

# College Women's Stay/Leave Decisions in Abusive Dating Relationships: A Prospective Analysis of an Expanded Investment Model

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## Abstract

The purpose of the current study was to explore college women's stay/leave decisions in abusive relationships using a prospective methodology. Participants ( $N = 323$ ) completed surveys at the beginning and end of a 10-week academic quarter for course credit. A path analysis suggested that the model—which included investment model variables (i.e., relationship commitment, investment, satisfaction, and quality of alternatives), childhood abuse, psychological distress, avoidance coping, and self-esteem—was a good fit to the data and predicted abused women's leaving behaviors over the interim. The implications of these findings for future research, theory, and clinical work are discussed.

## Keywords

abusive relationships, college women, relationship stability, investment model, stay/leave decisions

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Intimate partner violence, including dating violence, is a serious problem in our society. In fact, the majority of women will experience some type of dating violence during their lifetime (Edwards, Desai, Gidycz, & VanWynsberghe, 2009; Lewis & Fremouw, 2001). Research suggests that many women remain in abusive relationships. For example, Katz, Kuffel, and Brown (2006) found that 85% of college women reported remaining in their sexually coercive relationships over a 6- to 8-week interim. However, there is a paucity of well-designed and theoretically sound research examining women's stay/leave decisions in abusive dating relationships. Accordingly, the purpose of the current study was to explore this gap in the literature using a prospective design and the investment model as a guiding theoretical paradigm. The investment model was selected given the burgeoning body of empirical research to suggest that this theory is the most promising to predict women's stay/leave decisions in abusive relationships (for a review, see Rhatigan, Street, & Axsom, 2006).

The investment model (Rusbult, 1980, 1983; Rusbult & Martz, 1995), predicated on interdependent theory (Kelley & Thibaut, 1978), asserts that individuals who remain in relationships evidence greater relationship commitment than those who terminate relationships. This commitment is a function of greater relationship investment, greater relationship satisfaction, and fewer perceived alternatives. Unlike violence-specific theories (e.g., theory of learned helplessness, theory of traumatic bonding), which focus more on individual variables (e.g., psychological distress, self-esteem), the investment model is a general social-psychological theory that stresses the importance of interdependent processes in the stay/leave decision-making process. Although most stay/leave research to date has been conducted with women in domestic violence shelters, there have been three published studies with college students that have provided support for the investment model in predicting stay/leave intentions and behaviors in both abusive and nonabusive relationships (Katz et al., 2006; Rhatigan & Street, 2005; Truman-Schram, Cann, Calhoun, & Vanwallendael, 2000). For example, Rhatigan and Street (2005) found that the four investment model variables collectively accounted for 57% of the variance in women's stay/leave intentions in physically abusive dating relationships. Katz and colleagues (2006) conducted a prospective path analysis and found indirect effects of partner sexual coercion on relationship commitment through greater relationship investment. Commitment was the only variable directly associated with women's leaving behaviors over the 6- to 8-week interim and accounted for 24% of the variance in the criterion variable.

Research suggests that relationship abuse affects investment model variables. For example, using a sample of college women, Rhatigan and Street (2005) found that both psychological and physical victimization were negatively related to satisfaction and commitment but unrelated to perceived alternatives

and investment. In another sample of college women, Katz et al. (2006) found that intimate partner sexual coercion was related to lower investment but unrelated to satisfaction, commitment, or perceived alternatives. As demonstrated by these conflicting findings, it is unclear how relationship abuse is related to college women's perceptions of investment model variables. Furthermore, there is also conflicting evidence about the role of partner abuse in women's stay/leave intentions and decisions with some research suggesting that more severe and frequent abuse is related to relationship termination and other research finding no association (for a review, see Rhatigan et al., 2006).

Whereas there is burgeoning research to suggest that relationship abuse affects investment model variables and that investment model variables affect relationship stability, there is less research examining the historical and personal factors that shape women's perceptions of investment model variables. Although research with general samples (where abuse was not assessed) suggests that certain variables such as attachment (Jones & Cunningham, 1996), self-esteem (Kam, Spitzberg, & Roesch, 2009), Big Five personality factors (Watson, Hubbard, & Weise, 2000), and frequency of displeasurable events (Barnett & Nietzel, 1979) are related to people's levels of satisfaction in relationships, no research has assessed the factors that shape abused women's perceptions of investment model variables. This is especially surprising due to recommendations in the literature to integrate various stay/leave theories to maximize explanatory and predictive power (Choice & Lamke, 1997; Strube, 1988). It is possible that historical (e.g., childhood abuse) and personal (e.g., psychological distress, self-esteem, coping) variables from violence-specific theories shape abused women's perceptions of the investment model variables. Two of the most commonly cited violence-specific theories in the literature are social learning theory and the theory of learned helplessness (for a discussion, see Rhatigan et al., 2006).

Consistent with social learning theory (Bandura, 1969, 1977) and the intergenerational transmission of violence theory (Widom, 1989), it has been theorized that women who experience abuse in childhood are less likely to terminate abusive relationships than women not abused in childhood (Rhatigan et al., 2006). Specifically, survivors of childhood abuse may be less likely to terminate abusive relationships because they have more tolerance for mistreatment based on early life experiences and resulting interpersonal schemas (Cloitre, Cohen, & Scarvalone, 2002; Ehrensaft et al., 2003). However, the research on childhood abuse and abused women's stay/leave intentions and behaviors is mixed (see Rhatigan et al., 2006). It is possible that childhood abuse may have an indirect effect on women's stay/leave decisions and more directly shape women's perceptions of investment model variables. In fact, DiLillo, Lewis, and Di Loreto-Colgan (2007) found that college women with

a history of childhood abuse reported poorer subsequent relationship functioning than their nonabused peers.

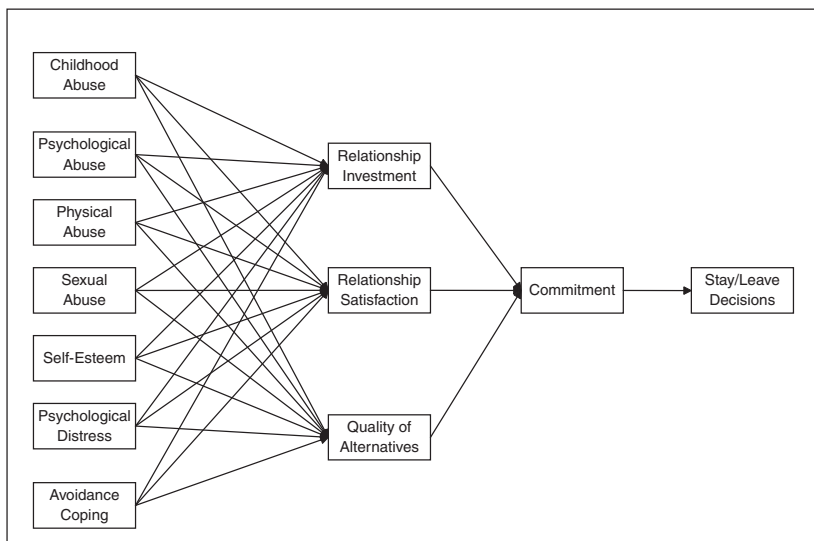
The theory of learned helplessness (Seligman, 1975; Walker, 1979) suggests that despite abused women's attempts to control abusive situations, their efforts lead to little (or no) change and result in feelings of helplessness. Consequentially, according to this theory, women demonstrate affective (e.g., psychological distress, low self-esteem) and cognitive (i.e., avoidance coping) effects, which reduce their likelihood of relationship termination. The research evidence with this theory's ability to explain abused women's stay/leave intentions and behaviors is mixed and has only been conducted with battered, community women (see Rhatigan et al., 2006, for a review). It is possible that variables from this theory—specifically psychological distress, self-esteem, and avoidance coping—may shape college women's perceptions of investment model variables. For example, in a sample of women with childhood abuse histories, psychological distress was predictive of relationship functioning (DiLillo et al., 2007). Furthermore, Kam et al. (2009) found in their sample of nonabused college students that self-esteem was positively related to quality of alternatives.

Taken together, there is growing support of the investment model's ability to predict women's stay/leave intentions and decisions in dating relationships (Katz et al., 2006; Rhatigan & Street, 2005; Truman-Schram et al., 2000). However, no previous research has comprehensively assessed how historical and personal variables shape abused women's perceptions of investment model variables. Furthermore, no previous research of the investment model has concurrently defined abuse inclusively (physical, sexual, and psychological), utilized a prospective methodology, and sampled nontreatment-seeking college women in dating relationships. The purpose of the current study was to explore these gaps in the literature. This type of research is useful to expand on existing theory and develop empirically sound interventions for college women in abusive relationships. Based on previous research, we hypothesized (see Figure 1) that the investment model would be a good fit to the data. Given the dearth of existing research to allow for specific, directional hypotheses among historical and personal variables and investment model variables, all possible paths were tested.

## **Method**

### *Participants*

Participants included 323 women who reported at least one incident of sexual, physical, or psychological abuse in their current relationship and attended both Time 1 (T1) and Time 2 (T2) study sessions. This sample was



**Figure 1.** Hypothesized model

Note: All variables were assessed at Time 1 except stay/leave decisions, which were assessed at the 10-week follow-up.

derived from a larger sample that included 506 women, 446 (88%) of whom returned for the 10-week follow-up. Of the 446 women who returned, 323 (72%) reported at least one experience of abuse at T1. The final sample ( $N = 323$ ) was comprised of largely young ( $M$  age = 18.89,  $SD = 0.96$ ) and 1st-year students (66%). The majority of the sample was White (91%), with the remaining participants identifying as Black (5%), Latino or Hispanic (2%), Asian (<1%), American Indian (<1%), or multiracial (<1%). Furthermore, the vast majority (88%) of participants reported combined annual family incomes greater than US\$50,000. The duration women reported being in a relationship with their current partner at T1 ranged from 1 month to 6 years ( $M = 20.73$  months,  $SD = 16.11$  months).

## Measures

**Demographics.** A demographics questionnaire was used to assess descriptive variables of interest, such as age, racial identity, and family income. This questionnaire also inquired about participants' past and current dating status at both T1 and T2. At T2, this survey contained questions assessing if participants were still in a dating relationship with their T1 partner and, if not, identifying whether the relationship was ended by the participant, the participant's

partner, or the decision was mutual. Consistent with previous research (Katz et al., 2006), the three women who indicated that their partners left them were not included in the analyses. Leaving one's partner over the interim was a dichotomous variable (0 = *still with current partner*; 1 = *participant left partner or decision to terminate was mutual*).

**Current partner abuse.** The Revised Conflict Tactics Scale (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) was used to identify women in relationships where they had experienced physical (e.g., "pushed or shoved me"), sexual (e.g., "made me have sex without a condom"), and/or psychological (e.g., "called me fat or ugly") victimization and the number of times women experienced each type of victimization in their current relationships. We did not measure women's perpetration of dating abuse. The CTS2 is the most widely used measure to assess intimate partner violence and has good psychometric properties. In the current study, the internal consistency was .71 for physical abuse, .49 for sexual abuse, and .70 for psychological abuse. Using the CTS2, each of the different types of partner abuse were continuous variables in the path analysis.

**Childhood interpersonal trauma.** The Early Trauma Inventory Self-Report–Short Form (ETISR-SF; Bremner, Vermetten, & Masure, 2000) was used to assess childhood physical abuse (e.g., "punched or kicked"), sexual abuse (e.g., "forced or coerced to perform oral sex"), and psychological abuse/neglect (e.g., "often ignored or made to feel that you didn't count"). The ETISR-SF is a valid and reliable instrument for the measurement of early traumatic experiences (Bremner et al., 2000). Using the ETISR-SF, childhood abuse was a composite variable of physical abuse, sexual abuse, and psychological abuse/neglect, and participants were coded as either 0 (*no childhood abuse*) or 1 (*any childhood abuse*). The internal consistency among the items on the ETISR-SF was .78.

**Coping style.** The Avoidance Coping subscale of the Coping Strategy Indicator (Amirkhan, 1990) was used to assess the degree to which participants use avoidance coping in dealing with problems in their current relationship. Example items include "keep others from seeing how bad it is" and "fantasize that things are different." The internal consistency of the Avoidance Coping subscale was .85. Higher scores on this subscale are indicative of greater use of avoidance coping.

**Self-esteem.** The 10-item Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1979) is the most widely used measure of self-esteem in social science research and possesses good psychometric properties (Hojat & Lyons, 1998; Sheasby, Barlow, Cullen, & Wright, 2000; Wylie, 1989). An example item is "I take a positive attitude toward myself." The internal consistency of the RSE in the current study was .90. Higher scores on the RSE indicate greater self-esteem.

**Psychological distress.** Psychological distress associated with intimate partner violence was assessed by the Trauma Symptom Checklist-40 (Briere & Runtz, 1989). A total score was computed that includes a wide range of symptom constellations: anxiety (e.g., "anxiety attacks"), depression (e.g., "sadness"), dissociation (e.g., "spacing out"), posttraumatic stress disorder (PTSD; for example, "flashbacks"), sexual problems (e.g., "low sex drive"), and sleep disturbances (e.g., "restless sleep"). All items were summed to create a total score, with higher scores indicating greater psychological distress. The internal consistency in the current study was .92.

**Investment model.** The Investment Model Scale (IMS; Rusbult, Martz, & Agnew, 1998) was administered to assess relationship satisfaction (e.g., "I feel satisfied with our relationship"), quality of alternatives (e.g., "My alternatives to our relationship are close to ideal"), investment size (e.g., "I have put a great deal into our relationship that I would lose if the relationship were to end"), and commitment (e.g., "I am committed to maintaining my relationship with my partner"). Each of the subscales is a continuous variable. In the current sample, the internal consistencies were as follows: satisfaction (.91), quality of alternatives (.84), investment (.79), and commitment (.88).

## **Procedure**

Participants were recruited through introductory psychology courses at a medium-size, Midwestern, public university and received course credit for their participation. To participate in the study, women were required to be at least 18 years of age and currently in a heterosexual dating relationship. The description of the study provided to potential participants was "An Examination of Dating Relationships." Both T1 and T2 group-testing sessions were identical in format, which included informed consent, survey completion, and debriefing. T2 occurred approximately 10 weeks after T1; this time frame was used based on the structure of the academic quarters at the university where the research was conducted. All research was conducted in compliance with the University's Internal Review Board.

## **Results**

### ***Descriptive Statistics***

Of the 446 women who participated in both survey sessions, 323 (72%) reported at least one experience of abuse at T1 perpetrated by their current partner. Of the 323 abused women, 98% reported psychological abuse (range = 0-94;  $M = 11.98$ ;  $SD = 15.23$ ), 19% reported physical abuse (range = 0-47;

$M = 0.86$ ;  $SD = 3.61$ ), and 32% reported sexual abuse (range = 0-50;  $M = 2.23$ ;  $SD = 6.19$ ). As evidenced by these descriptive statistics, for most participants the abuse was chronic. Furthermore, participants were more likely to report moderate forms of dating abuse (e.g., “insulted or swore at me,” “slapped me,” “insisted on having sex when I did not want to”) as opposed to severe forms of dating abuse (“destroyed something belonging to me,” “used a knife or gun on me,” “used force to make me have sex”), as defined by the CTS2 (Straus et al., 1996). Longitudinal analyses suggested that 12% ( $n = 40$ ) of women in abusive relationships reported at T2 that they left their partners over the interim.

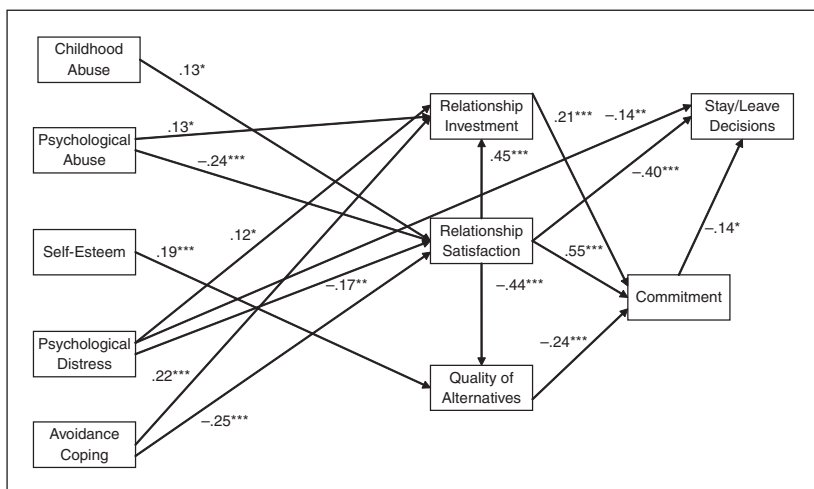
### Path Analysis

We used AMOS 7.0 (Arbuckle, 1999) to test the fit of the hypothesized model (Figure 1) to the data. The goodness-of-fit chi-square statistic was used to provide a test of the hypothesized model; a nonsignificant chi-square statistic is desirable because it indicates that there is not a significant difference between the model and the data. Several goodness-of-fit indices were also used to examine the fit of the model to the data. These include the Comparative Fit Index (CFI), Tucker–Lewis Index (TLI), and root mean square error approximation (RMSEA). For the CFI and TLI, values close to 0.95 and higher are evidence of an appropriate fit; for the RMSEA, values close to 0.06 and lower are evidence of an appropriate fit (Hu & Bentler, 1996; Loehlin, 2004).

Initial results revealed unacceptable goodness-of-fit indices,  $\chi^2(20, N = 323) = 164.30$ ,  $p < .001$ ; CFI = 0.83; TLI = 0.47; RMSEA = 0.15. Therefore, given the largely exploratory nature of the study, modification indices provided by the program AMOS were examined and the model was revised to include an additional path from satisfaction to investment, satisfaction to quality of alternatives, satisfaction to stay/leave decisions, and psychological distress to stay/leave decisions. Nonsignificant paths were also deleted from the model (Garrison, 2009). As demonstrated by the goodness-of-fit indices, the revised model (see Figure 2) was a good fit to the data,  $\chi^2(28, N = 323) = 34.52$ ,  $p = .18$ ; CFI = 0.99; TLI = 0.98; RMSEA = 0.03. The final model accounted for 22% of the variance in satisfaction, 19% of the variance in investment, 20% of the variance in quality of alternatives, 60% of the variance in commitment, and 24% of the variance in T2 stay/leave decisions.

With regards to the standardized path coefficients, greater investment was predicted by more frequent psychological abuse ( $\beta = .13$ ,  $p < .05$ ), greater psychological distress ( $\beta = .12$ ,  $p < .05$ ), and greater avoidance coping ( $\beta = .22$ ,  $p < .001$ ). Higher levels of satisfaction were predicted by a history of





**Figure 2.** Modified model

Notes: All variables were assessed at Time 1 except stay/leave decisions, which were assessed at the 10-week follow-up. All exogenous variables were correlated. For the criterion variable, stay was coded as 0 and leave was coded as 1.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

childhood abuse ( $\beta = .13, p < .05$ ), less frequent psychological abuse ( $\beta = -.24, p < .001$ ), less psychological distress ( $\beta = -.17, p < .01$ ), and less avoidance coping ( $\beta = -.25, p < .001$ ). Higher levels of perceived quality of alternatives were predicted by greater self-esteem ( $\beta = .19, p < .001$ ) and less satisfaction ( $\beta = -.44, p < .001$ ). Higher levels of commitment were predicted by greater investment ( $\beta = .21, p < .001$ ), greater satisfaction ( $\beta = .55, p < .001$ ), and less perceived quality of alternatives ( $\beta = -.24, p < .01$ ). Finally, T2 reports of leaving were predicted by less T1 commitment ( $\beta = -.14, p < .05$ ), less T1 satisfaction ( $\beta = -.40, p < .001$ ), and less T1 psychological distress ( $\beta = -.14, p < .01$ ).

## Discussion

The current study explored women's stay/leave decisions in abusive dating relationships. Descriptive analyses suggested alarming rates of dating violence and that 88% of women reported at T2 that they were still with their T1 dating partners. Moreover, path analytic results provided support for the investment model in predicting stay/leave decisions and identified factors that shape investment model variables.

Similar to proposed theory (Rusbult, 1980, 1983; Rusbult & Martz, 1995), greater investment, greater satisfaction, and poorer quality of alternatives all predicted greater commitment, which directly predicted women's T2 decisions to remain with their partners. Furthermore, greater psychological distress and greater satisfaction directly predicted women's T2 decisions to remain with their partners. Consistent with the theory of learned helplessness (Seligman, 1975; Walker, 1979), women experiencing high levels of psychological distress may not feel efficacious in their ability to leave their partners. Furthermore, higher levels of satisfaction emerged not only as a predictor of relationship stability but also predicted greater investment, greater commitment, and poorer quality of alternatives. Based on these data, it appears as if satisfaction is a salient factor that directly affects other investment model variables and women's stay/leave decisions.

The results from the study also shed important light on the variables that shape women's perceptions of investment model variables. Consistent with the social learning theory (Bandura, 1969, 1977) and intergenerational transmission of violence theory (Widom, 1989), a history of childhood abuse predicted women's perceptions of satisfaction in their abusive relationships. Specifically, women who were abused in childhood were more satisfied with their current relationships than women who were not abused in childhood. It is possible that women with childhood abuse histories are more satisfied in their relationships than women without childhood abuse histories because they have more tolerance for mistreatment based on early life experiences and resulting interpersonal schemas. This satisfaction, then in turn, leads to relationship stability.

Personal variables—self-esteem, psychological distress, and avoidance coping—also affected perceptions of investment model variables. Consistent with research with nonabused dating individuals (Kam et al., 2009), abused women with greater self-esteem reported better quality of alternatives than women with lower self-esteem. Furthermore, women with higher levels of psychological distress and women who relied on avoidance coping were *less satisfied* in their relationships. On the contrary, women with higher levels of psychological distress and women who relied on avoidance coping were *more invested* in their relationships. On examining the individual items (e.g., “keep others from seeing how bad it is” and “fantasize that things are different”) that make up the Avoidance Coping subscale of the CSI (Amirkhan, 1990), it seems as if those high on avoidance coping are acknowledging problems in their relationships (even if they are not dealing with them in an active way), which, in combination with psychological distress, contributes to decreased relationship satisfaction. However, inverse relationships were

observed among these two variables and relationship investment. It is possible that investment in abusive relationships is related to increased denial and avoidance coping and that women justify their maintained investment in the relationship by hoping that things in the relationship will simply improve on their own. Taken together, these data suggest that psychological distress and avoidance coping have differential relationships with relationship satisfaction and investment.

In addition to historical and personal variables as predictors of investment model variables, the frequency of psychological abuse was positively related to investment and negatively related to satisfaction. Other studies (e.g., Rhatigan & Axsom, 2006; Rhatigan & Street, 2005) have also found that psychological abuse is positively related to relationship investment. Rhatigan and Street (2005) suggested that the more psychological abuse women are exposed to, the more energy and effort they put forth to resolve the conflict, thus leading to increases in perceived investment. Although psychological abuse was negatively associated with satisfaction, which is consistent with previous research (e.g., Rhatigan & Axsom, 2006; Rhatigan & Street, 2005), neither sexual abuse nor physical abuse predicted any of the investment model variables. Assuming that this is a reliable finding, it is possible that the severity of these types of abuse (Rhatigan et al., 2006) or the meaning women ascribe to these types of abuse (Katz et al., 2006) are more predictive of investment model variables than the frequency with which they occur. This finding could also be related to the fact that the vast majority of abused women endorsed moderate levels of sexual and physical abuse, as opposed to severe levels of abuse, as defined by the CTS2.

Although this study contributes to our knowledge of women's leaving processes in abusive dating relationships, several limitations should be noted. The most notable limitation is the relatively small number of women who left abusive relationships over the follow-up period. Furthermore, the sample was homogeneous, which limits the generalizability of these results to diverse (e.g., racial minorities, same-sex couples) college students. Based on these two limitations, future research should use larger, more diverse samples. Also, the 10-week follow-up was a relatively short interim period chosen based on the structure of the academic calendar, which did not capture women who left their partners after this period of time. Moreover, the methodology of this study did not allow for women who left their partners immediately following the initial incident of abuse to be included in the study given that all women at T1 had remained for at least some time following the initial incident of abuse. Taken together, future research should use multiple follow-up periods beginning in developmental periods prior to the time when

adolescents begin to date. An additional limitation is that we did not measure the degree to which women feared their partners at T1 or stalking or abuse subsequent to relationship termination at T2. Given that research suggests these are important variables in the leaving process (for reviews, see Anderson & Saunders, 2003; Rhatigan et al., 2006), future research should incorporate measures to assess these variables. In addition, in light of the high rates of psychological abuse found in the study, some of the verbalization items on the CTS could be construed as arguing rather than aggression. Furthermore, the internal consistency of the sexual abuse subscale of the CTS2 was low. However, researchers (i.e., Koss et al., 2007) have suggested that measures of internal consistency are not appropriate for victimization measures because internal consistencies imply that all experiences are interrelated, suggesting that a common characteristic exists that causes women to be abused or assaulted in multiple ways. Furthermore, Koss et al. (2007) asserted that the way these measures are used in research (e.g., as a selection tool) do not require that experiences are interrelated. A final limitation is that we did not administer the perpetration subscales of the CTS2. Although research suggests that there are gender differences in motivations for engaging in partner abuse and consequences of abuse (Dasgupta, 1999; McHugh, Livingston, & Ford, 2005; Tjaden & Thoennes, 2000), research does suggest that women perpetrate verbal and physical aggression at similar rates to men (for a review, see Archer, 2000). Taken together, future research should use alternative measures to the CTS2 and assess the role of women's use of aggression in relationship stability.

These data have important implications for intervention and counseling with college women in abusive relationships. Specifically, these data suggest that it is important for therapists to consider relationship variables (i.e., commitment, satisfaction, quality of alternatives, and investment) and the factors that shape relationship variables when working with college women who present to therapy in abusive relationships. Furthermore, it may be especially important for clinicians to make a distinction between relationship investment and satisfaction, given their differential relationships with psychological distress and avoidance coping. In addition, it could be effective for therapists to process with their clients the factors that shape their perceptions of relationship variables. For example, it might be important to explore interpersonal patterns with women who report childhood abuse histories and how this relates to their current levels of satisfaction in an abusive relationship. Finally, given that relationship satisfaction was the single most predictive variable of college women's stay/leave decisions (and other investment model variables), this is likely an important component for therapists to include in their

conceptualization and treatment plan with college women who present to therapy in abusive relationships.

When discussing the clinical implications of women's stay/leave decisions, it is important to note that therapists' encouragement regarding the stay/leave process with abused women is a controversial topic (see Edwards, Merrill, Desai, & MacNamara, 2008, for a discussion). Whereas therapists consider many variables in their conceptualization and treatment of women in abusive relationships, ultimately it is the client's decision whether she stays or leaves. However, as therapists, we want to empower our clients and provide them with possible alternatives to their abusive relationships. Research such as the current study is useful to clinicians in understanding the variables that affect this complex decision-making process.

In conclusion, the current study is the first attempt to test an expanded investment model to explain women's stay/leave decisions in abusive dating relationships using a prospective methodology. Perpetrators are always responsible for all acts of intimate partner violence, and efforts should be focused on prevention and intervention efforts for high-risk and offending populations. However, it is critical that researchers and clinicians continue to understand the factors that contribute to women's leaving processes so that the most effective intervention programming and therapeutic techniques can be created for this population.

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The authors declared that they had no conflicts of interests with respect to their authorship or the publication of this article.

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## Bios

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