about the various strategies and their benefits and drawbacks. As previously stated, research indicates that a higher level of functioning was found in a minority of women who used seeking social support and problem solving coping strategies (DiPalma, 1994; Draucker, 1989). Therefore, we encourage college counselors to teach clients these coping strategies in the course of treatment.

Students presenting with a history of child abuse that included a negative home environment can be helped to recognize and reduce the use of avoidance coping strategies and to adopt the use of both seeking social support and problem solving
coping strategies, thus possibly lessening the extent to which they experience disso-
ociation. For example, clients who have engaged in avoidance coping as a means of
adapting to a negative home environment may be helped, first, by evaluating the
extent and frequency of avoidance coping behaviors and then by learning adaptive
coping strategies (e.g., seeking social support and problem solving coping).
College counselors may begin by carefully evaluating the ways in which the client
currently engages in avoidance coping. This could involve exploration and recogni-
tion of day-to-day activities that support and perpetuate avoidant behaviors (e.g.,
client admission of avoiding being with people in general, spending extended periods
of time daydreaming, or watching TV more than usual). Once this awareness has
been established, the counselor could teach the client problem solving and seeking
social support coping strategies. For example, in illustrating problem solving coping,
the counselor could assist the client in deliberately planning strategies to help reduce
feelings of tension or anxiety that may escalate dissociative episodes by adopting a
stress-reduction practice (e.g., an exercise routine or joining a yoga or meditation
class); setting attainable, realistic goals; and implementing the new plan until the
client reports success in reducing episodes of dissociation. Examples of seeking social
support coping strategies that counselors can teach clients include confiding one’s
concerns to a friend or joining a support group of child abuse survivors.

Limitations and Recommendations for Future Research
Certain limitations are inherent in survey research and may have affected the out-
come of this study. First, all measures were obtained by self-report questionnaires,
and participants were anonymous and self-selected. Students who may have expe-
rienced high levels of abuse may have been less motivated to participate in this
study in order to avoid painful issues associated with their abuse. Conversely, those
students who indicated that they were not abused may have judged their partici-
pation in this study to have little impact and may have chosen not to participate.
Future studies could use multiple measures to assess the dependent variable, thereby
giving a clearer picture of the long-term effect of childhood abuse.
Second, the study was restricted to a specifically defined population. By in-
cluding only female undergraduates from a geographically limited convenience
sample, the conclusions are limited to this defined population and may not be
generalizable to all female survivors of CSA. According to the research of
Ross, Joshi, and Currie (1991), who examined dissociation in the general popu-
lation, dissociative experiences were found not to differ by gender. Further
research with traditional college-age students would allow mental health re-
searchers to determine if significant similarities or differences exist in dissocia-
tion levels between male and female college students and between the general
population and the college population.
Further limitations of the study relate to the cultural implications of the defi-
nitions of the constructs of coping strategies and our sample selection. Healthy
coping strategies are contextually and socially defined and may vary from cul-
ture to culture (Sue & Sue, 2003). Ultimately, coping styles cannot be viewed
apart from the influences of race, ethnicity, and culture. College counselors
must take care to assist diverse clients while being mindful of the contextual meaning of coping. For example, in some cultures (e.g., African American and Hispanic), spiritual or religious coping may be strongly emphasized, whereas in others (e.g., European-American) intrinsic sources of support (e.g., self-reliance) are highly valued. Also, whereas some cultures encourage open disclosure and expression of emotion (e.g., Hispanic), others discourage such displays (e.g., Native American; Sue & Sue, 2003). Because the participation rate of minorities was low in this study, further research might use a larger, more diverse population to determine if significant differences exist in dissociation levels and to test the predictor qualities of the variables in this study in a comparison of students of various ethnic or racial minority groups with Caucasian students.

Finally, further investigation of coping styles and dissociation in relation to the sequelae of child abuse could be very valuable to the study of this critical issue. It is important to better understand how college students can be helped to lessen dissociation in relation to posttraumatic stress. Future research might further test the predictor quality of child abuse types and coping strategies to determine if the variations found in this study were due to sampling or other types of error. Similar studies with college students and the general population should be undertaken to examine the scope of generalizability and the linkage of coping strategies to dissociation based on IMICA (Briere, 1992).

References


