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EXPANDING THE THEORY OF TRAUMATIC BONDING AS IT RELATES TO
FORGIVENESS, ROMANTIC ATTACHMENT AND INTENTION TO RETURN

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ABSTRACT

Various empirically validated theories have explained the phenomenon of women in abusive relationships engaging in a repeated leave/return cycle when trying to terminate the relationship. The current study was designed to add to the already existing theories that focus on factors constraining women to stay in abusive relationships by evaluating the relationship between traumatic bond, forgiveness, and intention to return to the abusive relationship, and by evaluating the relationship between traumatic bond, attachment to abusive partner, and intention to return. The current sample consisted of 121 women residing in both urban and rural emergency domestic violence shelters. Forgiveness was found to partially mediate the relationship between traumatic bond and intention to return, and traumatic bond mediated the relationship between preoccupied attachment to the abusive partner and intention to return to the abusive relationship. These findings suggest that in this specific population it is important to not only address constraint variables (e.g., income, employment, child care, etc.), but to also address variables regarding the individual's emotional attachment to the relationship. Addressing these variables could be important new and additional points of intervention for women living in emergency domestic violence shelters.

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INTRODUCTION AND BACKGROUND RESEARCH

At one time or another every woman in an abusive relationship must ask herself, ‘should I stay or should I go?’ However, before answering this seemingly simple question the woman has to face even more questions, and this original question of ‘should I stay or should I go’ becomes a complex analysis of what this woman’s life is and what her life could be. Much of the previous research on an abused woman’s decision to leave the abusive relationship found that external resources (e.g., income, transportation, employment) are very important in influencing the woman’s decision (e.g., Strube, 1988; Rusbult, 1980). At the same time, there is evidence that other variables unique to the individual and the relationship play a key role in predicting not only the woman’s decision to leave the abusive relationship, but whether or not she will return to the abusive relationship after she has initially decided to leave (e.g., Dutton & Painter, 1981; Gordon, Burton, & Porter, 2004).

This complex analysis of ‘should I stay or should I go’ has been broken down into two additional questions; ‘Will I be better off’ and ‘Can I do it’ (Choice & Lake, 1997). The question ‘will I be better off’ involves the consideration of the woman’s quality of alternatives, which is defined as comparing the costs and benefits of the current relationship to the costs and benefits of alternative relationships or being on one’s own (Strube, 1988). First, the abused woman evaluates whether the total costs (e.g., exposing self and possible children to violence, being isolated from friends and family, etc.) outweigh the total benefits (e.g., feeling loved, being provided for, having another parent

to help) of the current abusive relationship, which includes her subjective measure of relationship satisfaction. She then must compare her satisfaction with this current relationship to her estimate of satisfaction with alternative relationships or with being alone, should she leave the current abusive relationship (Strube, 1988). Pfouts (1978) found 80% of a sample, comprised of 35 women, left their abusive relationship when benefits of alternative relationships exceeded the costs of alternative relationships. Similarly, Rhatigan and Axsom (2006) found that not only did relationship satisfaction significantly predict relationship commitment, but quality of alternatives and investments did as well, such that higher levels of relationship satisfaction and investment size and lower levels of quality of alternatives led to an increased level of commitment to the relationship. Furthermore, when looking at psychological aggression and commitment, relationship satisfaction mediated the association between psychological aggression and commitment. More specifically, higher levels of psychological aggression predicted lower levels of commitment, but when controlling for relationship satisfaction psychological aggression ceased to predict commitment (Rhatigan & Axsom, 2006). Interestingly, this research implies that even though aggression can have negative effects on a relationship there are other possible mechanisms of the relationship that might lead to lower or higher levels of commitment, such as relationship satisfaction, attachment, and forgiveness.

The next question in this analysis, 'Can I do it?' is often referred to as the constraint variables (Choice & Lamke, 1997). These constraint variables are comprised of variables that in some way limit one's ability to succeed. More specifically, constraint variables for a battered woman considering leaving an abusive relationship would be

factors in her life that would inhibit her from leaving, such as having children, not working outside of the home, and not being able to provide transportation for oneself and/or children. Furthermore, constraint variables can be broken down into two categories: (1) personal resources and barriers, and (2) structural resources and barriers (Choice & Lamke, 1997). Personal resources and barriers are variables that consist of personal, internal traits that one does or does not possess, such as self-esteem, self-efficacy, problem solving skills, passivity, etc. (Choice & Lamke, 1997). On the other hand, structural resources and barriers include external variables, such as income, employment, transportation, and number of children (Choice & Lamke, 1997).

Although quality of alternatives and constraint variables are strongly predictive of whether or not a woman will leave an abusive relationship, other potential factors in this decision have been largely neglected. The process of leaving an abusive relationship does not necessarily end after the woman has initially left. Even after the woman has left the abusive relationship and utilized available resources well, the process continues as she transitions into a new life, and often during this transition the woman will maintain emotional connectedness, continue sexual contact, and return to the abusive relationship, often repeating this cycle of leaving and returning to the relationship many times (Henderson, Bartholomew, & Dutton, 1997). It seems as though relationship termination is a long process that can be influenced by different variables at different times throughout the process. For example, women in emergency domestic violence shelters have already made the initial decision to leave their abusive relationships, and it may be that the constraint and quality of alternative variables listed above are most important when making the initial decision to leave the relationship, but might have less predictive

value when predicting their intent to return to the relationship.

The aim of the current study is to further analyze this process of leaving an abusive relationship and to better understand the decision process of whether an abused woman will return to an abusive relationship once she has already left. Rhatigan, Street, and Axsom (2006) reviewed the current theories of violent relationship termination and called for research that develops and furthers our knowledge of theories of violent relationship termination. The current study builds upon the previous literature by examining forgiveness and romantic attachment in the context of the traumatic bonding theory. Previous research has found associations between forgiveness and intent to return (Gordon, Burton, & Porter, 2004), and insecure romantic attachment and multiple relationship separations in abusive relationships (Henderson, Bartholomew, & Dutton, 1997). The current study intends to further explore the effects of forgiveness and romantic attachment on intent to return by relating them to the theory of traumatic bonding.

Traumatic Bonding

Traumatic bonding, which results from an imbalance of power and intermittency of abuse within a relationship (Dutton & Painter, 1993), attempts to explain why women who have initially left an abusive relationship return to it. The imbalance of power is a particular dynamic of an abusive relationship, such that the balance of power is offset during times of abuse, but during other phases of the relationship (i.e., a honeymoon phase after an abusive episode) the power may be fairly balanced. Dutton and Painter (1981) have theorized that strong emotional bonds are produced in relationships where

the abuse is not constant, but the abuse is often counterbalanced by positive behaviors, thus subjecting the victim to periods of both abuse and positive behaviors. Walker (1979) identified a cyclical pattern of domestic violence through detailed interviews with 120 battered women, in that (1) tension builds, (2) an explosive battering incident occurs, and (3) the batterer becomes calm, loving, and apologetic. Learning theory suggests that intermittent abuse and its accompanying positive restitution behaviors might be partial or intermittent reinforcement, which is highly effective in producing unrelenting patterns of behavior that are extremely difficult to extinguish (Amsel, 1958). In a study by Dutton and Painter (1993) investigating post-separation attachment with the abusive partner, both intermittency of abuse and changes in power due to battering were found to be strong predictors of post-separation attachment, thus suggesting traumatic bonding, or post-separation attachment, to be a probable variable contributing to the repeated leave-return cycle.

In the context of Stockholm Syndrome, Graham, Rawlings, and Rimini (1988) compared the psychological mechanisms of victims in hostage situations to those of battered women. More specifically, Graham and colleagues (1988) found similarities between hostage situations and domestic violence in domination strategies and strategies for survival. Their model illustrated how extreme power between an abuser and victim can lead to strong emotional bonding. It is further noted within this model that the strong emotional bond observed in battered women and hostages is likely a result from the life threatening situation, not a cause. Thus, this model posits that four conditions must be present for the development of Stockholm Syndrome. First, a person threatens the life of another, possibly through violence. Second, the threatened person cannot escape, and

thus is dependent on the abuser. Third, the threatened person is isolated from others, thereby eliminating any possible alternative relationships and sources of support. Finally, the abuser shows some degree of kindness to the threatened person (Graham et al, 1988). The above four conditions are consistent with the model of traumatic bonding, in that the above conditions illustrate both the power imbalance and/or intermittent abuse that are central to Dutton's and Painter's theory.

Romantic Attachment

Bowlby (1969) defined infant attachment as a bond developed with some other differentiated and preferred individual who is conceived as stronger and/or wiser. Bowlby further posited that a secure attachment is often formed with a consistently nurturing and responsive other. However, Bowlby also highlighted that not only will the attachment persevere during maltreatment from an attachment figure, but abuse may actively maintain or enhance the strength of the attachment relationship. Whereas, attachment research originated in the parent-child relationship, more recently romantic love has been theorized as an attachment process (Hazan & Shaver, 1987). Hazan and Shaver (1987) found similar proportions of attachment styles among adults as were found in previous studies investigating attachment between an infant and caregiver, suggesting early life experiences may play an important role in adult romantic relationships and attachment styles. Furthermore, it is important to note the differences between secure and insecure attachment styles when identifying important love experiences. It was found that adults with insecure attachment style were less likely to have experienced friendship than adults with a secure attachment style, but were more likely to have a fear

of closeness and experience emotional extremes (Hazan & Shaver, 1987).

Bartholomew and Horowitz (1991) went on to derive a model of adult attachment, which included how one perceives the self and the other in their model of adult attachment. Furthermore, the perception of the self is based in terms of dependency, such that one who has a positive self regard does not have a high need for external validation. On the other hand, one whose self-regard is contingent upon external validation and acceptance is highly dependent (Bartholomew & Horowitz, 1991). The other part of this model, the perception of other, is based upon the degree of avoidance one partakes in, such that those with a negative view of others are more likely to avoid intimacy possibly due to previous negative experiences in relationships and those with a positive view of others are more likely comfortable with intimacy and have a desire to be close with others. Indeed, Bartholomew and Horowitz's (1991) model can be conceptualized in four types of attachment: (1) secure attachment characterized by comfort with intimacy and autonomy; (2) preoccupied attachment characterized by a preoccupation with relationships; (3) fearful attachment characterized by a fear of intimacy and socially avoidance; (4) dismissive attachment characterized by dismissing of intimacy and counter dependence.

Henderson, Bartholomew, and Dutton (1997) have expanded upon the realm of attachment by exploring the relationship between attachment styles and abusive relationships. More specifically, women with preoccupied attachment to their partner had reported significantly more previous separations within the relationship than the remaining three attachment types. Those with a preoccupied attachment are highly dependent upon others to maintain a positive self-regard and attempt to maintain intimacy

with others in an overly controlling interpersonal manner; however, they also tend to blame themselves for perceived rejections, thereby maintaining a need for external validation (Bartholomew & Horowitz, 1991). Thus the "somewhat volatile aspects of the preoccupied style may lead these women to readily leave abusive relationships; however, their tendencies toward idealization and compulsive caretaking may predispose them to numerous reconciliations throughout the leave-taking process" (Henderson et al., 1997, p. 175).

The research above provides support for preoccupied attachment and traumatic bonding to be related, such that having a preoccupied attachment to a partner is predictive of leaving and returning to an abusive relationship multiple times. A reason for this might be that women with a preoccupied attachment to their partners would be more vulnerable to establishing a traumatic bond with their partner, which then would lead to leaving and returning to the relationship multiple times. Thus, it is hypothesized in this study that the traumatic bond will mediate the relationship between preoccupied attachment and intent to return to the abusive relationship.

Forgiveness

Undeniably, forgiveness is an important element to relationships, but has only recently received attention in the literature. The implications forgiveness has for both an individual and a relationship include, but are not limited to influences on physical and mental health, relationship longevity, and relationship satisfaction (Fincham, Hall, & Beach, 2006). Forgiveness also has been shown to play a crucial role in the healing process of major relationship betrayals (Gordon, Baucom, & Synder, 2005).

Consequently, forgiveness has generally been thought of as a positive interpersonal process; however, recent findings have illuminated a darker side to forgiveness. In fact, Gordon, Burton, and Porter (2004) found forgiveness to be a significant predictor of returning to the abusive relationship once a woman leaves the relationship and enters a domestic violence shelter. More specifically, the forgiveness of one's partner predicted, above and beyond the traditional quality of alternative variables and constraint variables, the intent to return to that partner. Additionally, Tsang and Stanford (2007) examined the influence of victim and offender variables on forgiveness for intimate partner violence and found that women who felt more empathic towards their partners were more forgiving of them. Also, this study indicated that women tended to be more forgiving of their abusive spouses if he had a dominant personality, but less forgiving if he suffered from psychological problems (e.g., anxiety disorders, mood disorders, substance abuse/dependence, personality disorders, and psychosis). Interestingly, empathy mediated the relationship between perpetrator dominance and benevolence, a subscale of forgiveness. This finding could be indicating that the violence (i.e., intermittent violence), along with the increased dominance in the perpetrator (i.e., power imbalance) creates an environment for traumatic bonding to occur between the woman and her abusive spouse. Furthermore, the formation of the traumatic bond could be driving the woman to feel more empathic towards her abuser, which then leads her to forgive. Thus, further investigation of the role of forgiveness and other relationship variables (i.e., traumatic bond, attachment, etc.) in women's decisions to return to abusive partners is warranted.

In general, the relationship between spousal abuse and forgiveness has received

little attention. Thus, it is important to study the relationship between the phenomenon of women repeatedly leaving and returning to an abusive relationship and variables that describe the relationship (i.e., forgiveness towards the partner, attachment to the partner, and the traumatic bond one has toward the partner). As stated above, variables such as empathy for abuser and dominance of abuser have been linked to forgiveness (Tsang & Stanford, 2007), and forgiveness for the abuser is related to intent to return to the abusive relationship (Gordon, Burton, & Porter, 2004). These findings indicate that emotional factors in an abusive relationship might play a part in this specific course of forgiveness, such that having a traumatic bond with one's abusive partner could give rise to forgiving the partner and allowing the woman to return to the abusive relationship. The current study examined the possible mechanisms involved in forgiveness of abuse. Moreover, it is hypothesized that a strong traumatic bond gives rise to forgiveness, which predicts intention to return. In other words, it is predicted that a strong traumatic bond is associated with this darker side of forgiveness, and that forgiveness is predictive of intent to return. Furthermore, it is expected that forgiveness will mediate the relationship between traumatic bond and intent to return.

Summary

The focus of the current study was to examine the interplay of variables unique to the relationship (i.e., traumatic bond, forgiveness, and preoccupied attachment style) with women's intentions to return home to an abusive partner after a stay in an emergency shelter. Specifically, it was hypothesized that (1) the traumatic bond will mediate the

association between preoccupied attachment style and intention to return and (2) forgiveness will mediate the relationship between traumatic bond and intention to return. It is hoped that examining these variables might lead to a greater understanding of the psychological mechanisms at work during the stay leave process.

METHOD

Participants

Participants included 121 women residing in nine domestic violence shelters, three of these shelters were in an urban area and the other six were in a rural area, in eastern Tennessee. These women participated in a larger study on intention to return to abusive relationships. The participants were an average age of 34 years ($SD = 10.5$). Of the current sample, 56 % reported being married, living in a committed relationship, or separated yet still seeing each other; the remaining women were in other living situations with their partners or in dating relationships, not living with their partners. The ethnicity of the sample was somewhat diverse and comprised of 82% Caucasian, 9% African-American, 4% Hispanic, 2% Native American, and 3% other. Thirty-nine percent of the population reported the household income to be less than \$5,000, 21% between \$5,000 and 10,000, 25% between \$10,000 and \$25,000, and 15% reported over \$25,000. Twenty-two percent of the sample held full-time jobs, 7% held part-time jobs, and the remaining women were unemployed. For 51% of the sample, this was their first shelter stay; 49% reported staying in a domestic violence shelter at least one other time with the mean number for multiple stays of 2.0 ($SD = 1.5$).

Procedures

A letter of introduction, with a self-addressed, stamped postcard indicating willingness to participate, was mailed to the contact persons of all known shelters within two hours driving distance of the study's home base. Nine out of twenty seven shelters

agreed to participate and those who refused cited security concerns or shelter policies regarding research projects as the grounds for their unwillingness to participate. After each participant completed the packet of questionnaires, she received a \$20 gift certificate as compensation for her involvement. After completing the questionnaires, the researchers debriefed the women, answered any of their questions, and assessed for any resulting distress from the content of the questionnaires. There was only one incident in which a woman exhibited any distress that lasted beyond the time it took to complete the questionnaires; the researcher, an advanced clinical psychology doctoral student, talked with her until she was calm, and a shelter worker was alerted to the situation. Follow-up a week later revealed no lasting distress.

Measures

Brief Demographic Data Form. This form obtains the basic demographic information necessary to provide a description of the study's sample (i.e., age, years of education, level of social support, and marital status).

Conflict Tactics Scale (CTS; Straus, 1979). This scale is a widely used measure that assesses the degree to which couples use reasoning, verbal aggression, and physical aggression to resolve conflicts. Its coefficient alphas are good, ranging from .70 to .88, and there is considerable evidence of its concurrent and content validity as it is highly predictive of the incident rate of spousal violence (Straus, 1979). Both the physical and verbal aggression were used to assess severity of abuse in this study.

Acts of Forgiveness Scale (AF; Drinnon, Jones, & Lawler, 2000). The AF is a 45-item questionnaire measuring how much forgiveness an individual currently reports

about a specific betrayal. Sample items are: “Just thinking about what happened makes me fume;” “I don’t think I can ever fully forgive the person in question;” “I still hold a grudge against the person in question;” “I don’t know if I will ever get over it.” The scale has good reliability, with initial coefficient alphas of .96 and a test-retest coefficient of .90 (Drinnon, Jones, & Lawler, 2000). This measure also has good construct and convergent validity, correlating significantly with other existing measures of forgiveness (r ranged from .53 to .82). The measure was also more strongly correlated with other state measures of forgiveness than trait measures of forgiveness, indicating discriminant validity (Drinnon, 2000).

Stockholm Syndrome Scale (SSS; Graham, Dee, Rawlings, Edna, Ihms, Latimer, Foliano, Thompson, Suttman, Farrington, & Hacker, 1995). This measure consists of 49 items designed to measure the level of traumatic bonding with an abusive partner. The measure has a test-retest reliability of .84, and has good concurrent validity, correlating significantly with other related constructs of impact of event ($r = .70$), Borderline Personality Disorder ($r = .42$), psychological abuse ($r = .46$), physical abuse ($r = .26$), and passionate love ($r = .48$).

The Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991). This measure consists of four short paragraphs describing the four attachment styles. Each participant is to pick the paragraph that most accurately describes how they view relationships. This measure has yielded similar intercorrelations of attachment styles as a semi-structured interview (secure and fearful attachment ratings $r(75) = -.55$, $p < .001$; preoccupied and dismissing ratings $r(75) = -.50$, $p < .001$), which was found to be reliable with alpha coefficients ranging from .87-.95. Bartholomew and Horowitz (1991) found

an average correlation between corresponding attachment ratings across the interview and the RQ to be .34.

Intent to Return Questionnaire. This measure consists of five statements that assess the degree to which a woman intends to return to her abusive relationship.

Responses are on a 5-point scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. Cronbach's coefficient alpha for this scale in this study was .84.

This measure was initially validated by Gordon et al. (2004) by demonstrating that it differentiates between women who reported to shelter workers that they were returning to their partners after the shelter stay from those who reported that they were not returning to their partners at the end of their stay. The results of a univariate analysis of variance indicated that there was a significant difference, $F(2, 119) = 5.53, p < .01$, between these groups' (not with partners, with partners, and unknown) average scores on the intent to return measure.

RESULTS

Initial examination of the data revealed normal distributions for all variables except the acts of forgiveness and intent to return measures. These variables were positively skewed, indicating that the majority of the participants did not intend to return to or forgive their partners. A square-root transformation adjusted the intent to return and forgiveness variables to an acceptable approximation of a normal distribution.

Power analyses recommended by Borenstein, Rothstein, Cohen, Schoenfeld, & Berlin (2000) indicated that to for a power of 80% to detect a moderate effect size of 0.15 for this size regression model at alpha of .05, a sample of 59 participants were needed. Our sample of 121 participants was clearly larger than needed, thus we felt confident regarding our ability to detect significant moderate effects.

Hypothesis 1: Traumatic bond will mediate the relationship between preoccupied attachment and intention to return.

We conducted regression analyses with the appropriate predictor, mediator, and outcome variables. We included constraint variables that were significantly correlated with at least one of the predictor, mediator, or outcome variables (See Table 1). The constraint variables controlled for in this hypothesis were number of children, direct access to a car (transportation), and severity of violence.

To test this mediational model we followed the procedures outlined by MacKinnon, Lockwood, Hoffman, West, and Sheets (2002) in their *Z'* approach. The *Z'* approach is more sensitive to detecting type II error, and thus a more sensitive test of mediation. The first test of mediation is to regress the mediator (traumatic bond), on the predictor (preoccupied attachment), and the previously defined control variables. Preoccupied attachment positively

predicted traumatic bond ($R^2 = .11$, $F(4, 101) = 3.01$, $p = .02$). The second test of mediation is to simultaneously regress the outcome variable (intent to return) onto the mediating variable (traumatic bond), the predicting variable (preoccupied attachment), and the previously defined control variables. In doing so, preoccupied attachment was no longer significantly predictive of intent to return, ($\beta = .12$, $p = .196$), but traumatic bond remained predictive of intent to return, ($\beta = .28$, $p = .004$). This final regression equation is suggestive of a full mediation, but to test for true mediation MacKinnon and colleagues (2002) state that the association between the predictor variable (preoccupied attachment) and the outcome variable (intent to return) must be significantly changed when the mediator (traumatic bond) is controlled. To do this, an obtained Z' is compared to and must be larger than the critical Z' , which is .97, when alpha equals .05. For the current mediation model the obtained $Z' = 1.90$, which is larger than the critical Z' , indicating that the above model is a true and full mediation.

Hypothesis 2: Forgiveness will mediate the relationship between traumatic bond and intention to return.

Again, we conducted regression analyses with the appropriate predictor, mediator, and outcome variables. Also the same inclusion criterion was used to determine the appropriate control variables, which are social support, transportation, and severity of violence.

To test this mediational model, the same Z' method (MacKinnon et al., 2002) was used. First, the mediator (forgiveness) was regressed onto the predictor (traumatic bond) and the previously defined control variables. This first test of mediation was supported, such that traumatic bond positively predicted forgiveness ($R^2 = .28$, $F(4, 101) = 9.28$, $p < .0001$). The

second test of mediation is to simultaneously regress the outcome variable (intent to return) onto the mediating variable (forgiveness), the predicting variable (traumatic bond), and the previously defined control variables. In doing so, traumatic bond became less significantly predictive of intent to return ($\beta=.24$, $p = .02$), and forgiveness was significantly predictive of intent to return ($\beta=.31$, $p = .004$). This final regression equation is suggestive of a partial mediation, but to test for true mediation MacKinnon and colleagues (2002) state that the association between the predictor variable (traumatic bond) and the outcome variable (intent to return) must be significantly changed when the mediator (forgiveness) is controlled. To do this, an obtained Z' is compared to and must be larger than the critical Z' , which is .97, when alpha equals .05. For the current mediation model the obtained $Z' = 1.24$, which is larger than the critical Z' , indicating that the above model is a true and partial mediation.

DISCUSSION

The purpose of this study was twofold, in that relationships among variables were established and by testing the two mediational models we were able to further our knowledge of the traumatic bonding theory. Interestingly, traumatic bond mediates preoccupied attachment to one's partner and intention to return in the first model, and forgiveness partially mediates traumatic bond and intention to return in the second model, indicating a complex relationship among all the variables used in this study. These results indicate that having a preoccupied attachment to one's romantic partner might make one more vulnerable to forming a traumatic bond, when the necessary conditions are present, and that having a strong traumatic bond seems to make it more likely that women will forgive their abuser, and in turn, return to the relationship; however, some women might be bonded to their partner, and still return to the relationship without forgiving their partner.

The first hypothesis was intended to analyze the relationships between preoccupied attachment style, traumatic bond, and intention to return. The regression analyses revealed that having a preoccupied attachment to one's romantic partner is significantly predictive of a stronger traumatic bond, and having a stronger traumatic bond to one's partner is predictive of higher intentions to return to the abusive relationship. Thus, the current study indicated that traumatic bond mediates the association between preoccupied attachment and intention to return. These results were consistent with previous findings (Henderson et al., 1997) that women with a preoccupied attachment to their romantic partners are more likely to terminate and then return to an abusive relationship multiple times, signifying that attachment to a romantic partner, as

Bowlby (1969) theorized in the parent-child relationship, will persevere during times of abuse. It is also important to note that the mediational model in this hypothesis suggests that having a preoccupied attachment to one's abusive partner possibly leaves a woman more vulnerable to forming a strong traumatic bond to the abusive partner, which could influence her intentions to return to the abusive relationship after she has initially left it; however it is important to note that these findings are correlational and would require a longitudinal study to more definitively support the mediational model suggested here.

It seems that the variables used in the second hypothesis, traumatic bond, forgiveness, and intent to return, also are closely related, as indicated by the regression models and subsequent mediation model. This finding sheds light on a potentially darker side of forgiveness and illustrates that forgiveness is not necessarily always a process that leads to healthy outcomes and might not always arise from healthy motives. In fact, the findings of the second hypothesis indicate that having a strong traumatic bond to one's partner predicts greater forgiveness of one's abusive partner. This association could be driven by the woman making rationalizations and maladaptive attributions about the abusive partner, which might then affect her willingness to forgive (i.e., if I love someone, I must forgive him), and the forgiveness process. This suggestion is somewhat supported by findings from Gordon and colleagues (2004), who found that more benign attributions for the abuse is associated with greater forgiveness. Thus, it is conceivable that unhealthy beliefs about forgiveness and cognitive rationalizations may contribute to forgiveness in maladaptive situations such as on-going abuse; this hypothesis requires further investigation. Furthermore, a point of intervention could involve the possible origins of maladaptive beliefs about forgiveness. Again, it is important to note that these

findings are correlational and require a longitudinal study to support the mediational model suggested here.

Limitations

Before discussing the implications of this study and future directions of research it is important to note the limitations of this study. Even though the sample lacked racial and cultural diversity, which are factors that are influential in a woman's decision to stay in or leave the relationship (e.g., Gondolf, Fisher, & McFerron, 1988), the sample was similar to other domestic violence populations in age, number of children, and years of education (e.g., Pape & Arias, 2000; Rusbult & Martz, 1995). It also is important to note that all the women in the participating shelters were invited to take part in our study, but only women who volunteered to participate completed our measures, which could be suggestive of a selection bias. Furthermore, this study only included women living in emergency domestic violence shelters, and therefore, should not be generalized to all abusive romantic relationships.

Similarly, this study only took into account males perpetrating violence on females, however, Dutton and Corvo (2006) outline national statistics on IPV and only 4.2 percent of women reported severe abuse from a male partner and 2.6 percent of men reported severe abuse from a female partner, illustrating that the majority of violence in romantic relationships isn't considered severe and is reciprocal in nature. Therefore, it would have been very illuminating to also collect data from the male partner. Studying violence in relationships could pose some risks to the victim, such as a risk of re-victimization. However, given Dutton and Corvo's (2006) findings, it may be beneficial

to collect data within the general population from both partners on their cycle of violence and aggression to understand the relationship dynamics of reciprocal violence. Not only would it have been informative for the partners to also complete the measures, but observing the couple in their communication patterns and conflict styles could have provided rich qualitative data, which could lead to effective intervention strategies. It should also be noted that all of our data was collected via self-report measures and some of the variables could be better assessed through structured interviews and observation. Finally, this study was somewhat limited in the selection of some of its measures because revised versions, or more in depth measures have become available and more widely used.

Conclusions

To date, there is limited to no research on treatments offered in emergency shelters, and national statistics on average length of stay and psychological treatments offered are not available, most likely because many emergency shelters are not government funded and therefore not required to keep statistics. Thus, it would be very important for national statistics to be compiled to help us better understand women wanting to leave abusive relationships.

Most of the services provided in an emergency domestic violence shelter are housing, meals, clothing, child care, job training, etc. Thus, a strong contributing factor to women seeking help at an emergency shelter is the material resources provided, which can lead to a perception of better quality of alternatives or a lessening of constraint variables), as predicted by the Investment Model (Rusbult, 1980). However, if clinicians

and researchers solely examine factors that help women make the decision to leave, this restricted focus is likely to fail to explain why women often return to the relationship from an emergency shelter. The current study provides evidence that variables unique to the relationship (e.g., forgiveness, traumatic bond, and preoccupied attachment style) are predictive of a woman's intent to return to the abusive relationship above and beyond traditional investment variables (e.g., transportation, children, and severity of abuse). Also, equally important is the strong predictive value forgiveness has for the woman's intention to return, such that understanding this process of forgiveness could be fruitful for breaking the stay/leave process that women in domestic violence shelters often demonstrate. The current study also furthers the field's knowledge of the forgiveness process among this population by relating it to traumatic bonding. Addressing this bond, which is malleable, while still providing the necessary resources (e.g., employment, housing, meals, etc.) could be an effective approach to stopping the repeated stay/leave process of abused women. It is also important to note that the formation of an attachment style is adaptive, and often provides a feeling of security even when relationships can be unstable. Thus, it would be important for shelter workers and clinicians to not only provide a supportive environment that facilitates emotional security for exploration and understanding of their relationship and the trauma they have experienced, but to also understand how their relationship and the trauma has effected the women's intentions to return and continued attachment to the relationship.

Although the resources provided at emergency shelters are critical to a woman's decision to stay in or leave the relationship, this study indicated that relationship variables also are important in the next decision of what to do after a stay at a temporary

emergency shelter. This study lends support to the necessity of providing psychological treatment to women in emergency shelters, however, given the limitations of emergency shelters (e.g., length of stay, lack of funding, safety concerns) research should begin to focus on validating short term treatments specific to this population. For example, providing a treatment that begins to challenge a woman's automatic thoughts about herself and her relationship in an attempt to weaken the traumatic bond, or to challenge the beliefs behind why a woman wants to forgive her partner might be a useful next step in developing more effective support in helping women make the difficult decision to end an abusive relationship.

REFERENCES

- Amsel, A. (1958). The role of frustrative nonreward in noncontinuous reward situations. *Psychological Bulletin*, 55 (2), 102-119.
- Bartholomew, K., & Horowitz, L.M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61 (2), 226-244.
- Borenstein, M., Rothstein, H., Schoenfeld, D., & Berlin, J. (2000). *Sample Power 2.0*. Statistical Package for the Social Sciences (SPSS).
- Bowlby, J. (1969). *Attachment and loss: Vol.1. Attachment*. New York: Basic Books.
- Choice, P., & Lamke, L.K. (1997). A conceptual approach to understanding abused women's stay/leave decision. *Journal of Family Issues*, 18, 290-314.
- Drinnon, J. R., Jones, W. H., & Lawler, K.A. (2000, February). *The measurement of forgiveness*. Paper presented at the Annual Meeting of the Society for Personality and Social Psychology, Nashville, TN.
- Dutton, D.G., & Painter, S.L. (1981). Traumatic Bonding: The development of emotional attachments in battered women and other relationships of intermittent abuse. *Victimology*, 6, 139-155.
- Dutton, D.G., & Painter, S.L. (1993). The battered woman syndrome: Effects of severity and intermittency of abuse. *American Journal of Orthopsychiatry*, 63, 614-622.
- Dutton, D.G., & Corvo, K. (2006). Transforming a flawed policy: A call to revive psychology and science in domestic violence research and practice. *Aggression and Violent Behavior*, 11, 457-483.
- Fincham, F.D., Hall, J., & Beach, S.R.H. (2006). Forgiveness in Marriage: Current status and future directions. *Family Relations*, 55(4), 415-427.

- Gondolf, E.W., Fisher, E., & McFerron, J.R. (1988). Racial differences among shelter residents: A comparison of Anglo, Black, and Hispanic battered women. *Journal of Family Violence*, 3, 39-51.
- Gordon, K.C., Burton, S., & Porter, L. (2004). Predicting the intentions of women in domestic violence shelters to return to partners: Does forgiveness play a role? *Journal of Family Psychology*, 18, 331-338.
- Gordon, K.C., Baucom, D.H., & Snyder, D.K. (2005). Treating couples recovering from infidelity: An integrative approach. *Journal of Clinical Psychology*, 61(11), 876-893.
- Graham, D.L.R., Rawlings, E.I., Rimini, N. (1988). Survivors of Terror: Battered women, hostages, and the Stockholm syndrome. In Y. Kersti & M. Bograd (Eds.), *Feminist perspectives on wife abuse*, 10, 217-233. Thousand Oaks, CA: Sage Publications.
- Graham, D.L.R., Rawlings, E.I., Ihms, K., Latimer, D., Foliano, J., Thompson, A., et al. (1995). A scale for identifying "Stockholm syndrome" reactions in young dating women: Factor structure, reliability, and validity. *Violence and Victims*, 10, 3-22.
- Hazan, C., & Shaver, P. (1987). Conceptualizing romantic love as an attachment process. *Journal of Personality and Social Psychology*, 52, 511-524.
- Henderson, A.J.Z., Bartholomew, K., & Dutton, D.G. (1997). He loves me; He loves me not: Attachment and separation resolution of abused women. *Journal of Family Violence*, 12 (2), 169-191.
- Katz, J., Street, A., & Arias, I. (1997). Individual differences in self-appraisals and responses to dating violence scenarios. *Violence and Victims*, 12, 265-276.

- MacKinnon, D.P., Lockwood, C.M., Hoffman, J.M., West, S.G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7 (1), 83-104.
- Pape, K.T., & Arias, I. (2000). The role of perceptions and attributions in battered women's intentions to permanently end their violent relationships. *Cognitive Therapy and Research*, 24, 201-214.
- Pfouts, J.H. (1978). Violent families: Coping responses of abused wives. *Child Welfare Journal*, 57 (2), 101-111.
- Rhatigan, D.L., & Axsom, D.K. (2006). Using the investment model to understand battered women's commitment to their abusive relationships. *Journal of Family Violence*, 21 (2), 153-162.
- Rhatigan, D.L., Street, A.E., & Axsom, D.K. (2006). A critical review of theories to explain violent relationship termination: Implications for research and intervention. *Clinical Psychology Review*, 26, 321-345.
- Rusbult, C.E. (1980). Commitment and satisfaction in romantic associations: A test of the investment model. *Journal of Experimental Social Psychology*, 16, 172-186.
- Rusbult, C.E., & Martz, J.M. (1995). Remaining in an abusive relationship: An investment model analysis of nonvoluntary dependence. *Personality and Social Psychology Bulletin*, 21, 558-571.
- Straus, M.A. (1979). Measuring intrafamily conflict and violence: The conflict tactics scale. *Journal of Marriage and the Family*, 41, 75-88.
- Strube, M.J. (1988). The decision to leave an abusive relationship: Empirical evidence and theoretical issues. *Psychological Bulletin*, 104, 236-250.

- Tsang, J., & Stanford, M.S. (2007). Forgiveness for intimate partner violence: The influence of victim and offender variables. *Personality and Individual Differences*, 42, 653-664.
- Walker, L.E. (1979). *The battered woman*. New York: Harper and Row.

APPENDIX

Table 1

Bivariate Correlations between Independent, Dependent, and Control Variables (N=121)

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Preoccupied Attachment	1.00										
2. Intent to Return	.19*	1.00									
3. Forgiveness	.07	.43**	1.00								
4. Traumatic Bonding	.19*	.32**	.55**	1.00							
5. Severity of Violence	-.01	-.23*	-.34**	-.14	1.00						
6. Level of Social Support	.06	-.01	-.18*	.11	.09	1.00					
7. Household Income	-.14	.10	.03	.05	-.01	-.03	1.00				
8. Employment	.08	.08	.08	.17	.12	.07	-.10	1.00			
9. Direct Access To a Car	.12	.07	.12	.22*	-.14	.11	.33**	.40**	1.00		
10. Number of Children	.21*	.18	-.01	.00	.15	.02	.01	-.12	-.16	1.00	
11. Level of Satisfaction in Relationship	-.02	.09	-.17	-.04	.05	.30**	.02	.12	.00	-.01	1.00

*p<.05, **p<.01

Table 2

Regression Analyses of the Tests of Mediation with Traumatic Bond as the Mediator of the Relation between Preoccupied Attachment and Intention to Return (N=121)

(a) Traumatic Bond				
Variable	B	SE B	β	R ²
Preoccupied Attachment	24.55	9.89	.24*	.11
No. of Children	.64	2.35	.03	
Severity of Violence	.08	.19	.04	
Transportation	14.11	7.16	.19	
(b) Intention to Return				
Preoccupied Attachment	2.65	2.03	.12	.22
Traumatic Bond	.06	.02	.28**	
No. of Children	1.24	.47	.25**	
Severity of Violence	-.10	.04	-.25**	
Transportation	-.63	1.46	-.04	

*p<.05, **p<.01

Table 3
Regression Analyses of the Tests of Mediation with Forgiveness as the Mediator of the Relation between Traumatic Bond and Intention to Return (N=121)

(a) Forgiveness				
Variable	B	SE B	β	R ²
Traumatic Bond	.01	.00	.35**	.28
Transportation	.11	.24	.04	
Severity of Violence	-.02	.01	-.34**	
Social Support	-.21	.11	-.18*	
(b) Intention to Return				
Traumatic Bond	.05	.02	.24*	.23
Forgiveness	1.81	.61	.31**	
Transportation	-1.22	1.47	-.08	
Severity of Violence	-.05	.04	-.13	
Social Support	.23	.65	.03	

*p<.05, **p<.01

VITA

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