Cognitive-Affective Predictors of Women’s Readiness to End Domestic Violence Relationships

By: Lauren A. Shurman and Christina M. Rodriguez


Made available courtesy of Sage Publications: [http://www.sagepub.com/](http://www.sagepub.com/)

*** Note: Figures may be missing from this format of the document

Abstract:
A model of women’s readiness to terminate an abusive relationship was examined, using cognitive and emotional factors to predict readiness to change as conceptualized in the transtheoretical model. Factors previously identified in the domestic violence literature were selected to represent cognitive predictors (attribution and attachment style) and affective predictors (depression, hopelessness, anxiety, and anger) of readiness to end a domestic violence relationship. Responses by 85 female victims of intimate partner violence indicated that their overall readiness to terminate a relationship was predicted by a preoccupied attachment style and high emotional arousal. However, women’s low level of anger predicted their precontemplation of change, the earliest stage of readiness, whereas internalizing emotional difficulties and preoccupation with their batterer predicted maintenance, the final stage of readiness to persist in their decision to leave their abuser. Implications of these findings for working with women considering leaving their partner are discussed.

Keywords: transtheoretical model; domestic violence victims; partner abuse; battered females

Article:
The prevalence of domestic violence is disturbingly high (Riggs, Caulfield, & Street, 2000). The National Crime Victimization Survey estimates that in 1998 about 1,000,000 violent crimes were committed against persons by an intimate partner and that one third of all murdered females were killed by an intimate partner (Rennison & Welchans, 2000). Such figures detect only those assaults officially reported as crimes, and therefore the actual number of assaults against partners is likely much higher because of underreporting. Although any family member can suffer partner violence, the majority of victims are women (Vazquez, 1996), and for the purposes of our study, women were the focus, and the term *victim* is herein used to refer to female victims of domestic violence.

The impact of domestic violence on women and children can be pervasive. Women who suffer abuse at the hands of their partner often later experience physical and mental health complications (Walker, 2000). Domestic violence can also interfere with women’s employment and education (Tolman & Rosen, 2001). Furthermore, a substantial majority of victims of domestic violence have children, with an estimated 10 million children in the nation witnessing spousal violence annually (Straus, 1992). Yet despite these risks for both women and children, many women do not terminate their abusive relationship. Most women who leave this relationship eventually return to their batterer. Studies estimate that at least one third of women in battered women’s shelters return to their abusers immediately on discharge from a shelter, and approximately 60% of women return within 2 months after a shelter stay (Brown, 1997).

The extant literature has explored the external constraints women confront when they attempt to leave abusive relationships, namely limited economic resources, minimal affordable housing, and heightened concern over personal safety. Current strategies such as shelters and transitional housing programs are ostensibly aimed at minimizing some of these external barriers if a woman decides to leave an abusive relationship (Pape & Arias, 2000). Despite the proliferation of such programs, the incidence of domestic violence has not noticeably subsided.
Consequently, recent attention has shifted to the internal psychological barriers women encounter when leaving an abusive relationship. Much remains to be clarified, however, about the process women undergo in ending such relationships. Identifying the specific intrapsychic aspects contributing to a woman’s decision to leave her abuser would enable mental health and social service workers to provide more meaningful services. Interventions tailored to an individual’s psychological needs are more likely to be helpful than interventions that address only extrinsic barriers, much like success in therapy may depend on the appropriateness and individualized nature of the therapeutic relationship and intervention (Prochaska & Norcross, 2003).

**Theories on Leaving Abusive Relationships**

One theory in the domestic violence literature is the investment model (Rusbult, 1980), proposing that a woman’s decision to stay in a relationship is most influenced by the perceived rewards and costs associated with the relationship in comparison to her standard for relationships (Strube, 1988). However, scores on perceived relationship alternatives and commitment level did not predict stay versus leave behavior (Truman-Schram, Cann, Calhoun, & Vanwallendael, 2000). Thus, the complex decision of whether or not to terminate an abusive relationship appears to involve more than simply a cost-benefit analysis.

Learned helplessness theory has also been used to explain why some women remain in abusive relationships. Initially applied by Walker (1979) toward battered women and based on the work of Seligman (1975), the theory of learned helplessness suggests that women learn not to expect their responses to have the desired outcome because of unsuccessful past efforts. When a woman’s efforts to improve or end a relationship are not rewarded with success, she will interpret this noncontingency consistent with her attributional style. Women who attribute their lack of success to internal, stable aspects of themselves are likely to develop learned helplessness and hopelessness, which is associated with depression and reduced motivation to leave the relationship (Strube, 1988). Attributions will be discussed below in greater detail.

The transtheoretical model (TM), a model conceptualized by Prochaska and DiClemente (1984) to describe an individual’s readiness to change, has recently gained appeal in the domestic violence literature. Originally developed from research on smoking cessation, the model is now accepted as a valid approach to behavior change for many behaviors. A core tenet of the TM is that change is a process, with tasks necessary to advance through stages. The stages of change are considered cyclical, with relapse to an earlier stage both common and possible at any point in the process. The five stages of change, as described by the TM, are precontemplation, contemplation, preparation, action, and maintenance.

Individuals in the precontemplation stage are often unaware of their problem, with no intention of changing (Prochaska & DiClemente, 1984). Movement from precontemplation to contemplation, then, often involves a recognition of and willingness to relinquish whatever was maintaining the problem behavior. Contemplators, in contrast to precontemplators, are aware of their problem and consider changing but have not yet made a commitment to change. The next stage, preparation, is characterized by the desire to change in the immediate future, with the initiation of small steps toward change but without a clear criterion for change. The criterion for change becomes apparent during the action phase, when individuals modify their behavior and their environment to accomplish their goal. Although great strides are often achieved during the action phase, individuals then enter the maintenance stage in which they work to continue the gains attained during the action stage and to prevent relapse to their earlier, problematic level of functioning (Prochaska & DiClemente, 1984).

Recently, the TM has been adopted by some to describe the process of how women leave their abusive partners. One recent qualitative study found support for the application of the TM to this population (Burke, Gielen, McDonnell, O’Campo, & Maman, 2001). Through interviews with victims of domestic violence, the researchers pinpointed a period in which the victim does not recognize the abuse as a problem. During this precontemplation stage, the victim may misperceive the abuse as love or a sign of affection. Movement to the next stage typically involved an identifiable precipitant that propelled the women’s acknowledgment of their partner’s abuse (Burke et al., 2001). Progression from contemplation to preparation was characterized by an evaluation of options for ending the relationship, weighing the pros and cons of leaving their partner, and
considering factors such as financial dependence and personal safety (Burke et al., 2001), much like the cost-benefit analysis suggested by the investment model. Burke et al. (2001) provide an example of a woman in the preparation stage:

I [can’t leave the abusive situation], not like right now, but as soon as I get myself together where I can stand on my own two feet without needing anybody to help me, then I’ll be gone .... I’ve been trying to find a job.” (p. 1153)

During the action phase, the victim engages in behaviors intended to end the abuse. For example, the woman might seek help at a shelter, call the police, or move in with family or friends. Once the abuse was terminated, many women in the study reported entering a maintenance stage, where they continued to work at remaining separated from their abusive partner and moving on with their life. This study thus provides support for the application of the TM to domestic violence (Burke et al., 2001). The study, however, is limited by its retrospective, qualitative nature. Nonetheless, the authors conclude that their research can be used as a foundation for developing quantitative methods of measuring the stages and processes of change in battered women.

The potential utility of the TM for working with victims of domestic violence is clear and compelling. Brown (1997) advocates the use of the TM as a way to understand and measure the activities of battered women that reflects the complex and dynamic nature of the process of ending abuse. In working with battered women, clinicians recognize that their interventions need to be matched to the stage of change of the victim. Victims are unlikely to consider clinicians’ suggestions that do not match their level of readiness for change (Brown, 1997).

The TM does not preclude the integration of traditional theories. Instead, TM suggests that different theoretical strategies may be more or less successful depending on the individual’s level of readiness for change (Prochaska & Norcross, 2003). Elements of the cognitive-behavioral (CBT) model, for example, have been theorized to contribute to the awareness required for precontemplation and contemplation phases and for the cognitive and behavioral changes needed to promote action and maintenance (Prochaska & Norcross, 2003). Based on the CBT model, cognitive appraisals of events prompt emotional reactions, which in turn influence behavior (J. S. Beck, 1995). Applied to victims, a woman’s cognitions about the abusive relationship may elicit emotional responses that lead her to consider altering her behavior, namely leaving the abuser. Yet different components of CBT may be applicable at different readiness levels, with some cognitions or emotions playing a greater role earlier in the process. The purpose of the current study, therefore, was to evaluate cognitive and affective components that would predict the various stages of behavioral change involved in readiness to terminate an abusive relationship.

**Cognitive and Affective Components**

Among the possible cognitive components that may affect a woman’s decision to leave, some researchers have examined the role of attribution for the abuse (e.g., O’Neill & Kerig, 2000; Pape & Arias, 2000). A woman’s explanation for the abuse reflects her assumptions regarding the cause of the abusive behavior.Attributions consist of perceiving the cause of the abuse as internal or external to the partner, stable or unstable, and intentional or unintentional. In addition, a woman’s attributional style reflects whether she perceives the abusive partner as selfish and blameworthy. Researchers hypothesize that a victim’s attribution for abuse affects her movement from the precontemplation to the contemplation stage (Brown, 1997) and her subsequent activities in the action stage. One study found that women who were still in abusive relationships scored higher on measures of behavioral and characterological self-blame than did women who had terminated their abusive relationship (O’Neill & Kerig, 2000). Thus, the literature on attribution in domestic violence relationships supports the notion that attributing blame for the abuse to the batterers may be essential for the woman’s decision to leave. However, research has not yet determined if attributions predict actual leaving behavior or how the victim’s subjective attribution for the abuse changes over time.
Another cognitive factor explored in the domestic violence literature involves attachment style. Recent research has acknowledged that a woman’s attachment to her batterer plays a significant role in her decision to end the relationship. In fact, one study found that women who had a history of returning to an abusive partner after a separation were significantly more likely to consider returning again in the future because of emotional attachment compared to women without a similar history of past separations (Griffing et al., 2002). Attachment theory was first proposed by John Bowlby (1969) to explain why humans tend to innately form strong bonds to particular others. Attachment is regulated by an individual’s internal working model, a cognitive representation of how acceptable or unacceptable a child feels he or she is in the eyes of the attachment figure (Bowlby, 1969). An individual’s internal working model determines the quality of his or her attachment bonds, which are classified as secure or insecure. Once these cognitive schemas about the self and others are formed, they tend to persist throughout the individual’s lifetime (Berman & Sperling, 1994).

One model of adult attachment is Bartholomew’s two-dimensional, four-category model (Bartholomew, Henderson, & Dutton, 2001), derived from the intersection of the two underlying cognitive dimensions: positivity of the self and positivity of the other. Individuals with a secure attachment style have a positive view of the self and of others. In contrast, a preoccupied attachment style is characterized by a negative view of the self and a positive view of others, and such individuals are overly dependent on others for their self-esteem and support needs. A fearful attachment style, derived from a negative view of the self and others, is apparent in individuals who tend to avoid intimate relationships because of a fear of rejection. The dismissing attachment style, in which the individual has a positive view of the self but a negative view of others, results in avoidance of close relationships and compulsive self-reliance (Bartholomew et al., 2001).

Recently, the Bartholomew model of adult attachment has been applied to violent relationships. Findings indicate that attachment patterns with a positive self-model (secure and dismissing) are underrepresented in violent couples (Henderson, Bartholomew, & Dutton, 1997). Secure individuals, with their high levels of self-esteem and self-worth, are hypothesized to believe they do not deserve abuse and so do not choose to stay in abusive relationships; dismissing individuals also do not generally choose to stay in abusive situations because of their lack of investment in relationships (Henderson et al., 1997). Thus, individuals with preoccupied and fearful attachment patterns appear to be at the greatest risk of remaining with abusive partners. One study found that in a sample of battered women who had recently left an abusive relationship, 35% had fearful attachment styles and 53% had preoccupied styles (Henderson et al., 1997), 2 to 3 times higher than what is found in the general population (Feeney, Noller, & Hanrahan, 1994).

With respect to the role of emotions, in a study of stay-leave decision making in battered women, symptoms of depression were negatively correlated with confidence for leaving the abusive relationship and positively correlated with temptation to stay in the relationship; the presence of anxiety demonstrated the same trend (Fiore Lerner & Kennedy, 2000). One investigation of welfare recipients found that women who had experienced severe violence within 12 months of the study had a rate of depression 3 times that of women who had never been abused (Tolman & Rosen, 2001). This study also found the rates of generalized anxiety disorder were 3 times higher for recent victims of abuse than for nonvictims (Tolman & Rosen, 2001). Researchers also unexpectedly discovered that women who have left an abusive relationship have higher rates of depression than do women who remain in abusive relationships (Walker, 1984). This finding suggests that depressive symptomatology may fluctuate during the process of terminating the relationship.

Researchers have also hypothesized that, to leave an abusive relationship, the victim must experience heightened feelings of anger rather than depression (Walker, 1984). Women who have left abusive relationships report feeling angrier and less fearful, anxious, or depressed at the time of the last battering incident than women who remain in the abusive relationship (Walker, 1984). However, the role that a victim’s feelings of anger plays while ending a violent relationship has not been thoroughly investigated.

Based on the existing literature, a model of behavior change in battered women was developed that encompasses cognitive and emotional factors, consistent with the CBT model, to predict readiness for change.
according to the TM stages. Specifically, two cognitive factors (attributions and attachment style) and four emotional factors (depression, hopelessness, anxiety, anger) were hypothesized to predict overall readiness to leave an abusive relationship. Partner blame and less insecure attachment style were expected to predict greater readiness for change, as was elevated depression, hopelessness, anxiety, and anger. Corresponding to CBT’s theory that cognitions elicit emotions, hierarchical multiple regression was performed to predict readiness, determining whether emotional factors contributed significant unique variance beyond what was accounted for by cognitive factors. Additional analyses were performed to determine which cognitive or affective variables predicted the different stages of readiness.

Method
Participants
A total of 85 women were recruited from domestic violence shelters and transitional housing programs in a moderately large city in the Mountain West. Approximately half of the participants were residing in crisis shelters, which have a maximum length of stay of 30 days. The remaining participants either were on the waiting list for or were residents of transitional housing programs for battered women, which have a maximum length of stay of 2 years.

Age of participants ranged from 18 to 55 years ($M = 33.89$, $SD = 9.6$). The women in this study had an average of 1.57 children (ranging from 0 to 7). About 10.6% of respondents described their ethnicity as Hispanic. In terms of racial diversity, 75.9% of participants reported they were Caucasian, 8.4% Native American, 7.2% Black, 1.2% Asian or Pacific Islander, and 7.2% Other. Because participants were recruited from shelters, the sample consisted primarily of low-income women. The average annual income for participants was $5,776 ($SD = $6,963). Educational level was also lower than the national average, with 20.2% of respondents lacking a high school diploma. In addition, 29.4% of participants described themselves as high school graduates, whereas 34.1% attended some college, 11.8% graduated from college, and 3.5% possessed a graduate level education. The majority of participants (55.3%) were in their most recent abusive relationship with a male live-in partner, with the remaining participants reporting abuse by a husband (32.9%), dating partner (7.1%), or same-sex partner (3.5%). In addition, 44.7% of participants reported the abusers were the father of their children. The average annual income of the abusers in this study was reportedly $26,604 ($SD = $26,962).

Participants reported being involved in from 0 to 15 prior abusive relationships ($Mdn = 1$). In terms of their current abusive relationship, the median length of the relationships examined in this study was 3 years ($M = 59.66$ months, $SD = 60.81$ months), with the shortest relationship 3 months and the longest 24 years. Women reported being separated from their abusers for a median of 49 days ($M = 173.74$ days, $SD = 245.87$ days). The separation time from their current batterer ranged from less than a day to 3 years.

Measures
Abusive Behavior Inventory (ABI). The ABI (Shepard & Campbell, 1992) is a 30-item instrument that measures the frequency of physical and psychological abuse of women by their partner. Women rated the frequency of abusive behaviors on a 5-point, Likert-type scale. The ABI was employed in this study to control for the frequency and severity of abuse, a variable suggested by previous research to be important in influencing a woman’s decision to leave (Henderson et al., 1997). An alpha coefficient of .88 for Psychological Abuse and .70 for Physical Abuse for battered women demonstrates adequate reliability (Shepard & Campbell, 1992). In an analysis of factor validity, one item (frequency of spanking) was negatively correlated with both the Psychological and Physical Abuse scales (Shepard & Campbell, 1992). In addition, 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”) were found to correlate more strongly to the Physical Abuse scale. The alpha coefficient for the Physical Abuse subscale improved when the spanking item was removed and the three items were shifted to the Physical Abuse scale. The alpha coefficient for the Psychological scale remained above .80. Based on these findings, these modifications were adopted in this study. Thus, the revised ABI consisted of 29 questions; 12 items composed the Physical Abuse scale, and 17 items composed the Psychological scale, with subscales summed across each scale’s items and averaged.
Relationship Attribution Measure – Revised (RAM-R). The RAM-R (Pape & Arias, 2000) asks respondents to rate the extent to which they agree with statements regarding causal and responsibility attributions for the abusive behavior, with six items scored on a 6-point, Likert-type scale. The three items of causal attribution derive from Abramson, Seligman, and Teasdale’s (1978) dimensions of causal attribution: locus (internal vs. external), stability (stable vs. unstable), and globality (global vs. specific). The three items of responsibility attributions assess the perceived motivation for the abuse, intention of the abuse, and blame for the abuse. Scores range from 6 to 36, with high scores reflecting more internal-to-partner, stable, and global causality and partner selfish motivation, malicious intent, and blameworthiness. The RAM-R has adequate internal consistency, at .88 in a study of battered women (Pape & Arias, 2000).

Attachment Style Questionnaire (ASQ). The ASQ (Feeney et al., 1994) taps five adult attachment styles using a 6-point, Likert-type scale. The two styles previously associated with domestic violence victims (Henderson et al., 1997) were targeted for this study: Discomfort with Closeness, reflective of a fearful attachment style (10 items), and Preoccupation with Relationships (8 items).

Wording was modified in the Preoccupation subscale so that responses were specific to the abusive relationship. For example, “I worry a lot about my relationships” was changed to “I worry a lot about my relationship with _______. Women were instructed to imagine the name of their abusive partner in the blank. 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 indicate moderate internal consistency (Feeney et al., 1994). Test-retest reliability coefficients are .74 for Discomfort with Closeness and .72 for Preoccupation, indicating reasonable stability (Feeney et al., 1994).

Beck Depression Inventory (BDI). The BDI (A. T. Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), one of the most widely used instruments to assess depression in clinical and normal populations, consists of 21 items that measure symptoms and attitudes related to depression. Respondents rate items on a scale of 0 to 3 in terms of their perceived intensity for the past week. In a review of 25 studies of the BDI, A. T. Beck, Steer, and Garbin (1988) found that the instrument had an average alpha coefficient of .81 for nonpsychiatric samples, indicating good internal consistency. Stability estimates for the BDI vary, with correlations ranging from .60 to .83 for nonpsychiatric participants, with overall good stability over the 1-week period that the measure is designed to assess (A. T. Beck, Steer, et al., 1988). The BDI displays concurrent validity with a number of other measures of depression, including clinical ratings of depression (A. T. Beck, Steer, et al., 1988).

Beck Hopelessness Scale (BHS). The BHS (A. T. Beck, Lester, & Trexler, 1974) is designed to measure hopelessness, believed to be a core characteristic of depression characterized by negative expectations for the future. The BHS consists of 20 true-false questions and has an alpha coefficient of .93 (A. T. Beck et al., 1974), indicating good reliability. The BHS has demonstrated concurrent validity with clinician ratings of hopelessness with a sample of outpatients in a general medical practice at .74 (A. T. Beck et al., 1974). In addition, researchers found the BHS to have good construct validity, in which seriousness of suicidal intent in one study was more strongly correlated to BHS scores than to depression scores, indicating that the BHS is better able to assess hopelessness than measures of depression (A. T. Beck et al., 1974).

Beck Anxiety Inventory (BAI). The BAI (A. T. Beck, Brown, Epstein, & Steer, 1988) is a widely used 21-item, self-report measure of the severity of clinical anxiety. Participants are asked to rate how much each symptom of anxiety has bothered them during the past week on a 4-point scale ranging from not at all to severely, with scores ranging from 0 to 63. In the original sample of 160 psychiatric outpatients, Cronbach’s alpha was .92, indicating high internal consistency and adequate test-retest reliability at .75 (A. T. Beck, Brown, et al., 1988). The BAI was also found to have good concurrent and discriminant construct validity, positively highly correlated with other measures of anxiety, but not as strongly with measures of depression or hopelessness.
Furthermore, BAI scores for individuals diagnosed with anxiety and no secondary diagnosis were significantly higher than scores for individuals diagnosed only with depression (A. T. Beck, Brown, et al., 1988).

State-Trait Anger Expression Inventory (STAXI). The STAXI (Spielberger, 1988) is a 44-item instrument consisting of three parts, 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-type scale. One study determined an alpha coefficient of .91, indicating good internal consistency (Fuqua & Leonard, 1991). In this study, the instructions for the State subscale were modified. Rather than instructing participants to describe how they feel “right now,” participants were instructed to think of the most recent incident of domestic violence and then report on how they felt as they thought about the incident. Thus, the revised State Anger scale reflects participants’ emotional response to the domestic violence incident specifically.

Stages of Change Questionnaire (SOCQ). Serving as the dependent variable, the SOCQ (McConnaughy, Prochaska, & Velicer, 1983) is a 32-item questionnaire designed to measure attitudes toward behavior change that are consistent with four of the TM stages of precontemplation, contemplation, action, and maintenance. Each subscale contains eight questions in which respondents indicate the extent to which they agree with a statement on a 5-point, Likert-type scale. Scores for each subscale are summed to obtain a separate score for each stage of change. A total readiness for change score is obtained by summing the contemplation, action, and maintenance scores and subtracting the precontemplation score (Carpenter, Miele, & Hasin, 2002). The SOCQ has demonstrated moderate internal consistency, with coefficient alphas of .88 for the precontemplation, contemplation, and maintenance scales and .89 for the action scale (McConnaughy et al., 1983). Studies that have obtained a total readiness for change score have found low to moderate internal consistencies for this score, with alphas ranging from .67 to .86 for different populations (Carpenter et al., 2002).

Wording of the statements was modified for this study to be more specific to the domestic violence situation and to emphasize the relational, rather than individual, nature of change for this population. For example, the statement, “I’ve been thinking that I might want to change something about myself” was changed to “I’ve been thinking that I might want to change something about my situation.” Furthermore, the SOCQ instructions were modified to ensure that participants responded only in terms of their abusive relationship. A high SOCQ total readiness for change score indicates that a participant is actively involved and ready to end the relationship. High scores on precontemplation suggest reluctance to change, whereas high scores on the other subscales (contemplation, action, and maintenance) suggest greater investment in change.

Procedures
Participants were recruited from domestic violence facilities with a flyer and consent form distributed in their mailbox. Interested participants were instructed to sign and return the informed consent form to a designated location. Those individuals who returned a consent form were contacted to set up a time to complete the study. Data collection took place inside the domestic violence shelters or in the participants’ homes in the case of those residing in transitional housing programs. All demographic and background questions and the measures were administered with a computer program on a laptop computer so that participants could anonymously and rapidly enter their responses. Administration of all measures took approximately 30 to 45 minutes. Participants received $10 compensation for their effort.

Results
All analyses were conducted using the SPSS for Windows statistical package. Because of the number of comparisons, the significance level was reduced to an alpha of .01. Results are provided initially for all outcome measures individually, although for the purposes of the multiple regression, affective components were standardized and combined into an Internalizing Emotion composite, consisting of scores from the BDI, BHS, BAI, and an Emotionality Composite, which further included the STAXI State Anger scores.
**Descriptive Statistics**

Means and standard deviations of all measures appear in Table 1. To summarize these findings, in terms of exposure to domestic violence, participants reported more frequent psychological abuse than physical abuse on the ABI, considerably higher than the averages reported in the Shepard and Campbell (1992) study. With respect to affective components, literature is available about the clinical uses of these measures. Obtained mean scores suggested that, on average, women suffered from moderate depression (A. T. Beck & Steer, 1987), moderate to severe anxiety (A. T. Beck & Steer, 1990), and clinically elevated anger (Spielberger, 1988) but were below the clinical cutoff for hopelessness (A. T. Beck, Brown, Berchick, Steward, & Steer, 1990).

**Correlations Among Demographic Variables and Outcome Measures**

Testing first for significant demographic and background differences, no significant differences across outcome measures were detected between Caucasians and the remaining respondents, or between Hispanic and non-Hispanic groups (t test comparisons, all \( p > .01 \)). No significant correlations were found among the outcome measures and participants’ income, participants’ number of children, abusers’ income, or time since separation (\( p > .01 \)). No significant differences across outcome measures were detected for participants’ educational level, the nature of their relationship to the abuser (e.g., husband vs. opposite sex boyfriend), nor whether their abuser was the father of their children (all \( p > .01 \)).

However, older women reported higher SOCQ action scores (\( r = .32, p < .01 \)) and greater likelihood to blame their partner on the RAM-R (\( r = .32, p < .01 \)) than younger respondents. Moreover, older women were marginally less preoccupied on the ASQ (\( r = -.22, p = .04 \)) but marginally more anxious (\( r = .23, p < .04 \)) than younger women. In addition, participants who had been in their abusive relationship longer obtained higher scores on the SOCQ precontemplation stage (\( r = .27, p < .01 \)). Finally, although the number of prior relationships was unrelated to readiness for change, increased prior experience with abusive partners was significantly correlated with depression scores (\( r = .45, p < .001 \)) and hopelessness scores (\( r = .37, p < .001 \)) and marginally correlated with the anxiety scores (\( r = .25, p = .02 \)).

**Correlations Among Outcome Measures**

Several intriguing significant correlations emerged among the outcome variables (see Table 1). Overall readiness to change (SOCQ total) was significantly correlated with all measures of emotion with the exception of the BHS, with which SOCQ total was marginally correlated. With respect to the various stages of change, precontemplation scores were significantly correlated with STAXI State Anger and marginally correlated with RAM-R attributional style scores. For the contemplation stage, no other measures were correlated, and only BAI anxiety scores were marginally correlated with SOCQ action scores. With the maintenance stage, however, all emotional and cognitive scores were significantly correlated with the exception of Discomfort with Closeness attachment scores, with which it was only marginally correlated.

Unexpectedly, the measure of frequency of abuse was associated with only some of the outcome measures. The ABI Physical Abuse subscale was significantly correlated with SOCQ precontemplation scores and marginally correlated with scores on the SOCQ total and the RAM-R. Otherwise, the ABI Physical Severity scores were not significantly correlated with the remaining outcome measures. The ABI Psychological Abuse scale was significantly correlated with SOCQ precontemplation, SOCQ total, and RAM-R attribution scores but only marginally correlated with SOCQ contemplation, SOCQ action, and STAXI State Anger scores.
Multiple hierarchical regression analyses were performed to predict the separate stages of change in the Conjoint Therapy for Abusive Relationships (CTAR) intervention. Cognitive-affective variables were not significantly correlated with SOCQ contemplation or action stages, so the additional regression analyses were limited to only the SOCQ precontemplation and maintenance scores. Demographic variables were entered in the first step for each regression, but none accounted for significant variance and were thus excluded. Relevant background controls were entered (e.g., ABI abuse severity scores, abusive relationship characteristics) and retained as warranted. In light of the CBT model's theory that cognitions prompt emotions, cognitive factors (attachment style scores for Discomfort for Closeness, Preoccupation with Relationship, and RAM-R attribution scores) were entered first, followed by the emotional factors. Scores from the four measures of emotion (BDI, BHS, BAI, and STAXI Anger) were entered both individually and as composites.

### Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</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>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. BDI</td>
<td>24.05</td>
<td>12.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. BHS</td>
<td>5.72</td>
<td>5.48</td>
<td>.73*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. BAI</td>
<td>26.74</td>
<td>14.13</td>
<td>.57**</td>
<td>.45**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. STAXI State Anger</td>
<td>22.91</td>
<td>6.96</td>
<td>.44**</td>
<td>.33*</td>
<td>.43**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Discomfort</td>
<td>44.53</td>
<td>8.93</td>
<td>.36**</td>
<td>.28*</td>
<td>.32*</td>
<td>.25*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Preoccupation</td>
<td>28.15</td>
<td>10.27</td>
<td>.28*</td>
<td>.21*</td>
<td>.32*</td>
<td>.23*</td>
<td>.41**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. RAM-R</td>
<td>30.52</td>
<td>4.85</td>
<td>-.10</td>
<td>-.14</td>
<td>-.02</td>
<td>.23*</td>
<td>.18</td>
<td>-.29*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. SOCQ Precontemplation</td>
<td>14.35</td>
<td>4.60</td>
<td>-.09</td>
<td>-.04</td>
<td>-.04</td>
<td>-.41**</td>
<td>-.10</td>
<td>-.12</td>
<td>-.21*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. SOCQ Contemplation</td>
<td>32.00</td>
<td>3.77</td>
<td>.09</td>
<td>.08</td>
<td>-.08</td>
<td>.17</td>
<td>.04</td>
<td>.17</td>
<td>.13</td>
<td>-.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. SOCQ Action</td>
<td>31.64</td>
<td>4.28</td>
<td>-.04</td>
<td>.21*</td>
<td>.14</td>
<td>-.13</td>
<td>-.04</td>
<td>.27*</td>
<td>-.08</td>
<td>.31*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. SOCQ Maintenance</td>
<td>25.85</td>
<td>6.73</td>
<td>.43**</td>
<td>.32*</td>
<td>.44**</td>
<td>.31*</td>
<td>.21*</td>
<td>.52**</td>
<td>-.28*</td>
<td>.10</td>
<td>.21*</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. SOCQ Total</td>
<td>75.09</td>
<td>11.49</td>
<td>.36**</td>
<td>.24*</td>
<td>.41**</td>
<td>.44**</td>
<td>.17</td>
<td>.43**</td>
<td>.07</td>
<td>.42**</td>
<td>.62**</td>
<td>.58**</td>
<td>.65**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. ABI Physical</td>
<td>3.21</td>
<td>1.31</td>
<td>-.01</td>
<td>-.05</td>
<td>.15</td>
<td>.20</td>
<td>.16</td>
<td>.03</td>
<td>.25*</td>
<td>-.36**</td>
<td>.08</td>
<td>.11</td>
<td>-.01</td>
<td>.21*</td>
<td></td>
</tr>
<tr>
<td>14. ABI Psychological</td>
<td>3.89</td>
<td>0.88</td>
<td>-.03</td>
<td>-.11</td>
<td>.05</td>
<td>.21*</td>
<td>.15</td>
<td>.00</td>
<td>.39**</td>
<td>-.45**</td>
<td>.22*</td>
<td>.24*</td>
<td>-.12</td>
<td>.29*</td>
<td>.67**</td>
</tr>
</tbody>
</table>

Note: BDI = Beck Depression Inventory; BHS = Beck Hopelessness Scale; BAI = Beck Anxiety Inventory; STAXI = State-Trait Anger Expression Inventory; RAM-R = Relationship Attribution Measure—Revised; SOCQ = Stages of Change Questionnaire; ABI = Abusive Behavior Inventory. a. p ≤ .05. Because the significance level was reduced to .01, this relationship was marginally significant. *p ≤ .01. ** p ≤ .001.
(internalizing emotion or emotionality as defined above) to determine which resulted in the most efficient final equation. A summary of these findings appears in Table 2.

For SOCQ total readiness scores, controlling for ABI Psychological severity scores, entry of all three cognitive component scores brought, $R = .53$, $F(4, 80) = 7.81$, $p < .001$. However, the RAM-R attribution scores and the Discomfort with Closeness attachment style scores did not contribute significant unique variance ($t = 1.23$ and $t = -0.92$, both $p > .05$). Therefore, only Preoccupation with Relationship was retained in the next step, in which the emotional factors were introduced. The most parsimonious final equation (see Table 2), controlling for ABI Psychological severity of abuse, included the preoccupation score and the emotionality composite score (the summed derivative of all four emotion scores), final $R = .61$, $F(3, 81) = 15.97$, $p < .001$.

To uncover how different components affected precontemplation and maintenance scores, the two endpoints of the stages of change, multiple regression analyses then turned to predicting the SOCQ precontemplation scores. Controlling for ABI Psychological severity and length of the current abusive relationship (ABI Physical severity was not retained), entry of all three cognitive component scores brought, $R = .53$, $F(5, 79) = 6.14$, $p < .001$. None of these three scores, however, contributed significant unique variance (discomfort $t = 0.56$, preoccupation $t = -1.29$, RAM-R attribution $t = -0.85$, all $p > .05$) to prediction of SOCQ precontemplation scores. The best final equation (see Table 2), controlling for ABI Psychological severity and length of current relationship, included only the STAXI State Anger scores, final $R = .58$, $F(3, 81) = 13.98$, $p < .001$.

With regard to predicting maintenance behavior, no control variables contributed significant unique variance. After inclusion of the three cognitive scores, $R = .54$, $F(3, 81) = 10.99$, $p < .001$. Only Preoccupation with Relationship, however, was retained given the nonsignificance of the other two cognitive scores (discomfort $t = 0.48$, RAM-R attribution $t = -1.51$, both $p > .05$). Finally, the most efficient prediction of SOCQ maintenance scores was achieved with the inclusion of the internalizing emotions composite (which does not include STAXI Anger), final $R = .61$, $F(2, 82) = 24.11$, $p < .001$ (see Table 2).

**Discussion**

The current study was designed to examine how cognitive behavioral theory (CBT) can apply to the Transtheoretical Model (TM) of change for victims of domestic violence. The TM would suggest that domestic violence victims would proceed through stages of readiness when deciding to end an abusive relationship. According to CBT, cognitions affect emotions that influence behavior, so cognitive and affective factors were identified in an attempt to predict women’s readiness to terminate their relationship with their batterer. Attributional and attachment style were selected from the domestic violence literature as the cognitive factors, and depression, hopelessness, anxiety, and anger were included as the affective predictors.

Overall readiness to end their abusive relationship, as measured by the SOCQ total score, was significantly predicted by preoccupied attachment style and an emotionality composite (the sum of all four scores on the measures of affect), controlling for severity of psychological abuse. In other words, the more preoccupied the victim is with her abuser, the more emotional she feels, the more likely she was to report being ready to end the relationship.

Regression analyses also distinguished which factors predicted precontemplation and maintenance, the two stages of readiness representing opposite ends of the TM that demonstrated initial correlations with the cognitive-affective predictors. Indeed, only low STAXI State Anger scores predicted high precontemplation, controlling for severity of psychological abuse and time invested in the relationship. In contrast, a preoccupied attachment style and internalizing emotions (depression, hopelessness, anxiety, but not anger) were predictive of behavior change in the maintenance stage.
In terms of the TM, this pattern of findings suggests that increased anger may be instrumental in moving women past the precontemplation stage, when they do not yet acknowledge the abuse as a problem. By the time they arrive at the maintenance stage, women appear to be experiencing internalizing emotions that reflect greater depression, pessimism about their future, and anxiety. In fact, prior researchers have discovered elevated depression in women who leave relationships compared to those who remain (Walker, 1984). This change in affective experience by the maintenance stage may be a consequence of accepting the end of their relationship with an abuser with whom they had once been attached or may be a sign of their adjustment to real changes in their life. This emotional response may also be a reaction to their preoccupation with the batterer, which also predicted maintenance behavior. Increased rates of preoccupied attachment styles have been previously encountered among domestic violence victims (Henderson et al., 1997), although one would imagine that such preoccupation would diminish by maintenance. However, part of the process of maintaining change involves a candid assessment of what could lead to relapse (Prochaska & Norcross, 2003); perhaps these women are actively engaged in an honest appraisal of their attachment to the abuser, which in turn precipitates their emotional response.

A preoccupied attachment style and emotional arousal in general, rather than any particular emotion, predicted overall readiness to end the domestic violence relationship. Thus, increased internalizing emotions and increased anger predicted readiness to change, with the notable shift being that although anger is low before she

<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Final Multiple Regression Results for SOCQ Total, Precontemplation, and Maintenance</strong></td>
</tr>
<tr>
<td>SOCQ Total Results</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>ABI psychological</td>
</tr>
<tr>
<td>Preoccupation</td>
</tr>
<tr>
<td>Emotionality composite</td>
</tr>
<tr>
<td>Intercept = 51.35</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Adjusted R² = .35</td>
</tr>
<tr>
<td>R = .61</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCQ Precontemplation Results</th>
<th>B</th>
<th>β Weights</th>
<th>t</th>
<th>sr²</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABI psychological</td>
<td>−.119</td>
<td>−.39</td>
<td>−4.18</td>
<td>.20**</td>
</tr>
<tr>
<td>Time in relationship</td>
<td>.015</td>
<td>.19</td>
<td>2.10</td>
<td>.06*</td>
</tr>
<tr>
<td>STAXI state anger</td>
<td>−.192</td>
<td>−.29</td>
<td>−3.08</td>
<td>.08*</td>
</tr>
<tr>
<td>Intercept = 25.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² = .34**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R² = .32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R = .58</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCQ Maintenance Results</th>
<th>B</th>
<th>β Weights</th>
<th>t</th>
<th>sr²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment: Preoccupation</td>
<td>.27</td>
<td>.41</td>
<td>4.48</td>
<td>.27**</td>
</tr>
<tr>
<td>Internalizing composite</td>
<td>.88</td>
<td>.33</td>
<td>3.63</td>
<td>.10**</td>
</tr>
<tr>
<td>Intercept = 18.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² = .37**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R² = .36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R = .61</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: STAXI = State-Trait Anger Expression Inventory; SOCQ = Stages of Change Questionnaire; ABI = Abusive Behavior Inventory. The table presents unstandardized regression coefficients (B) and intercept, standardized regression coefficient (β weights), semipartial correlation coefficients or incremental r² (sr²), squared multiple correlation coefficient (R²), adjusted squared multiple correlation (adjusted R²), and multiple correlations coefficient (R).
*p ≤ .01. **p ≤ .001.
is ready to change, anger appears to increase and motivate change. However, anger does not appear incompatible with more internalizing responses, as previously suggested (Walker, 1984). Experience of the full range of emotion may be at once overwhelming and/or liberating, perhaps propelling victims to change to cope with the situation.

Contrary to expectations, attributions about the abuse did not significantly correlate or predict most of the outcome measures. Thus, although earlier research has suggested that victims who blame their partners are more likely to be nervous, sad, and angry (Pape & Arias, 2000), attributional style was marginally correlated only with anger. Moreover, attributions did not contribute significant unique variance in predicting readiness to change beyond that accounted for by attachment style. Self-blame was, however, significantly correlated with greater preoccupation about the batterer. Interestingly, self-blame was also apparent to a marginal extent in pre-contemplation and then again in the maintenance stage, suggesting that at early stages, self-blame may serve to hinder confidence in leaving, but once they have left, self-blame may reflect taking control and responsibility for remaining away from the abuser (cf. Cascardi & O’Leary, 1992). In contrast, in this study, partner blame was marginally correlated with the action stage, when women would be most active in initiating observable behavioral changes (cf. Brown, 1997).

With respect to fearful attachment styles previously evident in findings on victims of domestic violence (Henderson et al., 1997), scores from the Discomfort with Closeness scale indicated that distrust was correlated to varying extents with depression, hopelessness, anxiety, and anger. Prior research has tied depression and anxiety to distrustful attachment style (Bartholomew et al., 2001). However, a distrustful attachment style did not explain significant unique variance in readiness to change. Thus, in comparison to a preoccupied attachment style, the fearful attachment style may not have as much influence on a woman’s decision to end an abusive relationship.

Surprisingly, abuse severity was not as powerful a predictor as anticipated, particularly severity of physical abuse. Previous researchers recommended controlling for abuse severity (e.g., Henderson et al., 1997). Neither the Physical nor the Psychological Abuse scale significantly correlated with any of the measures of emotion or attachment style. Of the two, the Psychological scale was the more powerful predictor, evidencing an association with partner blame and several stages of change. Thus, the Psychological Abuse scale predicted significant variance in overall readiness to change (with more severe abuse predicting greater motivation to change) and precontemplation (with less severe abuse predicting greater reluctance to change).

Finally, older women obtained higher action stage scores, were more likely to blame their partners and were less likely to be preoccupied with them. Yet women in longer term relationships with the abuser obtained higher precontemplation scores, reminiscent of the investment model (Rusbult, 1980). In addition, women who had a greater number of prior abusive partners were more likely to be depressed and hopeless about their future. Thus, although youth may diminish a woman’s confidence in her readiness to change, greater investment of time in a relationship also affects readiness, and a more extensive history of returning to violent situations appears to affect victims emotionally.

Several caveats to this study are warranted. Apart from sample size limitations, given the nature of the recruitment, few precontemplators were likely represented because most of the women who seek services have some level of awareness that abuse is a problem. To obtain a more representative sample across the TM stages of change, a larger sample of women, including those who have not yet sought services, would need to be studied, although such a population is admittedly more difficult to identify and recruit. Nonetheless, the results of this study should be applied primarily to women who seek support from social services. Furthermore, women who seek such services likely to do not represent the larger population of domestic violence victims because the women involved in this study are more likely a low-income sample with few economic resources. Future research should evaluate how such findings could apply to other samples of women who respond to abusive relationships in ways other than seeking social service support. Of particular interest is the experience of
middle- and upper-income women, which has traditionally been a difficult population for researchers to identify.

Another limitation of this study was its reliance on self-report measures. This limitation on method variance is most problematic when respondents are not candid in their responses. Efforts in the present study to ensure anonymity of responding may not have entirely quelled social desirability effects. Practicality often dictates dependence on self-report in research of this nature because many of these constructs are not readily observable by others. However, designs that potentially incorporate clinical reports of functioning to supplement self-report should be explored.

In addition, several modifications were made to some of the instruments utilized in this study. For example, although the Discomfort with Closeness scale measured distrust of others in general, the Preoccupation with Relationship scale targeted their attachment to the batterer specifically, which may account for why the Preoccupation scale was more clearly associated with readiness to change. Wording of the readiness to change scale and STAXI instructions were also altered to make them applicable to this population, with unknown affects on how this influenced responding. Finally, the RAM-R, which measures attributions, did not predict readiness as expected. The RAM-R, with only six items yielding a score that does not distinguish between different causal and responsibility dimensions, is limited and may obscure nuances in the attributions involved in influencing women’s decisions.

Future studies should also investigate motivation to change in women still in abusive relationships, typically a difficult population to pinpoint (Strube, 1988). Researchers have begun to acknowledge the fact that some battered women choose to remain with their partner despite a desire for the abuse to cease (Herbert, Silver, & Ellard, 1991). The process of ending abuse for these women who remain may be similar, wherein they temporarily leave their partner or obtain a restraining order, but they do not intend to permanently separate from their partner.

Therapists electing to apply the cognitive behavioral theory (CBT) therapeutically with domestic violence victims can utilize the results of this study by first evaluating how ready the victims are to terminate the abusive relationship. Findings from this study suggest that emotions play an important role in a woman’s decision to terminate her abusive relationship. Thus, emotional arousal could be considered an essential motivator rather than a hindrance to separating from the abuser. Labeling emotions in this population as pathological may be counterproductive. Moreover, pharmacological or therapeutic interventions that intend to decrease emotional arousal may have the unintended effect of decreasing a victim’s motivation to end the abusive relationship. Alternatively, acknowledging and exploring emotions such as depression, anxiety, and anger in therapy may be advantageous to reinforce a woman’s decision to leave, particularly as increased anger may prompt her to move from precontemplation.

In addition, the fact that preoccupation with the abuser was found to be a predictor of motivation to leave should be considered when working therapeutically with battered women. Worrying about the relationship and the abuser may enable the victim to further contemplate the nature of the abuse, as part of her cognitive appraisal of her circumstances, and thereby solidify her decision to terminate the relationship. Indeed, the very scrutiny of cognitions inherent in cognitive behavioral therapy (CBT) may increase the victim’s thinking about the abuser. Therapists may wish to discuss with the victim her continued preoccupation with the relationship after the separation from the abuser and acknowledge preoccupation as simply part of the process of ending abusive relationships.

The proposed model of change cannot provide a complete picture of what affects a victim’s decision to end an abusive relationship. The external forces that shape a woman’s decision, such as family or societal pressures, absent in this model, are undoubtedly important. This model attempted to integrate some of the intrapsychic facets discussed in the domestic violence literature, with the hope that ultimately research can expand to include both internal and external influences.
References


