

Emotional Functioning, Attachment Style, and Attributions as Predictors of Child Abuse Potential in Domestic Violence Victims

By: [Christina M. Rodriguez, PhD](#)

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Abstract:

To explore cognitive and emotional factors that may exacerbate child-abuse potential among domestic violence victims, 80 participants reported on their depression, hopelessness, anxiety, and anger as well as their attachment style and attributional style. Increased emotional difficulties as well as insecure attachment styles were significantly positively correlated with child abuse potential, although depression and anxiety were the strongest predictors. Externalizing blame for the spousal abuse was not associated with abuse risk. Women residing in shelters demonstrated significantly greater abuse risk than those in transitional housing programs, suggesting that greater temporal proximity to the spousal abuse may in part account for the increased abuse potential. Depression and hopelessness, however, appeared particularly relevant to increased abuse risk in domestic violence victims in the transitional housing system. Implications of these findings for working with battered women in terms of their emotional functioning and attachment style are discussed.

Keywords: battered women; child maltreatment; attachment style; depression; anxiety; anger

Article:

American families witness an alarmingly high rate of family violence. The National Crime Victimization Survey (NCVS) reported that nearly 700,000 violent crimes in 2001 were committed by an intimate partner, with 85% of these targeting women, and with one third of all female fatalities instigated by an intimate partner (Rennison, 2003). Yet, such statistics do not capture the extent of unreported violence. Reluctance to report domestic violence significantly confounds estimates of actual prevalence (Ellsberg, Heise, Agurto, & Winkvist, 2001), implying that the true number of domestic assaults is considerably greater.

Because the majority of domestic violence victims are female (Rennison, 2003), use of the term “victim” henceforth will refer to the literature and findings on battered women. Although the detrimental impact of domestic violence on women’s psychological wellbeing is well-documented (Cascardi & O’Leary, 1992; Walker, 2000), children also bear the repercussions of family violence. The vast majority of domestic violence victims are raising children in these homes, with estimates ranging from 3.3 to 10 million children in the nation witnessing spousal violence every year (Peled, Jaffe, & Edleson, 1995).

The consequences of domestic violence on children are pervasive. Children growing up in violent homes demonstrate higher rates of psychopathology (Kolko, Blakely, & Engleman, 1996; McCloskey, Figueredo, & Koss, 1995). Externalizing behavior problems, including aggression and oppositionality, and internalizing difficulties, such as depression and anxiety, have been observed among children who are exposed to domestic violence (Barnett, Miller-Perrin, & Perrin, 1997). Furthermore, the impact of domestic violence on children’s mental health appears to develop into long-term negative consequences (Rossman, 2001).

Whereas some of these adverse outcomes may be attributable to traumatic exposure to violence in general, some of the impact on children may reflect their direct experience of aggression. The incidence of child maltreatment in families with spousal violence is substantial, with some estimates as high as 70% of children entering battered women’s shelters (Layzer, Goodson, & DeLange, 1986). The co-occurrence of child abuse

and domestic violence varies considerably, with the median rate around 40% (Appel & Holden, 1998; Margolin, Gordis, Medina, & Oliver, 2003).

Although several states include witness to domestic violence in their expanded definition of maltreatment (Magen, 1999), much of the evidence for child maltreatment in these families confirms the presence of direct physical aggression. Some of the violence directed toward these children is perpetrated by the intimate partner who assaulted the mother, with surveys suggesting that men who abused their partners also abused a child 50% of the time (Straus, 1990). However, considerable evidence suggests that some domestic violence victims also physically abuse their children (e.g., Appel & Holden, 1998; Coohy, 2004; Edleson, 1999; Giles-Sims, 1985; Jouriles & LeCompte, 1991; Margolin et al., 2003). Although rates of co-occurrence of spousal violence and child abuse are lower among community samples (Appel & Holden, 1998), domestic violence was associated with increased child abuse potential in both mothers and fathers in a community sample (Margolin et al., 2003).

However, this increase in risk to maltreat children among domestic violence victims may in part depend on the context in which they are parenting. Battered women are eight times more likely to be violent toward their children when they are actively in an abusive relationship compared to when they have terminated that relationship (Walker, 2000). A battered woman's risk to abuse her children may theoretically then be a function of whether she is currently in a violent situation; upon ending the relationship, battered women may be less likely to aggress towards their children, perhaps reflecting the physical and emotional distance the domestic violence victim attains from her batterer.

Given the violence the woman is enduring, many have puzzled over why a victim would physically maltreat her own children (McKay, 1994). Some have speculated that women perceive themselves as more in control of their own anger than are their partners, believing that they discipline their children less severely by comparison (Conte & Savage, 2003; McKay, 1994). Administration of discipline, then, would be construed by the mother as protecting the child in order to control child behavior that would potentially antagonize the batterer. Others have speculated that the increased stress of coping with domestic violence taxes the mothers' limited resources (Kerig & Fedorowicz, 1999), which would be consistent with a resource theory of violence (Giles-Sims, 1985). Others have implied that battered women hit children as a reaction to their frustration at their own abuse, referred to as the frustration-aggression or sequential perpetration hypothesis (Appel & Holden, 1998; Coohy, 2004). Taken together, such theories align with the notion that when a woman is no longer confronted with the stress and frustration of her own abuse, her maltreatment risk diminishes.

Moving beyond speculation, however, research should begin to pinpoint which particular factors in domestic violence victims increase their risk to abuse their children. In the absence of understanding what contributes to a battered woman's physical violence toward her children, the field is susceptible to merely blaming the domestic violence victim for perpetuating violence. Moreover, by evaluating whether abuse risk is lower in those where significant time has lapsed since ending the domestic violence situation, researchers can consider whether the abuse risk reported among battered women is situational. If greater temporal proximity to the domestic violence relationship translates into higher child abuse potential, professionals should actively address abuse risk factors early, when those factors most exacerbate the woman's risk to aggress towards her children.

Rather than focusing solely on substantiated child abuse (which is vulnerable to similar underreporting problems as domestic violence), preventive efforts have targeted beliefs and behaviors associated with risk to physically maltreat children, collectively termed child abuse potential (Milner, 1994). Child abuse potential has been conceptualized as a strategy to detect the likelihood of physical abuse, including intrapersonal and interpersonal difficulties as well as inflexible attitudes regarding children that have been observed in parents identified as physically abusive (Milner, 1986). Assessment of child abuse potential has demonstrated promising concurrent and predictive validity with numerous samples (Milner, 1994). Hence, the current study focused on investigating factors predictive of child abuse potential in the hopes of selecting variables with practical applications to prevention efforts.

One potentially promising avenue to comprehending child abuse potential is cognitive-behavioral theory (CBT), which can be directly translated into intervention techniques (Beck, 1995). According to CBT, cognitions and emotions are integrally related to behavior (Beck, 1995). Therefore, the purpose of the current study was to evaluate cognitive and affective variables in domestic violence victims in an attempt to determine how these factors may account for variability in their child abuse potential.

Two well-researched cognitive variables in the domestic violence literature include the role of attribution for the abuse (e.g., Cascardi & O'Leary, 1992; O'Neill & Kerig, 2000; Pape & Arias, 2000) and attachment style (Henderson, Bartholomew, & Dutton, 1997). Attributions pertain to a domestic violence victim's perception of the cause of her abuse, namely, whether she considers the abuse to be due to factors in the partner that are internal or external, stable or unstable, and intentional or unintentional. In contrast, self-blame, or internalized attributions, imply that the victim holds herself responsible for the abuse, which is generally linked to poor outcome in victims. High rates of self-blame have been found in women who remain in abusive relationships (O'Neill & Kerig, 2000). Thus, in terms of the domestic violence relationship, internalized blame may be detrimental to the victim whereas externalizing blame to the batterer is advantageous (Andrews & Brewin, 1990). In contrast, child abuse potential has been linked to parents using an externalizing style (Ellis & Milner, 1981; Milner, 1986). Domestic violence victims who externalize blame for their abuse to their batterer may also be likely to externalize blame to their children, increasing their risk of child maltreatment.

Another cognitive variable receiving increasing attention in the domestic violence literature involves the victim's attachment style. Originally proposed by John Bowlby (1969), attachment, or one's bond to others, is theorized to stem from an individual's internal working model, one's cognitive representation of their acceptability in the eyes of their attachment figure. Developed during childhood, these attachment styles continue into adulthood, affecting the nature of adult relationships (Crittenden & Ainsworth, 1989). The construct of attachment style, typically characterized as secure or insecure, has been applied to domestic violence victims, with two insecure attachment styles particularly apparent. A study of battered women who had recently left abusive relationships found that 35% had fearful attachment styles and 53% had preoccupied styles (Henderson et al., 1997), two to three times higher than what is found in the general population (Feeney, Noller, & Hanrahan, 1994). A "preoccupied" attachment style is typified by a negative view of the self and a positive view of others, and such individuals rely on others for their self-esteem and support (Bartholomew, Henderson, & Dutton, 2001). A "fearful" attachment style, characterized by a negative view of both the self and others, is seen in those who avoid close relationships because of fear of rejection (Bartholomew et al., 2001). Thus, domestic violence victims evidence insecure attachment patterns that affect their relationships with the batterer (Henderson et al., 1997). Furthermore, an insecure maternal attachment style has been linked to greater child abuse potential (Moncher, 1996). Accordingly, battered women would be expected to demonstrate insecure attachment styles that would potentially be associated with increased child abuse potential as well.

In addition to the cognitive elements of the CBT model, emotional functioning has also been discussed in the domestic violence literature. Battered women demonstrate more depression and psychological distress (Cascardi & O'Leary, 1992) and increased incidence of anxiety disorder (Tolman & Rosen, 2001). Parental affective difficulties have also been frequently tied to child abuse risk (Milner, 1994; Milner & Dopke, 1997). Indeed, major depression was found in nearly 41% of women who experienced domestic violence in a sample of mothers referred to child protective services (Hazen, Connelly, Kelleher, Landsverk, & Barth, 2004). In addition, some have proposed that anger is instrumental in a victim's decision to leave an abusive relationship, and women who left an abusive relationship reported feeling angrier and less fearful, anxious, or depressed than victims who remained in an abusive relationship (Walker, 1984). However, anger has also been implicated in child abuse risk (Acton & Daring, 1992; Ammerman, 1990; Rodriguez & Green, 1997). Thus, although anger may motivate battered women to end their own abuse, anger places them at risk to abuse their children.

To ascertain which factors might account for increased child abuse potential among domestic violence victims, the current investigation examined the association of emotional and cognitive functioning with abuse potential. Affective difficulties (i.e., increased depression, hopelessness, anxiety, and anger) were hypothesized to be

associated with greater child abuse potential. Moreover, externalizing attributions and insecure attachment styles were also expected to relate to abuse risk. Participants also reported on the severity of the domestic violence they experienced to determine whether their batterer's abuse frequency was positively related to the victim's abuse risk. Additionally, battered women were recruited from shelters, which represent immediate removal from the batterer, as well as transitional housing programs, which signify a more permanent separation from the abusive relationship. Women in the shelters were expected to demonstrate greater abuse potential compared to transitional housing participants, who had been separated longer from the abusive relationship.

METHOD

Participants

Eighty female victims of domestic violence were recruited in a moderately large western city. Thirty-nine participants were recruited from two crisis shelters, which have a maximum length of stay of 30 days, and the remaining 41 participants were either on the waiting list for or residents of transitional housing programs for battered women, which have a maximum length of stay of 2 years. Women in the transitional housing group were no longer in an intimate relationship with their batterer. Characteristics of the total sample, shelter subsample, and transitional housing subsample are summarized in Table 1.

TABLE 1. Means, Standard Deviations, or Percentages Describing the Total Sample and Subsamples

	Total Sample (<i>N</i> = 80) <i>M</i> (<i>SD</i>) or %	Shelter (<i>n</i> = 39) <i>M</i> (<i>SD</i>) or %	Transitional (<i>n</i> = 41) <i>M</i> (<i>SD</i>) or %
Age, years	34.03 (9.41)	34.05 (10.03)	34.00 (8.89)
Hispanic	11.3%	12.8%	9.7%
Non-Hispanic	88.7%		
White	75.6%	76.3%	75.0%
African American	7.7%	7.9%	7.5%
Native American	9.0%	7.9%	10%
Other	7.7%	7.9%	7.5%
Number of children	1.61 (1.45)	1.18 (1.42)	2.03 (1.37)*
Annual income	\$5,588 (\$6,801)	\$4,838.76 (\$8,037)	\$6,318 (\$5,341)
Education			
Some high school	21.5%	23.7%	19.5%
High school graduate	27.8%	36.8%	19.5%
Some college	36.7%	28.9%	43.9%
College graduate	10.1%	7.9%	12.2%
Graduate school	3.8%	2.6%	4.9%
Abuser's income	\$27,528 (\$27,155)	\$25,475 (\$20,817)	\$29,411 (\$32,076)
Father of children?	46.3%	35.9%	56.0% ^a
Relation to abuser			
Live-in boyfriend	57.0%	58.9%	55.0%
Husband	32.9%	30.8%	35.0%
Dating partner	6.3%	7.7%	5.0%
Same sex partner	3.8%	2.6%	5.0%
Length of relationship, months	61.29 (61.98)	56.74 (69.27)	65.85 (54.24)
Time since separation, days	170.32 (220.67)	16.72 (11.28)	307.30 (229.86)
No. of prior abusers	1.71 (2.45)	1.64 (2.05)	1.77 (2.81)

^aMarginally significant difference between Shelter and Transitional groups.

**p* < .01; significant difference between Shelter and Transitional groups.

Overall, the total sample could be characterized as non-Hispanic Caucasian, low-income women with one child. Most of their abusive relationships were with male live-in partners, and women had been involved with their partner an average of 4 years. The average victim had experienced one prior abusive relationship. The shelter subsample had been separated from their partner an average of 17 days, whereas the transitional housing subsample had been separated for an average of more than 10 months.

Procedures

Study procedures were approved by the Institutional Review Boards of the University of Utah and the Utah Department of Health and Human Services, the latter agency responsible for oversight of domestic violence services. Participants were recruited from the major domestic violence facilities in the city using flyers and consent forms distributed in their mailboxes. Participants were eligible to participate if they were English-speaking and literate, with virtually all eligible women electing to participate in the study. Women who were interested in participating signed and returned their informed consent forms to a designated location in the shelter or housing facility. Those women who expressed interest were then contacted to set up a time to complete the study. All data collection took place inside a private room in the domestic violence shelter or in the participants' homes for those residing in transitional housing programs. All data were collected via computer administration, in which women anonymously entered their responses to all questions into a laptop computer. Computer administration allowed respondents an opportunity to participate anonymously and to rapidly enter their responses. Administration of all measures entailed an average of 30–45 minutes, and women received \$10 compensation.

Instruments

Child Abuse Potential Inventory (CAPI). Recognized as a leading instrument to assess abuse risk, the CAPI (Milner, 1986) served as the dependent variable of abuse risk. The CAPI is a 160-item self-report measure, only 77 items of which are variably weighted to contribute to the Abuse Scale score. The remaining items serve either as distractors or as response distortion items. Three validity scales determine response distortion biases: Faking Good, Faking Bad, and Random Response. The Faking Good index assesses a respondent's socially desirable responding in their attempt to downplay their risk, which is particularly problematic if they obtain an Abuse Scale score below the recommended cut-off of 166. In the current sample 20 victims appeared to be representing themselves favorably. These participants were retained, however, because their scores would actually prove to be conservative estimates of their abuse potential. Indeed, removal of those Faking Good participants who scored below the cut-off actually strengthened the obtained findings, so their inclusion was favored. In contrast, the Faking Bad index indicates respondents' tendency to represent themselves poorly, but no participants endorsed such a profile. The Random Response index suggests inconsistent or random responding to items, but no participants met these criteria.

The CAPI has been utilized to screen abusive parents, correctly classifying 89.2% of confirmed child abusers and 96.3% of controls (Milner, Gold, & Wimberley, 1986). Internal consistency is considered acceptable, with a corrected split-half reliability at .96 and a Kuder-Richardson reliability coefficient of .92 (Milner, 1986). Test-retest reliabilities are reported at .91 after 1 day, .90 after 1 week, .83 after 1 month, and .75 after 3 months (Milner, 1986).

Abusive Behavior Inventory (ABI). The ABI is a 30-item instrument that assesses the frequency of physical and psychological abuse of women by their intimate partners (Shepard & Campbell, 1992). Participants reported the frequency of abusive behaviors on a 5-point Likert scale. The ABI was administered in this study to evaluate whether the participant's child abuse risk was related to the severity of abuse from the batterer. A reliability coefficient of .88 for psychological abuse and .70 for physical abuse for battered women suggests reasonable internal consistency (Shepard & Campbell, 1992). An analysis of factor validity indicated that one item (frequency of spanking) negatively loaded on both the Psychological and Physical Abuse scales, and three items previously scored as part of the Psychological Abuse subscale ("Threatened to hit or throw something at you"; "Threatened you with a weapon"; and "Threw, hit, kicked, or smashed something") correlated more strongly to the Physical Abuse scale (Shepard & Campbell, 1992). The alpha coefficient for the Physical Abuse subscale improved when the spanking item was removed and the three items were moved to the Physical Abuse scale. The alpha coefficient for the Psychological scale remained above .80. Because of these findings, these modifications were adopted in this study. Criterion-related validity was also established with a statistically significant difference between the group means for abused women versus nonabused women (Shepard & Campbell, 1992). This revised ABI includes 29 questions, 12 items in the Physical Abuse scale and 17 items in the Psychological Scale, with subscales summed across each scale's items and averaged.

Relationship Attribution Measure Revised (RAM-R). The RAM-R was designed to assess causal and responsibility attributions for domestic violence behavior (Pape & Arias, 2000). Women indicated their agreement with six items on a 6-point Likert scale. Three items reflect the causal attribution dimensions of locus (internal vs. external), stability (stable vs. unstable), and globality (global vs. specific) (Abramson, Seligman, & Teasdale, 1978) and three items represent the responsibility attributions of the perceived motivation for the abuse, intention of the abuse, and blame for the abuse. High scores indicate more numerous externalizing attributions, namely internal, stable, and global qualities in the partner as well as partner selfishness, spiteful intent, and blame. Psychometric study of the RAM-R with battered women has found an acceptable internal consistency for the total score of .88 (Pape & Arias, 2000), with an alpha coefficient of .84 reported for the causal attribution component and .89 for the responsibility items (Fincham & Bradbury, 1992).

Attachment Style Questionnaire (ASQ). The ASQ includes five adult attachment styles (Feeney et al., 1994), two of which were incorporated in this study given their identification in previous literature with domestic violence victims (Henderson et al., 1997): Discomfort with Closeness, reflective of a fearful attachment style (10 items), and Preoccupation with Relationships (eight items). Respondents indicate their agreement on these items using a 6-point Likert scale. High scores on Discomfort with Closeness imply greater distrust of others; high scores on Preoccupation with Relationship suggest increased attachment and connection to their abuser. A Cronbach's alpha of .80 for the Discomfort with Closeness scale and .79 for the Preoccupation scale suggests moderate internal consistency (Feeney et al., 1994). Acceptable stability has been reported, with test-retest reliability coefficients at .74 for Discomfort with Closeness and .72 for Preoccupation. The ASQ has also demonstrated construct validity, with the Discomfort with Closeness subscale negatively correlated with a scale for secure attachment ($r = -.50$), as is the Preoccupation scale ($r = -.24$) (Feeney et al., 1994).

Beck Depression Inventory (BDI). The BDI is a well-recognized measure of depressive symptomatology in clinical and normal populations (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), with 21 symptoms rated from 0 to 3 in terms of their perceived intensity for the past week. A comprehensive review found that the BDI had an average alpha coefficient of .81 for nonpsychiatric samples, suggesting reasonable internal consistency (Beck, Steer, & Garbin, 1988). Stability estimates for the BDI range from .60 to .83 for nonpsychiatric subjects, with overall good stability over the 1-week period that the BDI is intended to assess (Beck, Steer, et al., 1988). The BDI displays convergent validity with a number of other measures of depression, including clinical ratings of depression as well as discriminant validity between psychiatric and nonpsychiatric patients and between major depressive and generalized anxiety disorders (Beck, Steer, et al., 1988).

Beck Hopelessness Scale (BHS). The BHS consists of 20 true/false questions regarding hopelessness (Beck, Lester, & Trexler, 1974), a central component of depression marked by bleak expectations of the future. Reliability is high, with an alpha coefficient of .93 (Beck et al., 1974). The BHS has demonstrated concurrent validity with clinician ratings of hopelessness with a sample of outpatients in a general medical practice at .74 (Beck et al., 1974). Furthermore, researchers supported the construct validity of the BHS wherein seriousness of suicidal intent was more strongly correlated to BHS scores than to depression scores, suggesting that the BHS better captures the concept of hopelessness than measures of depression (Beck et al., 1974).

Beck Anxiety Inventory (BAI). The BAI taps clinical anxiety (Beck, Brown, Epstein, & Steer, 1988), with 21 symptoms of anxiety that respondents rank on a 4-point severity scale for the past week. In the original sample of 160 psychiatric outpatients, Cronbach's alpha was .92, indicating high internal consistency and acceptable test-retest reliability at .75 (Beck, Brown, et al., 1988). The BAI demonstrates convergent and discriminant validity, with high correlations with other measures of anxiety, but weaker correlations with depression or hopelessness (Beck, Brown, et al., 1988).

State-Trait Anger Expression Inventory (STAXI). The STAXI is a 44-item measure (Spielberger, 1988) consisting of three sections, of which the STAXI State Anger subscale was used for this study. This subscale assesses anger as a state or situational emotional response on a 4-point Likert scale. One study determined an alpha coefficient of .91, indicating good internal consistency (Fuqua & Leonard, 1991). The test manual for the

STAXI reports similar levels of reliability as well as high validity (Spielberger, 1988). In this study, the instructions for the State subscale were modified. Rather than instructing participants to describe how they feel “right now,” in which responses would reflect anger during the time they are completing the measure, participants were instead instructed to think of the most recent incident of domestic violence and then report on how they felt as they imagined that incident. This modification was adopted in order to elicit their anger associated with their domestic violence specifically.

RESULTS

All analyses were conducted using SPSS for Windows. Preliminary analyses indicated that the shelter subsample of mothers had significantly fewer children than the transitional housing subsample, $t(77) = -2.70$, $p \leq .01$. In addition, batterers of the transitional housing subsample were marginally more likely to be the fathers of women’s children ($\chi^2 = 3.28$, $p = .07$). Otherwise, the two subsamples demonstrated comparable demographic characteristics.

In terms of background variables, the dependent variable CAPI Abuse Scale score was not significantly correlated to age of respondent, annual income, number of children, or length of relationship (all $p > .05$). CAPI Abuse Scale scores were modestly positively correlated to the number of prior abusive relationships ($r = .24$, $p < .05$). No ethnic or racial differences were observed in any of the cognitive or affective factors or in the CAPI Abuse Scale scores; CAPI Abuse Scale scores also did not differ as a function of whether the batterer was the father of the children ($ps > .05$).

Obtained mean scores on the BDI ($M = 23.75$, $SD = 11.74$) indicated that the women in this sample were moderately depressed (Beck & Steer, 1987). Similarly, the obtained BAI scores ($M = 25.81$, $SD = 13.85$) suggest moderate to severe anxiety (Beck & Steer, 1990). BHS scores ($M = 5.56$, $SD = 5.37$) were below the clinical cut-off for hopelessness (Beck, Brown, Berchick, Steward, & Steer, 1990). With respect to anger, women in this sample obtained mean scores ($M = 22.93$, $SD = 6.77$) suggestive of clinically elevated anger (Spielberger, 1988). Most significant, on the Child Abuse Potential Inventory, 78.7% of women in this sample obtained Abuse Scale scores above the 166 cut-off score; 62.5% obtained scores above the more conservative 215 cut-off score. Consequently, the obtained sample mean CAPI Abuse Scale score ($M = 259.74$, $SD = 98.92$) was above the normative mean and comparable to reported means of adjudicated physical abusers (Milner, 1986).

As can be seen in Table 2, the CAPI Abuse Scale scores were highly correlated with the emotional functioning measures, moderately correlated with the two insecure attachment styles, but uncorrelated with the attribution measure. Therefore, increased depressive symptomatology, hopelessness, anxiety, and anger were associated with greater child abuse potential in the total sample of domestic violence victims. Moreover, both insecure attachment styles, Preoccupied with Relationship and Discomfort with Others, were associated with increased abuse risk. However, the severity of domestic abuse experienced by the victims from their batterers, as reported on the ABI, was not significantly correlated to participants’ CAPI Abuse Scale scores, suggesting that battered females’ abuse risk is not a function of the severity of the domestic violence.

Analyses also revealed a significant difference in CAPI Abuse Scale scores by sub-sample, $t(78) = 2.79$, $p \leq .01$. Women in shelters obtained significantly higher CAPI Abuse Scale scores ($M = 290.08$, $SD = 79.75$) than those in the transitional housing system ($M = 230.88$, $SD = 107.40$). In contrast, the two subsamples did not significantly differ in terms of depression, hopelessness, anxiety, anger, attachment style, or attributional style ($ps > .05$).

Table 2 also displays the correlations between CAPI Abuse Scale scores and the emotional and cognitive functioning measures for each subsample. Although the magnitude of the correlations appears to differ for several of the variables by subsample, only two of these were significantly different. Using Fisher’s z to test the difference between two correlations (Howell, 1982), there was no significant difference between subsamples on Discomfort with Closeness or Preoccupied attachment styles, STAXI State Anger, or BAI Anxiety. However,

the Transitional Housing subsample correlation of CAPI Abuse Scale scores with BDI scores was significantly stronger ($z = 2.025, p \leq .05$), as was the correlation with the BHS ($z = 2.081, p \leq .05$), than the correlations obtained for the Shelter subsample.

Hierarchical multiple regression analyses were then performed for the total sample to identify the strongest predictors, with CAPI Abuse Scale scores as the dependent variable. Attribution scores were omitted from this analysis, given that they were unrelated to abuse potential scores. Site of data collection (shelter or transitional) as the broader, contextual variable, was entered first, followed by the emotional and cognitive functioning measures. After the first step in predicting CAPI Abuse Scale scores, with site entered first into the regression equation, $R = .30, F(1, 78) = 7.77, p \leq .01$. After the second step, with all four emotional functioning total scores and the attachment scores entered, $R = .75, F(7, 72) = 13.26, p \leq .001$. However, neither the attachment scores, STAXI State Anger scores, or hopelessness scores contributed significant unique variance. Consequently, the most parsimonious equation included site as well as BDI and BAI total scores, for a final $R = .714, F(3, 76) = 26.42, p \leq .001$ (see Table 3 for a summary of the final regression equation results).

TABLE 2. Correlations of Emotional Functioning, Attachment Style, and Attribution With Child Abuse Potential Inventory Abuse Scale Score

	Total Sample ($N = 79$)	Shelter ($n = 38$)	Transitional ($n = 41$)
CAPI Abuse Scale	r	r	r
BDI–Depression	.66***	.50***	.77***
BHS–Hopelessness	.60***	.40**	.72***
BAI–Anxiety	.55***	.54***	.57***
STAXI State Anger	.44***	.46**	.45**
Attachment Style			
Discomfort with closeness	.32**	.28	.48***
Preoccupied	.35***	.39**	.40**
Relationship Attribution	-.06	-.15	.07
ABI–Physical Abuse	-.09	.15	-.10
ABI–Psychological Abuse	-.03	.13	.00

** $p \leq .01$. *** $p \leq .001$.

TABLE 3. Final Hierarchical Multiple Regression Predicting CAPI Abuse Scale Scores

	B	β	sr^{2a}
Data collection site	-37.42	-.19	.09*
BDI total scores	4.14	.49	.38**
BAI total scores	1.74	.24	.04*
Intercept = 135.65			

Note. $R = .72, F(3, 76) = 26.95^{**}, R^2 = .52$ (adj. $R^2 = .50$).

^aIncremental change in R^2 .

* $p \leq .05$. ** $p \leq .001$.

DISCUSSION

The current study evaluated whether increased child abuse potential in domestic violence victims was associated with problematic emotional functioning, attachment style, and attributions. To investigate whether increased abuse risk is largely apparent when domestic violence victims are more immediately involved with their batterer, women in battered women's shelters versus transitional housing programs were recruited. Participants completed measures of depression, hopelessness, anxiety, anger, insecure attachment style, and attributional style as well as child abuse potential. Women also reported on the severity of the violence received by their batterer to determine if their own abuse covaried with their child abuse potential.

As predicted, increased depressive symptomatology, hopelessness, anxiety, and anger were significantly correlated with Child Abuse Potential Abuse Scale scores in the overall sample of battered women. Previous research has suggested that depression and anxiety are associated with increased child abuse potential (Milner, 1994) as well as increased anger (Rodriguez & Green, 1997). For the present sample, women were experiencing

clinically elevated difficulties with emotional functioning across all four measured dimensions. The multiple regression analysis indicated that symptoms of depression and anxiety were the factors principally associated with abuse potential. Consequently, their greater struggle with emotional difficulties may in part clarify the mechanisms that place domestic violence victims at risk to physically maltreat their children.

Insecure attachment style was also modestly associated with child abuse potential in this study. Thus, women who reported greater preoccupation with their batterer and greater distrust were more likely to attain elevated Child Abuse Potential Inventory Abuse Scale scores. These two insecure attachment styles have been previously identified as prevalent among domestic violence victims (Henderson et al., 1997) and insecure attachment style has been connected to child abuse potential (Moncher, 1996). Therefore, women who are overly reliant on others or are distrustful of others appear to be more likely to engage in physical maltreatment of children. Consistent with the concept of intergenerational transmission of attachment styles (Howe, Brandon, Hinings, & Schofield, 1999), insecure attachment styles as adults would adversely impact their relationship with their child, which would, in turn, magnify abuse risk. However, in the multivariate analyses, attachment style did not contribute significant unique variance, highlighting the relative importance of emotional difficulties.

Unexpectedly, attributional style was not significantly correlated to child abuse potential. Although previous research has suggested that self-blame is detrimental to domestic violence victims (O'Neill & Kerig, 2000), battered women who externalize blame for their spousal abuse were hypothesized to have increased abuse potential. Thus, the current findings suggest that attributions a victim derives about spousal violence may not parallel an attributional style towards her children that would increase child abuse risk. The absence of a relation between abuse risk and attributional style may, however, reflect limitations in the instrument adopted for this study. The RAM-R relies on only six items and spans several different dimensions of attributional style that are collapsed into a single score. For instance, perhaps specific aspects of attribution are relevant for this population, such as locus or responsibility. Additionally, victims may engage in different attributions for different situations such that spousal violence attributions are distinct from those that relate to their parenting. Future research utilizing a more comprehensive measure of attributional style with separate factor scores may help tease apart such nuances.

Interestingly, the subsample of women residing in shelters obtained significantly higher scores on the CAPI Abuse Scale than women in transitional housing programs and, in the multiple regression, data collection site was a significant predictor of abuse potential. This finding parallels the lowered abusive behavior towards children found in those further away from their batterers (Giles-Sims, 1985; Walker, 2000). Indeed, compared to women in the transitional housing group, women in domestic violence shelters have greater supervision and oversight of their children, which would serve to inhibit their risk to aggress towards their children. In contrast, although women in shelters obtained higher scores in depression, hopelessness, anxiety, and anger, the two subgroups of domestic violence victims did not significantly differ in emotional functioning, attachment style, or attribution. Thus, with comparable cognitive and emotional functioning, women in the shelter were still at higher child abuse risk than the women in transitional housing. Such a finding supports the hypothesis that the increased abuse risk evident in domestic violence victims may in part be situational, manifest largely when they are involved with the batterer. Furthermore, a statistical comparison of the magnitude of differences in correlations between the two subsamples indicated that women in the transitional housing programs obtained higher correlations of child abuse potential to depression and hopelessness. In other words, whereas women in shelters may demonstrate greater abuse potential, those who are depressed or hopeless by the time they enter transitional housing programs may be at particularly increased risk to maltreat.

In this vein, a fascinating direction for research would involve longitudinal comparisons of emotional and cognitive functioning of women in various stages of leaving an abusive relationship. This study's cross-sectional nature limits the ability to test fully whether abuse risk truly diminishes when a woman permanently separates from her batterer. The current sample was also limited by its inclusion of only women who were not currently in the abusive relationship. This cross-sectional design thus focused on two phases, the immediate one of shelter and the longer-term one of separation. Although complex, ideally a longitudinal design could begin

by incorporating women who are currently involved in domestic violence and follow those who leave across time, including a component immediately upon departure and more distant follow-up(s). Even cross-sectionally, a comparison of women still in the midst of domestic violence to subsamples similar to those collected in the current study could provide a preliminary glimpse into how emotional and cognitive functioning may play a role in decreases in abuse potential. Ultimately, researchers should also include other cognitive factors that could further clarify additional mechanisms that may exacerbate child abuse risk.

The present study was also limited by the nature and size of the sample. For example, the women in the current sample were predominantly low-income and Caucasian, and clearly not all victims engage with social service agencies in response to assaults. Optimally, given the difference in co-occurrence of spousal and child abuse in community samples (Appel & Holden, 1998), future research would utilize larger samples more ethnically heterogeneous that would attempt to capture greater variability in socioeconomic status. In addition, although the participant's report of domestic violence severity was not related to their child-abuse potential, other aspects of their domestic violence situation should be examined (e.g., duration of domestic violence) as well as other characteristics of the battered woman (e.g., her childhood history of discipline and exposure to domestic violence). Moreover, although the present study concentrated on abuse risk factors connected to the domestic violence victim, further study of the qualities of the child that interact with parental abuse risk would also be pertinent (e.g., behavior of children).

In terms of the implications of the current results, the abuse risk reported among battered women may be in part situational, higher when women are more actively managing the chaos, stress, and frustration of their domestic abuse. Additionally, the current sample obtained rather high scores on the CAPI. Although the measure has demonstrated strong predictive validity (Milner, 1994), in this population, the CAPI may over-identify domestic violence victims as potential abusers. This possible issue in classification may in part reflect that these women are understandably struggling with considerable emotional difficulties, which taxes their resources and magnifies their perceived abuse risk. Nonetheless, service providers should be attuned to the emotional functioning of domestic violence victims, beginning in shelter settings, particularly if clinically elevated affective problems are persistent even after the termination of an abusive relationship. With respect to attachment style, these women are likely to present to professionals with issues related to distrusting and over-relying on others. Thus, interventions that target the distorted cognitions that support these insecure attachment styles could be challenged, which would potentially affect their attachment style in future relationships and serve as a means to decrease child abuse risk. Given the emotional turmoil involved in leaving a batterer, active efforts to directly address the emotional and cognitive functioning of domestic violence victims by employing CBT techniques could alleviate some of the emotional distress these women are reporting, which could, in turn, decrease their risk to aggress towards their own children.

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