

Running Head: STALKING AND PSYCHOLOGICAL ABUSE

Stalking and psychological abuse: Common factors and relationship-specific characteristics

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Abstract

The purpose of this study was to refine and elaborate models of personality and relationship-specific characteristics in the perpetration of stalking and psychological abuse. Three hundred and forty-two college students who had been in intimate relationships completed a series of questionnaires about their most recent breakup and their former relationship. Our hypotheses were supported, with harsh parental discipline, anxious attachment, and need for control of one's partner forming a common cluster in the prediction of stalking and psychological abuse. For psychological abuse, relationship dissatisfaction added to the predictive factors; whereas for stalking, the level of anger-jealousy over the breakup was the major added factor. Degree of anger-jealousy was influenced by being the recipient of a breakup and the level of passion.

Stalking and Psychological abuse: Common factors and relationship-specific characteristics

Stalking and psychological abuse are becoming subjects of increasing interest as distinct and potentially devastating forms of relationship violence. Awareness of stalking as a noteworthy issue was raised by the death of actress Rebecca Schaeffer, who was shot by a fan after having been stalked for two years (National Institute of Justice, 1996). While the public's attention has been directed towards celebrities stalked by strangers, as many as 80% of stalking incidents take place within the context of an intimate relationship (Tjaden & Thoennes, 1998). Furthermore, it has been hypothesized that stalking is most likely to occur in interpersonal relationships that have recently ended (Coleman, 1997). A probability sample of colleges and women within schools revealed a 13% stalking rate over a seven months period (Fisher, Cullen, & Turner, 2000).

Interpersonal violence researchers have recently begun to consider psychological abuse as an important phenomenon in its own right as well. Frequency rates range from 11% in a sample of college women (Pipes & LeBov-Keeler, 1997) to percentages in the 90s in samples of battered women (Follingstad, Rutledge, Berg, Hause, & Polek, 1990; Stets, 1990) and high school students (Jezl, Molidor, & Wright, 1996). Coker, Davis, Arias, Desai, Sanderson, Brandt, and Smith (under review) reported lifetime prevalence of psychological abuse to be 31.7% for men and 28.7% for women.

In addition to being quite prevalent, stalking and psychological abuse have a negative impact on the emotional well-being of the victims. These effects include stress, anxiety, depression, fear, repulsion, shock, self-blame, lowered self-esteem, and loss of trust in people (Aguilar & Nightingale, 1994; Mechanic, in press; Murphy & Cascardi, 1999). Psychological abuse is perceived by the victims as having more devastating effects than physical aggression

(Dutton, 1998; Follingstad et al., 1990; Gelles & Straus, 1988; Marshall, 1992) and often predicts and/or accompanies physical abuse (Murphy & O'Leary, 1989; Tolman, 1999). For these reasons, further investigation of both psychological abuse that occurs during the relationship and stalking occurring after the dissolution of the relationship seems warranted.

We will establish a relationship between measures of stalking and psychological abuse and will show that these both share a set of similar predictors, suggesting similar underlying mechanisms, but that specific features of the relationship context and background personality variables also operate distinctively in the prediction of each. We will develop each of these major considerations below, starting with the relationship between psychological abuse and stalking, followed by relationship context predictors, and then by personality and parental background factors.

Conceptual definitions of stalking and psychological abuse

Stalking was defined to include the overt following of the individual thereby presenting a threat to his/her safety and more covert unwanted pursuit behaviors that can be perceived as simple annoyance or harassment by the victim. Some examples include writing and calling after being told not to, sending unwanted gifts, making specific threats to damage his/her property, and spying and following him/her (Tjaden & Thoennes, 1998). Stalking-like behaviors can be defined as “the repeated and unwanted pursuit and invasion of one’s sense of physical or symbolic privacy by another person, either stranger or acquaintance, who desires and/or presumes an intimate relationship” (Cupach & Spitzberg, 1998, p.234-235). In this study, stalking was measured using a self-report inventory pre-tested and refined in two studies by Davis, Ace, and Andra (2000).

Psychological abuse was defined as coercive or aversive behaviors, not including

physical force or threat of harm, which are “intended to produce emotional harm..and which are directed at the target’s sense of self” (Murphy & Cascardi, 1999, p. 9). Tolman (1999) defines psychological abuse in terms of isolation of the victim/dominance of the perpetrator and emotional/verbal maltreatment of the victim. Because no standard perpetrator measure existed, we adapted the short form of the Psychological Maltreatment of Women Inventory (PMWI) for this purpose. Preliminary evidence (Davis, et al. 2000; Davis & O’Hearn, 1989) indicated that it was a promising measure of abuse.

Following Kurt’s (1995) hypothesis that stalking can be seen as a form of interpersonal coercion similar to physical and psychological abuse, we expect to find a core of common antecedents for psychological abuse during a relationship and stalking after a breakup. We also expect the context—being in a relationship vs. not—to bring some distinctive predictors into play. In line with White, Kowalski, Lyndon, and Valentine’s (2000) model, we propose to separate the class of potential predictors into relationship specific (dyadic and situational) and personality characteristics of the perpetrators.

Relationship-specific factors (see Figure 1 for an overview)

Angry-jealous emotional reactions to a breakup. The stalking literature has identified a core set of feelings, that is, anger, jealousy, and obsessiveness, that seem to typify many stalking relationships (Meloy, 1998; Mullen, Pathe, & Purcell, 2000). Studies of campus samples also find that feeling vengeful, deceived, jealous, and angry was moderately correlated with stalking-like behaviors (Davis et al, 2000; Langhinrichsen et al., 2000; Sinclair & Frieze, 2000). It was therefore hypothesized that an angry and jealous reaction to the breakup would significantly correlate with stalking as well as potentially mediate the relationship between stalking and other predictor variables in the model.

Break up initiation. The role of the stalking perpetrator during the breakup was explored by Davis et al. (2000). Being the recipient of a breakup was associated with an increased likelihood of engaging in stalking-like behaviors. Furthermore, breakup recipients were significantly more upset about the breakup than instigators or when the breakup was mutual. Since the breakup recipient usually experiences more emotional distress than the breakup initiator (Davis & O’Hearn, 1989), the correlation between breakup initiator status and stalking should be replicated. Furthermore, the link between breakup initiator status and stalking was expected to be mediated by breakup anger-jealousy in our model.

Quality of the relationship. The quality of the relationship, as based on Sternberg’s triadic theory of love involving intimacy, passion, and commitment (1986), prior to the breakup was also explored in the present study. Previous findings point to the potential importance of passionate love as a correlate and predictor of stalking behaviors (Langhinrichsen-Rohling et al., 2000; Sinclair & Frieze, 2000). While passion may correlate with stalking, we hypothesized that this relationship would be mediated by breakup initiation status and emotional reaction to the breakup. When a passionate relationship breaks-up, being the recipient of the breakup makes it more likely that anger-jealousy will be elicited and that stalking will occur.

While passion is expected to play a crucial role in a model of stalking, relationship satisfaction, as defined by high levels of commitment and intimacy, is hypothesized to affect the likelihood of emotionally abusing one’s partner. While research on whether marital satisfaction predict later physical aggression yields mixed results (Murphy & O’Leary, 1989; O’Leary, Malone, & Tyree, 1994), lack of satisfaction with the relationship seems to be related to later psychological abuse for couples (O’Leary et al., 1994), with partners who are more dissatisfied with the relationship engaging in higher rates of psychological abuse.

Personality characteristics (see Figure 1 for an overview)

Trait anger. While the role of angry temperament has been examined in the context of domestic and dating violence (Dye & Eckhardt, 2000; for a review, see Eckhardt, Barbour, and Stuart, 1997; Follingstad, Bradley, & Helff, in press), trait anger has also been found to correlate positively with psychological abuse perpetration (Dutton & Starzomski, 1993). Based on these results, it was predicted that anger would predict psychological abuse both directly and indirectly through need for control. Furthermore, we hypothesized that anger would affect relationship satisfaction, that is the degree of commitment and intimacy, which in turn would predict psychological abuse.

Control of partner. A control theory model of physical violence in dating relationships was first proposed by Stets and Pirog-Good (1987) and later elaborated by Follingstad and associates (Follingstad, Bradley, Laughlin, & Burke, 1999; Follingstad, Bradley, & Helff, in press). In an attempt to regain control of his/her partner, the partner who is challenged will use physical force or psychological coercion to do so. Control of partner has also been investigated directly and indirectly in the stalking literature. While emotionally abusive and controlling behavior towards a spouse was more likely to have been endorsed by an ex-husband who stalked (Tjaden & Thoennes, 1998), a controlling pattern of behavior was found to relate to stalking perpetration in college student samples (Davis et al., 2000; Langhinrichsen-Rohling et al., 2000).

Need for control was hypothesized to directly impact psychological abuse as well as be mediated by relationship satisfaction. We expected that the need to control one's partner would influence levels of intimacy and commitment, which in turn would impact the likelihood of engaging in psychological abuse.

It was hypothesized that the present study would replicate Davis et al.'s (2000) finding,

with control being a significant predictor of stalking. Furthermore, we predicted that need for control would be mediated by the emotional reaction to the breakup, with participants who had a higher score on the need for control scale being more likely to react with anger and jealousy to the breakup and therefore more likely to enact stalking behaviors toward their ex-partner.

Attachment. Hazan and Shaver (1987) developed the first model of adult attachment in romantic relationships based on Ainsworth's studies of infant reactions to the separation and reunion with attachment figures. While Hazan and Shaver proposed three attachment styles, Bartholomew and Horowitz (1991) suggested a four category model (secure, preoccupied, dismissing, and fearful) along two dimensions (self and others). After reviewing the attachment literature, Brennan, Clark, and Shaver's factor analysis (1998) provided further evidence of a four category model with two dimensions, that they conceptualized as Anxiety (model of self) and Avoidance (model of others).

Several researchers have found the degree of anxious attachment to be related to physical and psychological abuse (Dutton, 1998; Follingstad et al., in press; Holtzworth-Munroe, Stuart, & Hutchinson, 1997) and to jealousy and surveillance (Guerrero, 1998). Follingstad et al. found that anxious attachment resulting from early experiences resulted in the development of an angry temperament, which in turn led to a controlling style and eventually physical aggression. In a study by Dutton, Saunders, Starzomski, and Bartholomew (1994), anxious attachment was correlated with both anger and psychological abuse, with these latter variables relating significantly to each other, in a sample of batterers. It was therefore hypothesized that the relationship between anxious attachment, need for control, and anger would be replicated in this study, with anxious attachment relating to psychological abuse through anger and need for control. Langhinrichsen-Rohling et al. (2000) provided evidence that victims of pursuit

behaviors perceived their ex-partners as anxiously attached and Davis et al. (2000) found attachment anxiety to be mediated by anger-jealousy in the prediction of stalking. Anxious attachment was therefore expected to predict stalking indirectly through breakup status, need for control, and breakup anger.

Harsh Parental Discipline. While witnessing and experiencing parental violence has been repeatedly shown to be predictive of physical violence in later adult relationships, there is little data regarding the role of physical punishment in psychological abuse and stalking. Dutton and his associates (Dutton, 1995; Dutton, Starzomski, & Ryan, 1996) found that recollections of negative parental treatments by the abuse perpetrator were positively correlated with having an abusive personality and discriminated between low and high abusive personality perpetrators. Langhinrichsen-Rohling and Rohling (2000) discovered that recollections of parental divorce or separation were associated with more unwanted pursuit behaviors after a breakup, especially in male college students. Therefore, we hypothesized that the effect of parental punishment would be mediated by anxious attachment, need for control, and trait anger in the prediction of psychological abuse. In predicting stalking, harsh parental discipline would be mediated by anxious attachment and need for control.

To summarize, this study elaborates and tests two theoretical models of psychological abuse and stalking, which are presented in Figure 1.

Method

Participants

Participants were 87 male and 251 female undergraduates from the University of South Carolina in Columbia enrolled in a social psychology class. While 75% were Caucasian ($N=253$), 23% were African-American ($N=78$), 2% were Asian American ($N=7$), and 0.3% were

Hispanic ($N=1$). The mean age of participants was 21($SD=3.31$). Only students who had been involved in a romantic relationship and had recently broken up were included in the present study. Participants had been with their ex-partner on average 2 years and 2 months and reported having broken up on average 19 months ago. While 59% of participants admitted to trying to get back together with their partner, 38% admitted to having broken up with that partner more than once.

Procedure

Participants were asked to complete a Relationship History Questionnaire anonymously which included all measures as well as relationship demographics information (current relationship status, dating history, duration of current relationship, age of first dating experience and first sexual intercourse, number of dating partners, and sexual orientation). Informed consent and debriefing procedures were followed.

Instruments

Stalking Behaviors. The 14-item Stalking scale was a revised version of the 16-item scale used by Davis et al. (2000). Items are rated on a 3-point Likert scale ranging from “did not do it” to “did it more than once.” The scale yields a composite score and includes mild harassment items (e.g., “wrote, called, and e-mailed after s/he told me not to”) and threat items (e.g., “made specific threats to hurt his/her other friends, if s/he did not stop seeing them”). Items represented serious crimes (e.g., attempted to force sexual contact) and therefore potential confounds with other forms of violence (e.g., rape, kidnapping) were not included. These items had very low frequencies of endorsement in this sample. The 14-item scale was found to have adequate internal consistency, with an alpha level of .78.

Psychological abuse scale. The short version of the Psychological Maltreatment of

Women Inventory is a 14-item scale designed to assess psychological abuse (Tolman, 1999). The items were reworded to assess perpetration of psychologically abusive behaviors by the respondents. Each item is scored on a 5-point Likert scale, ranging from “never” to “very frequently”, with higher scores suggesting higher endorsement of these behaviors toward the partner. The dominance/isolation and emotional/verbal subscales were so highly correlated as perpetrator scales ($r=.51$, $p<.001$) that we combined them to form a single total score. In this study, the total scale had good internal consistency, with an alpha of .84.

Trait Anger Scale. The Trait Anger Scale was derived from the Affective Liability subscale (AFF) of the Propensity for Abusiveness Scale (PAS; Dutton, 1995). The anger subscale of the PAS was based on the Multidimensional Anger Inventory (Siegel, 1986). In this study, the Trait Anger Scale was composed of the three anger items of the AFF Scale. The items are rated on a 5-point Likert scale, with 1 being “not at all true” and 5 being “completely true for me.” In this study, the scale was found to have adequate internal consistency, with an alpha level of .72.

Control of partner. The short version of the Need to Control Scale was used to assess the participants’ need to control their partner (Follingstad et al., 1999). Items are rated on a 4-point Likert scale, ranging from “never or rarely” to “quite frequently.” The higher the score, the higher the need to control is. The short version of the scale has excellent internal consistency reliability (with alpha levels above .90) and was shown to discriminate and predict severity levels as well as frequency levels of physical violence in dating couples (Follingstad et al., 1999; Follingstad et al., in press).

Attachment. The Experiences in Close Relationships (ECR) questionnaire is a 36-item self-report measure designed to assess adult attachment (Brennan, Clark, & Shaver, 1998). Each

item is scored on a 7-point Likert scale, ranging from “disagree strongly” to “agree strongly”, with higher scores indicating a more dysfunctional attachment style. In these analyses, only the Anxious Attachment Scale defined by fear of abandonment was used. The scale was shown to possess excellent internal consistency reliability, with an alpha level .91 for Anxiety, good predictive validity for measures of interpersonal touch and sexual preferences, and excellent construct validity (Brennan et al., 1998).

Harsh Parental Discipline. The Harsh Parental Discipline Scale has for its origin “The Egna Minnen Beträffande Uppfostran” (EMBU; Perris et al., 1980), which was later shortened by Dutton (1995). The scale (10 items; e.g., “my parent punished me even for small offenses”) assesses memories of maternal and paternal disciplinary behaviors. The scale items are rated on 4-point Likert scale, with higher scores indicating a greater frequency of being harshly disciplined by one’s parents. Because a large number of participants completed the scale only for one parent, the total score was calculated to represent disciplinary actions either by the father, or by the mother, or by both (an average of the two was computed). In this study, the scale was found to have an excellent internal consistency reliability, with an alpha of .91.

Breakup anger-jealousy. Five items were added to measure an angry and jealous reaction to the breakup: angry, upset, jealous, letdown, and vengeful. The items were dichotomous as participants checked the ones applicable to their own situation. In this study, the scale alpha was .72.

Relationship Passion and Satisfaction. The Relationship Questionnaire is a 16-item measure assessing the quality of intimate relationships. The scale is based on the Factors for Intimate Relationships Scale created by Bretscher and Bergner (1991). Items are scored on a 9-point Likert scale, ranging from “absolutely uncharacteristic” to “absolutely characteristic”. In

this study, only the Passion subscale was used for the stalking model. The 5-item Passion subscale includes exclusiveness, sexual desire, preoccupation, enjoyment, and attractiveness. The alpha for the Passion scale was .78.

For the psychological abuse model, intimacy and commitment were combined to form a relationship satisfaction subscale. The 10-item satisfaction subscale includes trust, similarity between partners, authenticity of feelings, support, and acceptance. The scale has excellent internal consistency, with an alpha of .92.

Data Analysis

Descriptive and correlational analyses are presented. Path analysis was conducted to test the two theoretical models presented in Figure 1. The analyses, all conducted with the SAS software package, used the maximum Likelihood method of parameter estimation and were performed on the correlation matrices. The two models were modified after reviewing the Goodness of Fit Indices (Chi-Square, Ratio Chi-Square to Degrees of Freedom, Square Root Mean Residual or SRMR, RMSEA Estimate, Bentler's Comparative Fit Index or CFI, Bentler and Bonnett's Non-Normed Index or NNI, and McDonald's Centrality Index or MCI), path coefficients, and the residual matrices. The Chi-square should not be significant and the Chi-Square ratio should be less than 3 to indicate good fit. The chi-square ratio is preferred as a more accurate estimation of model fit, since it is less dependent on sample size than the Chi-square. While the CFI and NNI were considered excellent above .95 and MCI good above .90, the SRMR had to be below .08 and the RMSEA below .06 as indicators of a good fit between the model and data. Path coefficients were deemed significant if the standardized estimates of their t values were above 1.96 and the standardized path coefficients were nontrivial in magnitude (i.e., absolute values exceeded .05). Finally, Square Multiple Correlations for the endogenous

variables were reviewed to determine the amount of variance accounted for by their antecedents. Modifications to the models were made only if they could be explained theoretically. Multivariate outliers were included in the analyses.¹ Furthermore, the distributions of variables included in the models were checked for violation of normality.²

Results

Stalking and Psychological abuse Prevalence and Gender Differences

Results indicated that 35.67% of college students in this sample enacted a specific stalking behavior at least twice in order to re-establish the relationship, and 21.05% of the students admitted to engaging in two forms of psychological abuse at least twice during their relationship.

Although, based on previous research using samples of college students, we did not expect gender differences on the stalking or psychological abuse measures, two independent t-tests were conducted on the stalking and psychological abuse scores. T-tests for the stalking measure ($t(121)=0.72, p>.05$) and the psychological abuse scale ($t(140)=0.01, p>.05$) were not significant, indicating that there were no gender differences. The correlations among predictors and criterion variables were also examined separately by gender. With two exceptions noted below, there were no significant differences between men and women in the correlations, therefore subsequent analyses used the combined sample.

Stalking and Psychological abuse Correlations

Means, standard deviations, correlations, and coefficient alpha reliability estimates for the variables of interest for the stalking model are presented in Table 1 and for the variables included in the psychological abuse model in Table 2. Breakup status was dummy-coded prior to being entered in the analyses, with participants having been broken up with belonging to one

group and participants who were the initiator of the breakup or whose breakup was mutual composing the other group.

Stalking was significantly correlated with passion ($r=.15$), need for control ($r=.33$), anxious attachment ($r=.26$), parental discipline ($r=.14$), breakup anger ($r=.32$), and being the recipient of the breakup ($r=.15$). There was a trend for the relationship between breakup anger and stalking to be stronger among men ($r=.47$) than among women ($r=.25$, $z=1.96$, $p<.06$). Psychological abuse correlated positively with need for control ($r=.66$), anxious attachment ($r=.28$), parental discipline ($r=.24$), trait anger ($r=.27$) and negatively with relationship satisfaction ($r=-.23$). Stalking and psychological abuse were positively correlated ($r=.35$), but in this case the relationship was stronger for men ($r=.54$) than for women ($r=.29$; $z=2.44$, $p<.01$). All the correlations were in the expected direction.

Stalking and psychological abuse path analyses

Stalking Model (see figure 2). Estimation of the initial model revealed that, while the Chi-Square was significant, $X^2(11, N=268)=21.16$, $p<.05$, the Chi-Square ratio was 1.92. While the NNI was .93, the SRMR was .05, the RMSEA .06, the CFI was .96, and the MCI was .98, therefore indicating good model fit. The t values for all the paths were significant ($p<.05$) and all the residuals were below .10. Square multiple correlations for the endogenous variables indicated that 22% of the variance for stalking, 39% of the variance for breakup anger, 17% of the variance for need for control, 5% of the variance for breakup initiation status, and 2% of the variance for anxious attachment was explained by the preceding variables in the model. To test a secondary hypothesis that passion would affect breakup anger directly, a path was added from passion to breakup anger. Indeed, it is possible that the amount of passion in the relationship

affected the amount of breakup anger/hurt directly, that is without being mediated by breakup status.

The revised model, presented in Figure 2, was then re-estimated. A review of the goodness of Fit Indices indicated that the revised model provided a good fit to the data: the chi-square was not significant $X^2(10, N=268)=17.23, p>.05$; the SRMR and RMSEA were both below .05; while the NNI was .94, the CFI was .97 and the MCI .99. The residuals were all below .10 and the Rsquares were similar to those for the previous model, except for breakup anger (rsquare=.40). The t values for all the paths were significant ($p<.05$) and the standardized estimates of the paths were nontrivial in magnitude. The added path from passion to breakup anger was significant, therefore indicating that there is an indirect link between passion and stalking through breakup anger.

A chi-square difference between the initial model and the revised model was calculated to determine whether the addition of this path resulted in a significant improvement in the model's fit. Supporting our finding that this added path was significant, this difference was significant ($X^2(1, N=268)=3.93, p<.05$).

Psychological abuse model (see figure 3). Based on the Fit Indices, the initial model of psychological abuse seemed to provide a good fit for the data. The Chi-Square was not significant ($X^2(3, N=279)=5.45, p>.05$) and the Chi-Square ratio was below 3. Furthermore, the SRMR and RMSEA were below .06 and the CFI, NNI, and MCI above .96. The residual correlations were also all below .10. However, three path coefficients did not reach significance ($t<1.96$): anxious attachment to relationship quality, trait anger to relationship quality, and trait anger to psychological abuse. Based on these results, these three paths were removed in the subsequent model.

The revised model (see Figure 3) provided a superior fit to the data as indicated by the Goodness of Fit Indices: the Chi-Square was not significant ($\chi^2(6, N=279)=6.74, p>.05$); the Chi-Square ratio was below 3; the RMR and RMSEA were below .03; and the CFI, NNI, and MCI were above .99. All the path coefficients were significant and the residuals were below .10. In this model, 47% of the variance for psychological abuse, 21% for need for control, 17% for trait anger, 4% for relationship quality, and 1% of anxious attachment was explained by preceding variables. The Chi-Square difference between these two models was not significant, $\chi^2(3, 279)=1.29, p<.05$, indicating that, as expected, the deletion of these paths did not significantly alter the model.

Discussion

We have established that stalking-like behaviors following a relationship breakup and the perpetration of psychological abuse during the relationship share a number of theoretically relevant antecedents. Among the shared antecedents are need for control, anxious attachment, and harsh parental discipline. Anger, jealousy, passion, relationship dissatisfaction, and breakup initiation status, however, enter into the prediction of these two outcomes in different ways depending upon the context. In an ongoing relationship, it appears that trait anger and relationship quality make an additional contribution to the prediction of psychological abuse; whereas in the context of relationship breakup, the contributors to the prediction of stalking are the context (whether one is the recipient vs. an initiator of the breakup), the level of passion prior to the breakup, and the degree of anger-jealousy associated with the breakup. The path models that we propose bring together a number of theoretically relevant variables and suggest further areas of research.

Harsh parental discipline, anxious attachment, and need for control: a common basis for relationship violence-based phenomena?

Consistent with previous literature (Davis et al., 2000; Langhinrichsen-Rohling et al., 2000; Stets, 1991; Tjaden & Thoennes, 1998), need for control of partners continues to be a central core component of both stalking and psychological abuse. Need for control not only predicted our two outcomes directly and indirectly through model-specific variables, but was also predicted by common variables in stalking and psychological abuse, that is, harsh parental discipline and anxious attachment. Individuals who reported a need to control their (ex-) partner tended to have been harshly punished by parental figures in childhood and to have developed an anxious attachment style, which subsequently increased the likelihood of stalking after a breakup or perpetration of psychological abuse when in a relationship.

The role of harsh parental discipline as an antecedent of both anxious attachment and need for control and the role of anxious attachment as predictive of need for control are consistent with previous stalking and psychological abuse research (Davis et al., 2000; Dutton, 1995; Dutton et al., 1996; Langhinrichsen-Rohling et al., 2000; Langhinrichsen-Rohling & Rohling, 2000) and allow us to speculate about the underlying mechanisms of the development of a need to control one's partner. Our results indicate that harsh parental discipline may lead to the development of an anxious attachment style. Having received harsh and unfair parental punishment may lead the child to develop an insecure relationship with the caregiver. According to attachment theory (Bartholomew, Henderson, & Dutton, 2001), the child will then develop a negative sense of self (anxiety dimension), which will make him overly dependent on others for self-esteem and support (preoccupied) or fearful of intimacy because of fear of rejection (fearful). These internal working models will be re-activated in times of distress in an effort to

re-establish their relationship with their partners, hence the relationship between anxious attachment and need for control.

The conclusions about harsh parental discipline's potential role need to be qualified in that when multivariate outliers were removed in the stalking analyses, harsh parental discipline was no longer contributing to the prediction of anxious attachment or need for control.

Relationship characteristics specific to stalking and psychological abuse.

Psychological abuse. In the psychological abuse model, trait anger was significantly predicted by harsh parental discipline both directly and indirectly through anxious attachment. Furthermore, trait anger was predictive of psychological abuse through need for control. These findings are consistent with previous psychological maltreatment literature. Dutton et al. (1994), for instance, provided evidence that psychological abuse was related to both anger and anxious attachment.

Our results also further support Dutton and associates' theory of relationship violence development (Dutton, 1998) and dating violence findings (Follingstad et al., in press). Briefly, Dutton posits that difficulties in early attachment play a crucial role in later relationship violence. Follingstad et al. (in press) tested this theory in the context of dating violence and concluded that being anxiously attached predicted need for control indirectly through angry temperament. In our model, feelings of insecurity partly due to having been harshly punished as a child facilitate the development of an angry style as a way to handle the anxiety around real or imagined loss. The use of controlling tactics represent an effort to re-establish the relationship and is facilitated by the presence of anxious attachment both directly and indirectly through trait anger.

While trait anger appears to be an important antecedent of need to control in our psychological abuse model, relationship satisfaction was found to be predicted by need for

control. Contrary to our expectations, however, anxious attachment and trait anger did not predict relationship quality directly. Anxious attachment and trait anger were negatively correlated with relationship satisfaction, but when introduced in the model, these direct paths were not significant. It therefore appears that the need to control one's partner, which stems from early attachment problems and the subsequent development of an angry style, affects psychological abuse not only directly, but is also mediated by the amount of commitment and intimacy in the relationship. The more controlling an individual is with his/her partner, the less committed and intimate the relationship becomes, that is, the less satisfied s/he is with the relationship, which increases the likelihood of psychological abuse perpetration. These findings are consistent with previous research on psychological abuse, which associated relationship dissatisfaction with psychological abuse perpetration (O'Leary et al., 1994). The controlling individual is therefore caught in a self-fulfilling prophecy cycle. He attempts to control his/her partner by fear of abandonment and, by doing so, affects the level of commitment and intimacy negatively and his/her satisfaction with the relationship, which then increases the likelihood that s/he will have to resort to emotionally abusive tactics in order to regain control over the relationship. Relationship satisfaction, and more specifically commitment and intimacy levels, should therefore be included in future models of psychological abuse.

Stalking. Passion, breakup initiator status, and anger-jealousy were included in our stalking model. Results indicate that passion does play a role in stalking not only in predicting breakup initiation status, but in also predicting breakup anger. The more passionate the relationship was, the less likely one was to initiate the breakup and therefore the more likely s/he was to be the recipient of the breakup if there was a breakup. Furthermore, the more passionate

the relationship, the more likely the participant was to experience feelings of anger and jealousy about the breakup, regardless of breakup initiator status.

Breakup initiation status was not only predicted by passion, but also by anxious attachment, and was predictive of breakup anger. In other words, fearing rejection and being dependent on one's partner for support and self-esteem decreased the likelihood of initiating the breakup and therefore increase the likelihood to be the recipient of the breakup if there was a breakup. Breakup initiation status also predicted an angry and jealous reaction to the breakup, which was not surprising based on anxious attachment theory and since previous research revealed that the breakup recipient usually experiences more emotional distress than the initiator (Davis & O'Hearn, 1989).

The role of breakup anger appears to be a key in stalking relationships because an angry reaction to the breakup mediated the relationship between stalking and all the preceding variables, except need for control which also has a direct link to stalking. The angrier the individual was about the breakup, the more likely s/he was to stalk his/her ex-partner when the preceding characteristics were also present.

While these results support our two conceptual models of stalking and psychological abuse, the study is not without limitations. First, while stalking in the college population is warranted, this sample came from a very restricted population of students in upper division psychology courses. The relationships found here will need to be replicated in broader samples to have their ecological validity established.

Second, the data are cross-sectional, not longitudinal, all rely on self-report methodology, and some of the measures are retrospective, e.g., harsh parental discipline, the levels of passion and satisfaction in the previous relationship. We cannot therefore exclude the possibility that

current states of anger and jealousy may have colored respondents' memories of past relationships. Also, because of the common method variance, some of the relationships between variables may be inflated. The path models that we have tested and presented are thus plausible models of antecedents of stalking and psychological abuse, but not the only possible such models³. They have the virtue of being consistent with a growing body of literature on the antecedents of stalking and abuse (See Langhinrichsen-Rohling & Taylor, in press, for a similar model based on three studies by her research group) and of providing testable hypotheses for further research.

Another limitation is that the measures of both stalking-like behaviors and psychological abuse are relatively new. The measure of stalking has been pre-tested and refined in two studies by Davis, Ace, and Andra (2000). The item content is consistent with the highest frequency behaviors reported by victims (Tjaden & Thoennes, 1998; Cupach & Spitzberg, 2000) and the scale has shown modest, but statistically significant correlations with brief measures of psychological abuse and physical abuse. The measure of psychological abuse is built directly on Tolman's (1999) short form of his Psychological Maltreatment of Women Inventory. As expected, the perpetrator version of the PMWI was correlated with physical abuse measures-both frequency and severity (Davis, Ace, & Andra, 1999). Thus, while the key dependent variables are based on new measures, both have moderate internal consistency and evidence of construct validity.

In conclusion, we have established that two somewhat complex models of the antecedents of stalking and psychological abuse hold promise and support the premise that psychological abuse and stalking are forms of interpersonal coercion. The common constituents for these antecedents are need for control, forms of anger, anxious attachment and the experience

of harsh parental discipline. But in each case the form of the models must take account of relationship and context specific factors. For psychological abuse, relationship dissatisfaction and trait anger become important elements of the model; for stalking, anger-jealousy over the breakup, being the recipient of the breakup and levels of passion in the relationship become important. These findings have a clear continuity with research on physical violence in relationships.

References

- Aguilar, R.J., & Nightingale, N.N. (1994). The impact of specific battering experiences on the self-esteem of abused women. Journal of Family Violence, 9, 35-45.
- Bartholomew, K., Henderson, A.J.Z., & Dutton, D.G. (2001). Insecure attachment and abusive intimate relationships. In C. Clulow (Ed.), Adult attachment and couple work: Applying the "secure base" concept in research and practice (pp. 43-61). London: Rutledge.
- 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, 226=244.
- Brennan, K.A., Clark, C.L., & Shaver, P.R. (1998). Self-report measure of adult attachment: An integrative overview. In J. Simpson & W. Rholes (Eds.) Attachment theory and close relationships. (pp. 46-76). NY: Guilford.
- Bretscher, F., & Bergner, R. M. (1991). Relational qualities as factors in mate selection decisions. In M. K. Roberts & R. M. Bergner (Eds.) Advances in descriptive psychology (vol. 6, pp.107-123). Greenwich, CT: JAI Press.
- Coleman, F. L. (1997). Stalking behaviors and the cycle of domestic violence. Journal of Interpersonal Violence, 12, 420-432.
- Cupach, W.R., & Spitzberg, B.H. (1998). Obsessive relational intrusion and stalking. In B.H. Spitzberg and W.R. Cupach (Eds.), The dark side of close relationships (pp.233-263). Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Cupach, W.R., & Spitzberg, B.H. (2000). Obsessive relational intrusion. Violence and Victims, 15, 357-372.
- Davis, K.E., Ace, A., & Andra, M. (1999). [Stalking Measurement data]. Unpublished raw data.

Davis, K.E., Ace, A., & Andra, M. (2000). Stalking perpetrators and psychological maltreatment of partners: Anger-jealousy, attachment insecurity, need for control, and breakup context. Violence and Victims, *15*, 407-425.

Davis, K.E., & O'Hearn, R. (1989, May). Doing and being done to: Attachment style and the degree of post-breakup distress among formerly dating couples. Paper presented at the Iowa Network on Personal Relationships, Iowa City, Iowa.

Dutton, D.G. (1995). A scale for measuring propensity for abusiveness. Journal of Family Violence, *10*, 203-221.

Dutton, D.G. (1998). The abusive personality: violence and control in intimate relationships. New York: The Guilford Press.

Dutton, D.G., & Starzomski, A.J. (1993). Borderline personality in perpetrators of psychological and physical abuse. Violence and Victims, *8*, 327-337.

Dutton, D.G., Starzomski, A.J., & Ryan, L. (1996). Antecedents of abusive personality and abusive behaviors in wife assaulters. Journal of Family Violence, *11*, 113-132.

Dutton, D.G., Saunders, K., Starzomski, A., & Bartholomew, K. (1994). Intimacy-anger and insecure attachment as precursors of abuse in intimate relationships. Journal of Applied Social Psychology, *24*, 1367-1386.

Dye, M.L., & Eckhardt, C.I. (2000). Anger, irrational beliefs, and dysfunctional attitudes in violent dating relationships. Violence and Victims, *15*, 337-350.

Eckhardt, C.I., Barbour, K.A., & Stuart, G.L. (1997). Anger and hostility in maritally violent men: Conceptual distinctions, measurement issues, and literature review. Clinical Psychology Review, *17*, 333-358.

Fisher, B.S., Cullen, F.T., & Turner, M.G. (2000). The sexual victimization of college

women. Washington D.C.: U.S. Department of Justice.

Follingstad, D.R., Bradley, R.G., & Helff, C.M. (in press). A model for predicting dating violence in college students: Anxious attachment, angry temperament, and need for control.

Violence and Victims.

Follingstad, D.R., Bradley, R.G., Laughlin, J.E., & Burke, L. (1999). Risk factors and correlates of dating violence: The relevance of examining frequency and severity levels in a college sample. Violence and Victims, 14, 1-17.

Follingstad, D.R., Rutledge, L.L., Berg, B.J., Hause, E.S., & Polek, D.S. (1990). The role of emotional abuse in physically abusive relationships. Journal of Family Violence, 5, 107-120.

Gelles, R.J., & Straus, M.A. (1988). Intimate violence. New York: Simon and Schuster.

Guerrero, L.K. (1998). Attachment-style differences in the experience and expression of romantic jealousy. Personal Relationships, 5, 273-291.

Hazan, C., & Shaver, P.R. (1987). Romantic love conceptualized as an attachment process. Journal of Personality and Social Psychology, 52, 511-524.

Holtzworth-Munroe, A., Stuart, G.L., & Hutchinson, G. (1997). Violent vs. nonviolent husbands: Differences in attachment patterns, dependency, and jealousy. Journal of Family Psychology, 11, 314-331.

Jezi, D.R., Molidor, C.E., & Wright, T.L. (1996). Physical, sexual, and psychological abuse in high school dating relationships: Prevalence, rates, and self-esteem issues. Child and Adolescent Social Work Journal, 13, 69-87.

Kurt, J.L. (1995). Stalking as a variant of domestic violence. Bulletin of the Academy of Psychiatry and the Law, 23, 219-223.

Langhinrichsen-Rohling, J., Palarea, R. E., Cohen, J., and Rohling, M. L. (2000).

Breaking up in hard to do: Pursuit behaviors following the dissolution of romantic relationships. Violence and Victims, 15, 73-90.

Langhinrichsen-Rohling, J., & Rohling, M. (2000). Negative family-of-origin experiences: Are they associated with perpetrating unwanted pursuit behaviors? Violence and Victims, 15, 1-13.

Langhinrichsen-Rohling, J. & Taylor, J. (in press). After the break-up: Relationship factors associated with intimate relationship stalking. In M. Brewster (Ed.), *Stalking victims and offenders*. New York: Civic Research Institute, Inc.

Marshall, L.L. (1992). Development of the Severity against Women Scales. Journal of Family Violence, 7, 103-121.

Mechanic, M. B. (in press). Stalking victimization: Clinical implications for assessment and intervention. In K.E. Davis, I.H. Frieze, and R. Maiuro (Eds.), Stalking: Perspectives on victims and perpetrators. New York: Springer Publishing Co.

Meloy, J. R. (1998). The psychology of stalking. In J.R. Meloy (Ed.) The psychology of stalking: Clinical and forensic perspectives (pp. 1-23). San Diego, CA: Academic Press.

Murphy, C.M., & O'Leary, K.D. (1989). Psychological aggression in prediction of physical aggression in early marriage. Journal of Consulting and Clinical Psychology, 57, 579-582.

Murphy, C. M. & Cascardi, M. (1999). Psychological abuse in marriage and dating relationships. In R. L. Hampton (Ed.), *Issues in children's and families' lives: Family violence* (2nd ed., pp.). Beverly Hills, CA: Sage.

National Institute of Justice (1996, April). Domestic violence, stalking, and antistalking legislation: An annual report to Congress under the Violence against Women Act. Washington,

DC: U.S. Department of Justice.

O'Leary, K.D., Malone, J., & Tyree, A. (1994). Physical aggression in early marriage: Pre-relationship and relationship effects. Journal of Consulting and Clinical Psychology, *62*, 594-602.

Perris, C., Jacobsson, L., Lindstrom, H., von Knorring, L., & Perris, H. (1980). Development of a new inventory for assessing memories of parental rearing behavior. Acta Psychiat. Scand., *61*, 265-274.

Pipes, R.B., & LeBov-Keeler, K. (1997). Psychological abuse among college women in exclusive heterosexual dating relationships. Sex Roles, *36*, 585-603.

Siegel, J.M. (1986). The multidimensional anger inventory. Journal of Social Psychology, *51*, 191-200.

Sinclair, H.C., & Frieze, I.H. (2000). Initial courtship behavior and stalking: How should we draw the line? Violence and Victims, *15*, 23-39.

Spitzberg, B.H., & Cupach, W.R. (1999, May). Jealousy, suspicion, possessiveness, and obsession as predictors of obsessive relational intrusion. Paper presented at the International Communication Association Convention, San Francisco, CA.

Sternberg, R.J. (1986). A triangular theory of love. Psychological Review, *93*, 119-135.

Stets, J.E. (1990). Verbal and physical aggression in marriage. Journal of Marriage and Family, *52*, 501-514.

Stets, J.E. (Walker 1991). Psychological aggression in dating relationships: The role of interpersonal control. Journal of Family Violence, *6*, 97-114.

Stets, J.E., & Pirog-Good, M.A. (1987). Violence in Dating Relationships. Social Psychology Quarterly, *50*, 237-246.

Tjaden, P., & Thoennes, N. (1998). Stalking in America: Findings from the national violence against women survey. Denver, CO: Center for Policy Research.

Tolman, R.M. (1999). The validation of the Psychological Maltreatment of Women Inventory. Violence and Victims, 14, 25-37.

White, J., Kowalski, R., Lyndon, A., & Valentine, S. (2000). An integrative contextual developmental model of male stalking. Violence and Victims, 15, 373-388.

Footnotes

¹All outliers were identified using multivariate statistical procedures (i.e., statistical comparison of Square Malanobis distance with appropriate Chi-Square). In the case of psychological abuse, 8 out of the 9 outliers fell at or above the 88th percentile on the abuse measure and represented one fourth of this group (i.e., scores at or above the 88th percentile). To exclude these scores would have been to eliminate the very participants we were trying to predict. Furthermore, there was no consistent correlational pattern of scores between anxious attachment, parental discipline, trait anger, need for control, relationship quality, and psychological abuse for these outliers, therefore indicating a plethora of alternative hypotheses for the model. We therefore decided to include these outliers in our models. In the case of stalking, half of the 10 outliers fell below and half above the 90th percentile on the stalking measure. Again, correlational patterns of scores between passion, anxious attachment, parental shame, need for control, breakup status, breakup anger, and stalking were different for each participant, therefore leading no support to a specific alternative model hypothesis. The best fitting stalking model including the outliers (model 2) was then re-ran without the outliers. Results indicated slightly better Fit Indices, although the following paths were not significant in the stalking model: parental discipline to anxious attachment, parental discipline to need for control, and need for control to anger-jealousy.

²Because the distributions of several manifest variables (i.e., passion, need for control, parental discipline, stalking, and psychological abuse) significantly departed from normality (i.e., the absolute value of skewness or kurtosis was greater than 1), these variables were transformed to moderate their skewness and/or kurtosis. The final models were then re-tested. Because violation of normality did not affect the results, they are not reported in the present article.

³ Other models that were theoretically defensible were also considered. Avoidant attachment was added as a variable that may potentially be influenced by harsh parental discipline and in turn impact need for control in both the stalking and psychological abuse models. These models did not fit the data as well and avoidant attachment was not found to be a significant variable. For these reasons, the results for these models are not presented in the present article.

Table 1

Means, Standard Deviations, Intercorrelations, and Coefficient Alphas Reliability Estimates for Stalking Models

Predictor	Criterion Variable								
	<u>M</u>	<u>SD</u>	1	2	3	4	5	6	7
1. Harsh Parental Discipline	1.29	0.38	[91]						
2. Breakup Anger	6.32	1.48	.09	[72]					
3. Passion	6.81	1.44	-.00	.22**	[78]				
4. Anxious Attachment	3.50	1.22	.12*	.27**	.10	[92]			
5. Breakup Initiator Status	1.12	0.15	-.05	.56**	.20**	.18**	[NA]		
6. Control	1.44	0.33	.24**	.19**	-.03	.36**	.00	[88]	
7. Stalking	1.20	0.25	.14*	.32**	.15**	.26**	.15**	.33**	[79]

Note. Due to missing data, N varies from 279 to 342 per correlation; Harsh Parental Discipline =

Recalled Negative Parental Treatment subscale of the Propensity for Abusiveness Scale; Control

= Need for Control Scale; Breakup Initiator Status = participant was the breakup recipient.

Decimals omitted from correlations and reliability estimates. Alpha coefficient reliability

estimates appear on the diagonal. * = $p < .05$; ** = $p < .01$

Table 2

Means, Standard Deviations, Intercorrelations, and Coefficient Alphas Reliability Estimates for Psychological abuse Models

Predictor	<u>M</u>	<u>SD</u>	Criterion Variable							
			1	2	3	4	5	6	7	
1. Harsh Parental Discipline	1.29	0.38	[91]							
2. Trait Anger	2.35	0.86	16**	[72]						
3. Relationship Satisfaction	6.50	1.56	-08	-12*	[92]					
4. Anxious Attachment	3.50	1.22	12*	40**	-13*	[92]				
5. Control	1.44	0.33	24**	36**	-20**	36**	[88]			
6. Psychological Abuse	0.71	0.64	24**	27**	-23**	28**	66**	[84]		

Note. Due to missing data, N varies from 282 to 342 per correlation; Harsh Parental Discipline = Recalled Negative Parental Treatment subscale of the Propensity for Abusiveness Scale; Control = Need for Control Scale. Decimals omitted from correlations and reliability estimates. Alpha coefficient reliability estimates appear on the diagonal. * = $p < .05$; ** = $p < .01$