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Predictors of Psychological Abuse and Violence in College Romantic Relationships

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PREDICTORS OF PSYCHOLOGICAL ABUSE AND VIOLENCE IN COLLEGE ROMANTIC RELATIONSHIPS

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This thesis is submitted in partial fulfillment of

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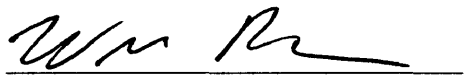

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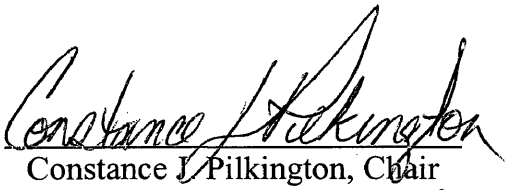

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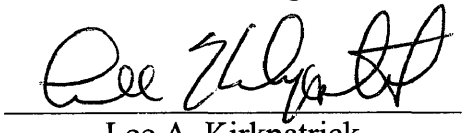

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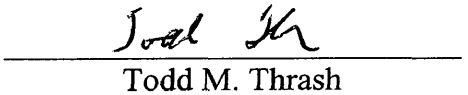

Todd M. Thrash

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ABSTRACT

The current study explored individual-level, couple-level, and interactive predictors of psychological abuse and violence in college romantic relationships. Ninety college couples filled out online questionnaires measuring rejection sensitivity, risk in intimacy, emotionality, desire for control, power in the relationship, jealousy in the relationship, commitment to the relationship, psychological abuse, and violence. Results revealed male emotionality and total demand-withdraw interactions (related to power) as main predictors of male psychological abuse and violence (as assessed by females). Furthermore, jealousy emerged as a mediator of certain relationships between individual-level variables and psychological abuse and violence, while self-partner quality of alternatives discrepancy (i.e., who has better alternatives outside the relationship; related to commitment) and power processes discrepancy (i.e., who has more power in the relationship) emerged as potential moderators of these relationships. Despite several limitations, this study provides an interesting glimpse of how individual- and couple-level variables can interact to predict aggression, abuse or violence in romantic relationships.

PREDICTORS OF PSYCHOLOGICAL ABUSE AND VIOLENCE IN COLLEGE ROMANTIC RELATIONSHIPS

INTRODUCTION

A woman feels stuck in an abusive relationship because she knows that if she leaves, her life may be in danger. A young man, perhaps under the influence of alcohol, sees his girlfriend dancing with another guy at a fraternity party, gets jealous, and violently pulls her away. A married couple with two children engages in constant verbal arguments; the husband is angry that his wife spends Friday nights out at clubs with her girlfriends, and the wife is angry that her husband spends Sunday afternoons watching football and drinking beer with his buddies. Adolescents, college students, and adults are all too familiar with partner maltreatment in romantic relationships, whether it has happened to them, their friends, or whether they have heard about extreme cases of this unfortunate phenomenon in the media.

According to the Federal Bureau of Investigation, in 1997 approximately 1,000 women in the United States were murdered by either their boyfriend or husband (Olson, 2002). Roughly 22% of women and 7% of men have been physically assaulted by an intimate partner at some point in their lives, and about 1.3 million women and 835,000 men are physically assaulted annually in the United States (Tjaden & Thoennes, 2000). Furthermore, it is estimated that some kind of significant psychological or physical aggression goes on in as many as 50% of all heterosexual romantic relationships (Olsen, 2002). Even more troubling, 40% of women who go to shelters to escape relationship abuse end up returning to their partner (Rusbult & Martz, 1995). Obviously, these numbers will vary depending on the source (police reports tend to underestimate abuse as

opposed to family conflict studies [Straus, 1999]), but the magnitude of partner maltreatment in the United States cannot be ignored.

So why are all these bad things happening, and can anything be done to help at-risk couples? Surely the level of aggression, abuse or violence in a heterosexual romantic relationship is affected by many factors, including socioeconomic status, the media, personality at the individual level (or "individual-level" variables), personality in the context of the relationship, or certain characteristics of the relationship (the latter two factors could be referred to as "couple-level" variables). Additionally, evolutionary psychology offers an explanation for why aggression between reproductive partners may occur in the first place. The present paper will address the "why are all these bad things happening" question, considering several individual-level and couple-level predictor variables of partner maltreatment, and incorporating evolutionary theory along the way.

Partner Maltreatment Defined, Classified, and Discussed

Before exploring possible etiologies behind the maltreatment that is prominent in so many relationships, it is necessary to list, define and differentiate the numerous psychological terms that have been used to describe this type of behavior: "aggression," "abuse," "violence," and "physical assault." In addition, in this paper "partner maltreatment" will be used to refer to all of these terms (in the context of romantic relationships). All of the above terms are very similar, and are often used interchangeably, but there are slight differences, and some researchers may define certain terms differently than others. Furthermore, embedded within all of these terms, (especially aggression) are different ways in which partner maltreatment can manifest itself.

Aggression has been defined as "any form of behavior directed toward the goal of harming or injuring another living human being who is motivated to avoid such treatment" (Baron & Richardson, 1994, p.7). Aggression in relationships could be defined similarly, with "one's spouse or partner" replacing "another living being." Marshall (1994) adds that definitions of aggression usually include the intent or perceived intent to harm, although it is difficult to determine exactly what is meant by "intent to harm." A key point about Baron and Richardson's (1994) definition of aggression and corresponding definition of aggression in relationships is that the behavior is *directed toward the goal* of harm or injury (or is intended to harm or injure), but it may not actually result in harm or injury. Another important point is that the motive for aggression may not just be to harm the person one is aggressing against. There may be some other higher-level goal or goals that one is trying to achieve by harming this person. For example, in order to get her beer-guzzling husband away from the television and outdoors so he can mow the lawn, a woman may insult his laziness and the current size of his stomach.

Aggression can be manifested psychologically or physically. A shove or a push would be examples of physical aggression, whereas a verbal attack on a partner's unhealthy eating habits would be an example of psychological (or emotional) aggression, defined in the context of romantic relationships as "yelling [at], insulting, threatening, or controlling" one's partner (Hammock & O'Hearn, 2002, p.526; Stets, 1991). On the *Revised Conflict Tactics Scales* (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996), which measure aggression in romantic relationships, there is a "psychological aggression" subscale, and items include insulting, swearing, shouting, stomping out of a

room, threatening to hit or throw something, destroying a possession, doing something out of spite, and making emotionally damaging accusations. Not surprisingly, psychological aggression is usually indicative of physical aggression, and vice versa (Arias, 1999; Murphy & O'Leary, 1989).

The next term, abuse, can also be categorized as psychological or physical. Marshall (1994) defines psychological abuse in the context of romantic relationships as "messages that are harmful and undermine the partner's personal and/or interpersonal competence" (p.305), distinguishing between "overt" and "subtle" psychological abuse. Overt psychological abuse is associated with dominance and intent to harm (and probably more related to violence or physical abuse), whereas subtle psychological abuse occurs when one undermines his or her partner's sense of self in a loving or joking manner (Marshall, 1994). For example, a man may offer to read over his girlfriend's English paper and make corrections, which on the surface seems like a nice gesture, but may in fact cause the woman to think she is not competent enough as a student. Marshall's questionnaire, the *Subtle and Overt Psychological Abuse of Women Scale* (SOPAS; Marshall, 2000), measures male overt and subtle psychological abuse of women in relationships (as reported by women). She also stresses that psychological abuse should not be defined in terms of control and dominance because there are behaviors in relationships that can be psychologically abusive but in no way coercive (Marshall, 1994). Buss (1994) adds that psychological abuse in a relationship can have the effect of lowering a partner's perceived value as a mate (or "mate value"), thereby decreasing the chance of that partner leaving the relationship.

The terms "physical abuse" and "violence" appear to refer to the same thing. If there is any difference, it may be that "abuse" implies ongoing violence in a relationship, as is evident by the term "abusive relationship." Thus, it would not be correct to refer to one isolated act of violence as physical abuse. Regardless, Marshall (1994) prefers the term violence because physical abuse carries too many negative connotations, although her precise definition of violence is unclear. She appears to define the term as "physical harm in a relationship," which makes violence easier to measure, but would be an oversimplification of the concept. Marshall's questionnaires, the *Severity of Violence Against Women Scales* (SVAWS; Marshall, 1992a) and the *Severity of Violence Against Men Scales* (SVAMS; Marshall, 1992b) measure violence in a relationship, and do so by assessing the frequency of threats and acts of violence by "you" and "your partner." Interestingly, the operationalization of violence in these scales may be at odds with her definition of violence (the threats and acts described do not necessarily imply harm, and level of harm is not actually measured).

Given the ambiguities in Marshall's conceptualization of violence, a better definition of violence in a relationship may be "any aggressive behavior against a partner that actually results in harm." So an act of aggression would usually be violent, but not always. Indeed, Archer (2000, 1994) states that physical aggression is more behaviorally defined and refers to reported acts of intended harm (i.e., kicking, slapping, hitting, etc.) regardless of the level of consequence, whereas violence is measured by assessing the consequences of physically aggressive acts or the amount of physical and psychological (or emotional) harm done by way of these acts (although an act of aggression probably would not be considered violent *only* if psychological harm were done). Similarly, overt

psychological abuse (but probably not subtle psychological abuse) could be defined as psychological aggression that results in harm.

The last term, physical assault, includes such acts as pushing, grabbing, slapping, hitting, throwing at, choking, or beating up (Tjaden & Thoennes, 2000), and could be defined as "any severe act of violence." The "physical assault" subscale on the CTS2 includes most of the aforementioned acts plus kicking, biting, using a knife or gun, twisting an arm or hair, and burning or scalding (Straus et al., 1996). There is no term called "psychological assault," or at least not yet.

Now that the four main terms used to refer to partner maltreatment have been reviewed, the different ways some of these terms can be broken down will be considered. To do this it is necessary to return to the term "aggression," which has been the most popular term used to describe partner maltreatment in psychological research. The psychological-physical distinction and the overt-subtle distinction (in the context of psychological abuse) have already been discussed, but one's aggressive behavior can be categorized in many other ways, such as "direct" or "indirect." Direct aggression implies face-to-face interaction, while indirect aggression occurs in a more circuitous manner, or in a way that gives the aggressor a chance to deny aggressive behavior (e.g., spreading rumors; Baron & Richardson, 1994; Bjorkqvist, Osterman, & Kaukiainen, 1992). Another distinction, relevant to motivation, is between instrumental (or proactive) aggression, aimed toward achieving some goal, and expressive aggression, which is more reactive and not necessarily directed toward a goal (Baron & Richardson, 1994). A similar distinction is between provoked (or retaliative) and unprovoked aggression (Baron & Richardson, 1994), while more obvious distinctions include verbal versus

nonverbal aggression (Bjorkqvist, 1994) and sexual versus nonsexual aggression (Archer, 2000). A distinction unique to Marshall's (1992a, 1992b) SVAWS and SVAMS is between threats and acts of violence. However, this distinction lies on a questionable assumption because threats of violence could easily be considered psychological abuse and not violence.

Providing a broader picture, Guerrero and Andersen (1998) put forth seven forms of negative behaviors associated with uncertainty, distrust or conflict that can occur in close relationships: (a) keeping a close watch over one's partner, (b) communicating with a rival to seek information about one's partner or threaten the rival, (c) showing verbal and physical signs of possession, (d) avoiding partner, especially in jealousy-provoking situations, (e) direct or indirect aggressive communication, (f) manipulation attempts, including counter-jealousy or guilt inductions, and (g) violent behavior, including violence toward partner or an object. Taking an evolutionary perspective, Buss (1988; Buss & Shackelford, 1997) has described several negative "mate retention strategies" (in addition to more neutral or positive ones) which include concealment of mate, derogation of mate, monopolization of time, emotional manipulation, verbal and physical possession signals, derogation of competitors, and violence against rivals. These two perspectives remind the reader that aggression/abuse/violence against one's partner is not the only "negative" response to conflict that can be directed toward one's partner. Whether or not all these negative behaviors can be classified as "partner maltreatment" is open to debate.

Thus far, partner maltreatment in relationships has been discussed only at an individual level, but Johnson (1995) has attempted to classify the different styles of aggression or violence that can occur at the couple level, coining the terms "common

couple violence" and "patriarchal terrorism." Patriarchal terrorism involves dominating males aggressing against submissive females usually to the point of injury; this is the form of violence that is typically reported by women in treatment programs. Common couple violence, on the other hand, is more prevalent and less severe, with occasional outbursts of violence being displayed by both the man and woman (Archer, 2000; Johnson, 1995). Johnson (2001) has recently added two more types of couple violence: "mutual violent control," in which both partners are equally violent and controlling, and "violent resistants," in which both partners are violent but only one (usually the man) is controlling. In addition, while not directly referring to styles of aggression or violence, Babcock, Waltz, Jacobson, and Gottman (1993) point out that certain partner communication styles, such as the "demand-withdraw" style, can make aggression more likely in relationships.

Clearly, all of these ways in which partner maltreatment can manifest itself (at the couple level and at the individual level) and every term used to describe partner maltreatment cannot be measured in one study. Consequently, because of its higher level of prevalence, only common couple violence (as opposed to patriarchal terrorism) will be investigated in the current study. Similarly, it is likely that psychological abuse is more prevalent than physical aggression because there are fewer social sanctions against insulting than hitting one's partner. Hence, psychological abuse will also be investigated in the current study.

Sex Differences

There are important sex differences in incidence of and reporting of partner maltreatment, and these will be addressed next. Outside the context of romantic

relationships, men are more aggressive than women (Baron & Richardson, 1994), females are more likely to aggress indirectly whereas men are more likely to aggress directly (Baron & Richardson, 1994), and it is believed by some that men usually aggress instrumentally and women expressively (Baron & Richardson, 1994; Campbell, Muncer, & Gorman, 1993; Muehlenhard, Danoff-Burg, & Powich, 1996). In the context of relationships, however, the story is a little different, and also less clear.

Archer (2000) found in a meta-analytic review that females are slightly more likely than males to use physical aggression in relationships but men are more likely to injure their partner. In contrast, Tjaden & Thoennes (2002) report that men are more likely than women to physically assault their partner. Ambiguities in these findings can be alleviated slightly by considering differences in measurement and terminology. Dobash, Dobash, Wilson, and Daly (1992) explain that the use of the terms "violence" and "physical aggression" interchangeably by researchers resulted in the proposal that men and women are equally violent in relationships, which is simply untrue. If aggression is operationalized as frequency of harmful or potentially harmful acts with no consideration of injury, then it could be said that females are slightly more aggressive than males in relationships (Archer, 2000). However, when measures of violence incorporate level of injury and not just frequency of acts, males are certainly more violent than women in relationships.

In regard to psychological partner maltreatment, Hammock and O'Hearn (2002) found women to be just as likely or perhaps more likely than men to use psychological aggression against their partner (assessed only with self-reports). Buss (1994), however, argues that men are more often the perpetrators of psychological abuse in relationships,

and the accompanying evolutionary view is that male coercive power plays an important role in partner maltreatment (Archer, 2000). These contrasting findings may again be due to discrepancies in measurement and terminology. Men may be more likely to use psychological abuse and not psychological aggression because psychological abuse incorporates level of emotional harm while aggression does not.

Interestingly, there are likely sex differences in reporting of partner maltreatment, and these differences could have implications for all of the above differences. Dobash et al. (1992) report a very low level of correspondence between self- and partner reports of violence (i.e., correlations "scarcely exceeded chance") and note that these "interrater reliabilities" are important in determining the validity of scales measuring partner maltreatment. (This issue of low correspondence affecting validity of such scales, and how this problem is dealt with in the present study, is addressed in the "Materials" section that follows.)

While a discrepancy in self- and partner reports clearly exists, it is unclear why this is the case. Is it because all partners just differ in their perceptions of partner maltreatment for various reasons, or are these low correlations a result of some fundamental difference between males and females? In addition, the magnitude of these correlations says nothing about whether males or females are more likely to report aggression/abuse/violence in general (i.e., by self *or* partner).

Although many sex differences are open to debate, one sex difference that probably cannot be refuted is that men cause more partner harm or injury than women. Therefore the present study focuses on predictors of *male* psychological abuse and

violence in relationships (as assessed by females), although female psychological abuse and violence will also be measured.

Individual-Level Predictor Variables

Some people, because of personality (at the individual level) alone, are more likely to aggress in relationships than others. Arguably the most extreme example of disposition affecting partner maltreatment is the case of a man with an "abusive personality" (Dutton, 1998). There are many different proposed typologies of "male batterers," but they all physically abuse their girlfriend or wife on a regular basis and usually are characterized by symptoms of some personality disorder (e.g., schizoid, antisocial, borderline, narcissistic, or dependent; Dutton, 1998; Holtzworth-Munroe, Meehan, Herron, & Stuart, 1999). Depending on the typology, they may also have jealousy problems, high impulsivity, an exaggerated need for control over their partner, and/or an insecure attachment to their parents as children (Dutton, 1998; Holtzworth-Munroe et al., 1999). Another variation of the abusive personality is the sexually promiscuous "Don Juan" male with a high need for control who looks only for sexual conquest in relationships, and leaves his partner after he gets what he wants (Dutton, 1998).

Although these specific descriptions of typical male batterers give a basic idea of what traits may correspond to partner maltreatment, they clearly oversimplify the effect of individual-level variables. It is more likely that certain characteristics of males and females who are not necessarily prone to abuse in every relationship interact with couple-level variables or other variables to cause aggression. With this in mind, four individual-level variables will be examined in the present study: rejection sensitivity, perceptions of

risk in intimacy, emotionality, and desire for control. Reasons for choosing these variables over others will be discussed below.

Rejection sensitivity has been conceptualized by Downey and Feldman (1996; Feldman & Downey, 1994) as the tendency to "anxiously [or angrily] expect, readily perceive, and overreact to rejection" (p.1327 [1996]). In romantic relationships, those higher in rejection sensitivity (HRS) more readily perceive rejection in their partner's behavior, and both partners in the relationship report less satisfaction when an HRS individual is involved (Downey & Feldman, 1996). This lowered satisfaction appears to be a result of jealous and controlling behavior in HRS males, and hostile and unsupportive behavior in HRS females (Downey & Feldman, 1996).

Downey, Feldman, and Ayduk (2000) cite a relationship between rejection sensitivity and male violence in intimate relationships, finding that those men high in both rejection sensitivity and "investment in intimate relationships" were more likely to report using violence in their current or most recent relationship than HRS-low investment males. In other words, romantic investment moderated the relationship between rejection sensitivity and violence. Downey et al. (2000) also reported that investment and rejection sensitivity were uncorrelated. Unfortunately, the validity of this finding is questionable considering the weak measure of investment that was used and the fact that only male self-reports and no partner reports were obtained.

The idea of rejection sensitivity fits in nicely with an evolutionary perspective on aggression in relationships. As Baumeister and Leary (1995) state, humans have evolved a universal need to belong, meaning that all humans are motivated to be accepted and not rejected. Throughout evolutionary history, any person receiving acceptance and social

support was probably cared for appropriately (especially as a child) and therefore acceptance and social support were beneficial to survival and reproduction. It would make sense that the ancestors of present-day humans evolved some mechanism or mechanisms that responded to rejection with anxiety or anger, leading to an action aimed at acceptance. Those individuals without this capacity would not have received the proper support needed for survival and would have eventually died off. This pro-acceptance mechanism is clearly present in humans today. When babies do not receive attention from their parents, they cry in an effort to get attention. When Jimmy notices Rosie cheating on him, he feels hurt, and this could result in him exhibiting controlling behavior. So at some level all humans seem to be sensitive to rejection because this "belong is good, rejection is bad" mechanism helped human ancestors survive and reproduce, ultimately spreading the genes resulting in this mechanism to the present-day human population.

Although it seems all humans feel some level of anxiety or anger when they experience or perceive rejection in social relationships, clearly certain people react to rejection more emphatically than others. These individual differences in rejection sensitivity are likely to be partially rooted in biology, but whether or not a person is highly rejection sensitive could be determined also by the level of attachment that person had with his/her primary caregiver from birth through childhood (Downey, Khouri, & Feldman, 1997; Sloman, 2002). Coined by Bowlby (1969, 1988), attachment theory predicts that childhood attachment style (anxious-ambivalent, avoidant, or secure) has a substantial influence on how humans interact socially later on in life, and more pertinent to the present study, how they interact in romantic relationships. So HRS males and

females may be more likely to become involved in insecure, conflict-prone relationships, and their high rejection sensitivity may be a result of insecure attachment as a child (among other factors; Downey et al., 1997).

Perhaps not surprisingly, those who had an anxious-ambivalent childhood attachment are more prone to high rejection sensitivity as adults than are those who had an avoidant attachment (Sloman, 2002). This is because avoidants are conditioned over their childhood to just accept rejection (because they get rejected all the time), so they lose sensitivity to it. Anxious-ambivalents have a constant need for reassurance of love because they are always unsure whether their parents will accept or reject them (Sloman, 2002); they may learn that sometimes it pays to respond to rejection with an anxious or angry feeling that can cause action and hopefully acceptance and love.

Bartholomew (1991) proposed four types of *adult* attachment styles for romantic love--secure, preoccupied (same as anxious-ambivalent), dismissive (avoidant with a positive working model of self), and fearful (avoidant with a negative model of self)--and found that men who had battered their partners had high levels of preoccupation and fearfulness (Bartholomew, 1997). So it may be that an anxious-ambivalent style of attachment as a child leads to both an anxious-ambivalent or preoccupied style of attachment in romantic relationships and a higher level of adult rejection sensitivity, which may make this type of person more prone to aggression in relationships.

These theories of development seem to imply a more direct relationship between rejection sensitivity and partner maltreatment, as opposed to just the interactive effect that Downey et al. (2000) found. Thus, rejection sensitivity was included in the current study to determine whether it has a direct and/or an interactive effect on partner

maltreatment. Furthermore, because Downey et al. (2000) found only that male assessments of rejection sensitivity were predictive of male assessments of partner maltreatment, another reason for inclusion was to see if male assessments of rejection sensitivity are predictive of *female* assessments of partner maltreatment (by males). More generally, few previous studies have predicted partner maltreatment by males as assessed by females with predictor variables assessed by males, yet this method would seemingly disentangle any relationships between criterion and predictor variables due solely to the personality of the assessor. Hence, a main purpose of the present study is to predict partner maltreatment in this relatively novel manner.

Perceptions of risk in intimacy, a construct introduced by Pilkington and Richardson (1988) to measure how people differ in their sensitivity to the dangers associated with intimacy, is believed to be related to partner maltreatment based on its apparent similarity to rejection sensitivity and some empirical findings. Nezlek and Pilkington (1994) found that those higher in perceptions of risk in intimacy have less social participation on a daily basis, making conflict management more difficult (and bad conflict management skills may in turn lead to aggression). Furthermore, Hammock and O'Hearn (2001, 2002) created a factor called threat susceptibility that was predictive of psychological aggression in relationships (as assessed by their own scale) and moderated the relationship between level of partner provocation and physical aggression in relationships. Risk in intimacy was one of the variables that loaded significantly onto this threat susceptibility factor. (The other variables loading onto it were global self-esteem, trait anger, Machiavellianism, and neuroticism.) Individuals high in threat susceptibility were more likely than others to perceive ambiguous situations as

threatening and to react negatively (or "overreact") to perceived threats (Hammock & O'Hearn, 2002). The results of these studies were similar for both male and female aggression, although there were some slight sex differences in predictive models. Again, just as in the Downey (2000) study, the predictor variables and aggression were assessed only with self-report, and (just as with rejection sensitivity) one of the main reasons for including risk in intimacy in this study was to see if risk in intimacy as assessed by males is predictive of *female* assessments of partner maltreatment by males. Another reason for including risk in intimacy was see if it is predictive of partner maltreatment outside the context of threat susceptibility.

The third individual-level variable, emotionality, has not been explicitly connected with partner maltreatment, but it is related to neuroticism (Buss & Plomin, 1984), which loads significantly onto the Hammock and O'Hearn (2002) threat susceptibility factor. Buss and Plomin (1984) define emotionality as the tendency to be distressed or "become upset easily and intensely" (p.54). One can display emotionality by showing either anger or fear, but usually not both at the same time (or at least not high levels of each at the same time; Buss & Plomin, 1984). When faced with conflict, those high on emotionality might channel this excess anger or fear into aggression against their partner. Another possibility is that those already vulnerable to aggression or violence because of a specific trait or situational variable may be even more vulnerable if they are high in emotionality. Emotionality was included in the current study because it appears to be related to the level of psychological abuse and violence that one would inflict yet has been essentially overlooked as a predictor in previous research. It was used instead of neuroticism because the "tendency to become distressed or upset" seems to be most

relevant to partner maltreatment, and though neuroticism encapsulates this tendency, it also encapsulates self-pity and insecurity.

Desire for control, another individual-level variable likely to be associated with partner maltreatment, was conceptualized by Burger and Cooper (1979). Those high in desire for control are motivated to take actions that will satisfy the need to feel in control and are more likely to make their own decisions and take on leadership roles. They tend to distort their perception about how much control they actually have (i.e., have an "illusion of control") and react strongly when their beliefs about how much control they have are challenged (Burger, 1986; Burger, 1987; Burger, 1990; Burger & Cooper, 1979). Those high in desire for control are also less likely to disclose intimate information about themselves, to initiate and enjoy conversations, and to conform to perceived norms (Bulger, 1987; Burger, 1990).

Although desire for control has not been previously linked to aggression/abuse/violence in general or in relationships, two related constructs -- need for power and Machiavellianism -- have. Need for power is defined by Winter (1973, 1988) as the concern for having an impact on others, arousing strong emotions in others, or maintaining reputation and prestige. This impact can be sought through either direct or indirect methods of control. More pertinent to the present study, Mason and Blankenship (1987) report a significant relationship in men between need for power and physical abuse in intimate relationships. Although both sexes had similar need for power scores, Mason and Blankenship (1987) did not find this need for power-physical abuse relationship among women. They did find, however, that women who were highly stressed and who had a high need for affiliation (similar to rejection sensitivity) and low

activity inhibition (i.e., less restraint in their actions; similar to emotionality) were most likely to inflict abuse in relationships. Unlike desire for control, which is measured with a questionnaire, need for power has been measured with the Thematic Apperception Test (TAT).

Another related concept is Machiavellianism. Those high on Machiavellianism have a strong desire to control "their world" and try to accomplish this goal by manipulating and controlling other people for self-gain, showing little empathy along the way (Bogart, Geis, Levy, & Zimbardo, 1970; Bogart & Scoles, 1971; Hammock & O'Hearn, 2002). Hammock and O'Hearn (2002) found Machiavellianism to significantly load onto their threat susceptibility factor, which as mentioned earlier is related to aggression in relationships.

Because of its apparent connection with need for power and Machiavellianism, desire for control should have some positive relationship with partner maltreatment. Perhaps those males high on desire for control, especially those who do not *actually* have control (or power) in their relationship, are more likely to aggress against their partner. This effect may be amplified further if the male's personality is such that he is more likely to act on such a desire, or if the nature of the relationship provides a more ample opportunity to act. From an evolutionary perspective, all humans seem programmed to have some kind of desire for control over their relationship partner, especially if they suspect this partner of cheating (Buss, 1994; Buss, Larsen, Westen, & Semmelroth, 1992; Buss & Shackelford, 1997). More specifically, it is in the best interest of the male to control who his partner has sex with (i.e., be the only person his partner has sex with) so he does not mistakenly care for an unrelated offspring that will not pass on his genes; it is

best for the female to control where her partner allocates his resources (i.e., so he allocates his resources only to her and their children) so she and her children can have a better chance to survive and reproduce (Buss, 1994; Buss et al., 1992; Buss & Shackelford, 1997). Desire for control was included as the last individual-level predictor variable in the current study because of its apparent connection to an evolutionary explanation of partner maltreatment, need for power and Machiavellianism, and the fact that it has not yet been studied in the context of romantic relationships.

Couple-Level Predictor Variables

It makes sense that someone with an abusive personality at the individual level would be more aggressive or violent in a relationship, but personality *in the context of a specific relationship* or certain characteristics of the relationship must also be considered when predicting partner maltreatment. These "couple-level predictor variables" could add unique predictive variance and/or interact with individual-level variables to predict partner maltreatment. Accordingly, three couple-level variables will be examined in the current study: power in the relationship, jealousy in the relationship, and commitment to the relationship.

Related to the trait variables desire for control, need for power and Machiavellianism is the couple-level variable of *actual* power in the relationship. How much power does each partner actually have in the relationship, and who has more power? Those who have power in a relationship typically have less interest in the relationship, more relationship alternatives, and are less dependent on their partner than their partner is on them (Brehm et al., 2002). Usually one thinks of abusive males as having the power in relationships and using this power to inflict physical harm with little

consequence. Indeed, Babcock et al. (1993) describe a "demand-withdraw" marriage interaction pattern in which the wife is the subordinate demander (i.e., she "criticizes, nags, and makes demands of the other" [p.289]) and the husband is the powerful withdrawer (i.e., he "avoids confrontation, withdraws, and becomes defensive" [p.289]) that is especially conducive to domestic abuse or substantial nonviolent marital distress. However, Babcock et al. (1993; Eldridge & Christensen, 2002) also describe a husband-demand, wife-withdraw marriage interaction pattern, and Babcock et al. (1993) found that this pattern can be conducive to domestic violence by the husband. In this type of relationship, the husband does *not* have power, and he could make a desperate attempt to gain this power or control through physical aggression (Babcock et al., 1993). Interestingly, as mentioned earlier, a man in this situation who is high in desire for control may be even more susceptible to aggressing against his partner. So while the more familiar wife-demand, husband-withdraw pattern appears to be most detrimental to a marriage, the husband-demand, wife-withdraw pattern can also have damaging effects, especially in the realm of domestic violence.

It is important to note that these demand-withdraw patterns are measured as continuous variables, and also that it is possible for both types of demand-withdraw patterns to flourish in one relationship. So although one partner may have power the majority of the time, who demands and who withdraws can fluctuate back and forth. In fact, it may be these fluctuations or power struggles (so high prevalence of the man-demand, woman-withdraw pattern *and* the woman-demand, man-withdraw pattern) that make partner maltreatment even more likely. It would be interesting to see how these

results would apply to non-married couples, where there may be even less of a set power structure.

Partner interaction patterns, in which the two partners engage in certain control styles (examples of which would be the two demand-withdraw styles), are called power processes (Babcock et al., 1993; Cromwell & Olson, 1975). Power processes are just one of three power domains in marriages described by Cromwell and Olson (1975). The other two domains are power bases, personal assets such as knowledge or skills that give a partner his or her potential for power in relationships, and power outcomes, or who makes the decisions in the relationship (Babcock et al., 1993; Cromwell & Olson, 1975). Hotalling and Sugarman (1986) conclude that marriages in which the wife has a larger power base (more education or higher income) than the husband are more prone to violence by the husband, while the relationship between power outcomes and aggression or violence is less clear mainly because of problems measuring power outcomes (Babcock et al., 1993).

Looking at power discrepancies (between strangers) and aggression in the laboratory, Richardson and Vandenberg (1986) found that those participants in the "less power" condition were more aggressive (administered higher-voltage shocks) than those participants in the "equal" or "greater power" conditions. Since the participants did not know each other and no real-life situational factors were present that could prevent a person with less power from aggressing against a person with more power, this experiment may not have elicited the type of aggression or violence that usually occurs between romantic partners. Furthermore, it is uncertain whether the manipulation of power was strong enough to make participants sincerely believe they had more power

than their competitor. In spite of these limitations though, this experimental study illustrates how a subordinate partner could be motivated to aggress in a relationship. This particular manipulation of power would probably map on to the power bases domain, and the results are similar (at least in a broad sense) to those of Hotalling and Sugarman (1986).

Thus, whatever the power domain (processes, bases, or outcomes), research has shown that there is potential for aggression when a power discrepancy exists in a relationship. With a power discrepancy, the individual with more power will have more flexibility as far as spending time away from the relationship, and more importantly, spending time with other members of the opposite sex. This is likely to cause jealousy in the subordinate partner. This jealousy is likely to lead to attempts to control the partner's behavior; these attempts may fail because the power discrepancy is too big, resulting in more anxiety and anger and more desperate attempts to control the partner's behavior. In this case, the subordinate individual's desire for power and subsequent inability to achieve actual power through reasonable means could result in the use of aggression or violence by that individual as a desperate attempt to obtain power (and according to Babcock et al. [1993], an individual who acts in this manner in this situation is more likely to be a male).

Another case would be the male abuser who already has established power but still has a strong desire to maintain control over his partner. To make sure that his partner does not leave, he may physically abuse her or degrade her through overt or subtle psychological abuse, lowering her perceived mate value and convincing her that she has no other alternative but to stay in the relationship (Buss, 1994). While the power of the

abuser in the relationship is reversed in these two cases, it could be that both power structures, coupled with certain personality variables, can result in the male becoming highly jealous (i.e., jealousy as a mediator variable) and more likely to aggress. These two examples are highly speculative, but give an example as to how power in the relationship could manifest itself as an interactive predictor variable of partner maltreatment.

It is worthwhile to add that the different power domains have previously been found *not* to be highly correlated (Babcock et al., 1993). Theoretically, it would make sense to combine power processes, bases, and outcomes into one "power in the relationship" factor, but this may be a statistical impossibility. The power domains that will be measured in the current study are power processes (i.e., prevalence of man-demand, woman-withdraw interactions, prevalence of woman-demand, man-withdraw interactions, total prevalence of demand-withdraw interactions [no matter who plays what role] and self-partner discrepancy in amount of demanding/partner withdrawing) and power outcomes (i.e., who makes the decisions in the relationship and to what extent). The power in the relationship variable was chosen because of its interactive potential with individual-level and other couple-level variables, the power processes domain was specifically included to explore the relationship between the demand-withdraw style in college couples (as opposed to married couples), and the power outcomes domain was included to clarify the relationship between it and partner maltreatment and power processes.

The second couple-level variable, jealousy in the relationship, refers not to how jealous an individual is on average across all aspects of life, but to jealous thoughts,

behavior, and emotional reactions to jealousy exhibited by an individual in the context of one relationship (Pfeiffer & Wong, 1989). Jealousy in a relationship should depend not only on dispositional jealousy, but also on other factors such as mate value, partner mate value (or self-partner discrepancy in mate value), perceived infidelity of partner (Buss et al., 1992; Buss & Shackelford, 1997), partner jealousy (Guerrero & Andersen, 1998), or other personality traits. In the context of intimate relationships, jealousy is associated with feelings of hurt, anger and fear that are caused by the realization that one may lose his or her partner to a rival (Brehm, Miller, Perlman, & Campbell, 2002).

Jealousy can also cause suspicion of one's partner engaging in romantic behavior outside of the relationship, which can lead to some sort of action against the partner (Brehm et al., 2002; Guerrero & Andersen, 1998). This action may be positive (e.g., trying to work things out), but it also may be negative or hostile. Typical hostile responses to jealousy against one's partner include violence, verbal antagonism, guilt and counter-jealousy inductions, control attempts, and the "silent treatment" (Brehm et al., 2002; Guerrero & Anderson, 1998). Guerrero and Anderson (1998) also note that in relationships, "violence is not a common consequence of jealousy," but "jealousy is a common antecedent of violence" (p. 58). Moreover, Wilson and Daly (1996) report that "battered women nominate 'jealousy' as the most frequent motive for their husbands' assaults, and their assailants commonly make the same attribution" (p.2). Additionally, Valencia (2001) measured jealousy as a personality variable and found it to be a strong predictor of both psychological abuse and violence.

Of course, whether or not feelings of jealousy are converted to controlling or aggressive behavior depends on other variables (such as how much power in the

relationship one has). To explain variance in level of jealousy, and in turn some variance in level of maltreatment in relationships, individual-level variables and other couple-level variables need to be considered. Jealousy was included in the current study because it has had such an important relationship with partner maltreatment in previous research, and most studies of partner maltreatment would be incomplete without it. In addition, jealousy may mediate the effect of other predictor variables on partner maltreatment, and this phenomenon needs to be explored further.

The last couple-level variable in this study that could affect partner maltreatment is commitment to the relationship, which can be conceptualized as some measure of dependence on one's partner (Rusbult & Martz, 1995). According to the Investment Model as formulated by Rusbult and Martz (1995; Rusbult, Martz, & Agnew, 1998), there are three components that contribute to the commitment level one has in a relationship: investment size, or the amount of benefits one would lose if the relationship ended; satisfaction level, or the level of positive or negative affect attributed to the relationship; and quality of alternatives, or the extent to which one's intimacy needs could be fulfilled outside the relationship. Investment and satisfaction are positively correlated with commitment, while quality of alternatives is negatively correlated with commitment. Commitment to a relationship, as measured by the Investment Model, is highly related to the probability of continuing with the relationship (Rusbult & Martz, 1995; Rusbult et al., 1998).

The Investment Model (or any facet of it) has not been explicitly connected to partner aggression or violence, but the model has been used to explain why certain individuals might choose to remain in abusive relationships (Rusbult & Martz, 1995). A

high level of commitment has also been shown to promote a variety of "relationship maintenance behaviors," including devaluation of attractive alternative partners (Johnson & Rusbult, 1989; Lydon, Fitzsimmons, & Naidoo, 2003) and a tendency to accommodate rather than retaliate when faced with conflict (Finkel, Rusbult, Kumashiro, & Hannon, 2002). This finding would suggest that as commitment increases, partner maltreatment may decrease, although this would partially contradict the finding by Downey et al. (2000) that for rejection sensitive males, an increase in investment is related to an increase in male violence in relationships. It is important to note that investment in a relationship and commitment as defined by Rusbult et al. (1998) are related but not the same thing, and that Downey et al. (2000) and Rusbult et al. (1998) used different measures to assess investment; the Rusbult et al. (1998) measure is more extensive and concerns a specific relationship, not romantic relationships in general.

Investment size and quality of alternatives would seem to be particularly important in a partner's decision making about how to respond to feelings of jealousy. If investment size is low and quality of alternatives is high (relatively low commitment), then one would suspect that defection is likely. However, if investment size is high and quality of alternatives low (relatively high commitment), then one would suspect that either controlling behavior (possibly aggression) or avoidance of conflict is likely. Whether the response here is active or passive may depend on personality variables such as rejection sensitivity, desire for control or emotionality. Furthermore, if the response is active, then high investment and low alternatives on behalf of the other partner should make what may be developing into an abusive relationship more likely to persist (Rusbult & Martz, 1995).

Finally, it is important to note that facets of the Investment Model may only correlate with partner maltreatment because they are indicative of persistence of and commitment to a relationship. That is, there is going to be more partner maltreatment in an ongoing relationship than in one that has ended and in a relationship in which there is a higher level of interaction between partners (higher commitment would seem to imply more interaction). So, the question is, once a relationship is in full swing, do these facets account for any unique variance in level of partner maltreatment? One possibility is that males already prone to jealousy because of personality factors may become even more jealous when in a relationship where their quality of alternatives is lower than their partner's, and this increase in jealousy would in turn lead to a higher likelihood of partner maltreatment. As with power processes and outcomes, the three facets of the Investment Model (and a global measure of commitment to the relationship) were included as predictor variables because of their interactive potential with other variables.

Purpose of this Study

Many conflicts arise in relationships. They may be as simple as a disagreement over whether to go to Olive Garden or Hooters for dinner or as complex as emotional or sexual infidelity. To deal with these conflicts, and other conflicts or stressors that may be experienced outside the domain of a relationship (such as problems at work), there are many different tactics that can be used, which may or may not result in one's partner being harmed (Marshall, 1994). The purpose of this study is to explore several factors, both at the individual level (rejection sensitivity, risk in intimacy, emotionality, desire for control) and at the couple level (power in the relationship, jealousy in the relationship, commitment to the relationship) that may influence whether or not and to what extent one

responds to conflict with tactics that have the potential to harm or actually do harm one's partner. In addition, this study boasts two features which have rarely been seen in previous research. First, partner maltreatment will be measured with Marshall's (1992a, 1992b, 2000) questionnaires (as opposed to the CTS2 or other questionnaires), and second, male assessments (or aggregate assessments) of predictor variables will be used to predict *female* assessments of partner maltreatment by males.

Hypotheses 1 & 2

Based on previous research, six variables are thought to be directly predictive of psychological abuse and violence by males in college relationships (as assessed by their female partner): male rejection sensitivity, male risk in intimacy (although this variable may overlap considerably with rejection sensitivity in its predictive utility), male emotionality, male desire for control, male jealousy in the relationship, and total demand-withdraw interactions (all positive predictors). These variables will be entered as predictor variables in two hierarchical regression analyses predicting male partner maltreatment (i.e., the aggregate of male psychological abuse and violence). In the first analysis, the four individual-level variables will be entered first as a group, followed by the two couple-level variables, to determine how much unique variance the couple-level variables can account for when the individual-level variables are held constant. In the second analysis, the two couple-level variables will be entered first, followed by the four individual-level variables, to determine how much unique variance the individual-level variables can account for when the couple-level variables are held constant. The first hypothesis is that the aforementioned group of predictor variables will be predictive of partner maltreatment, and furthermore that each individual variable will be a predictive of

partner maltreatment alone. Because both the individual- and couple-level predictor variables used in these analyses appear to be important (according to previous research), the second hypothesis is that both the group of individual-level variables and the group of couple-level variables will account for a meaningful amount of unique variance when the other group is controlled for.

Hypothesis 3

There should be shared predictive variance between these individual-level and couple-level variables, and the third hypothesis is that some of this shared variance is a result of male jealousy mediating the relationship between the four male individual-level variables and partner maltreatment by males. Jealousy is suspected to have this mediating effect because of the relationships between personality variables and jealousy (in the relationship) and jealousy and partner maltreatment documented in previous literature (Brehm et al., 2002; Guerrero & Andersen, 1998; Valencia, 2001; Wilson & Daly, 1996). Additionally, it is likely that personality variables would partially cause jealousy in the relationship, and in turn jealousy would partially cause psychological abuse and violence. This hypothesis will be tested with four regression analyses, with each of the first three analyses corresponding to a step that must be taken to show that a mediating effect exists, and the fourth analysis serving to gauge whether the mediating effect is partial or complete (see Baron & Kenny, 1986).

Hypothesis 4

A fourth related hypothesis is that this mediating effect of jealousy is more likely to occur in a relationship where the male has a lower quality of alternatives in comparison to his partner than in a relationship where the male has a higher quality of

alternatives (i.e., quality of alternatives discrepancy as a moderator variable). As mentioned earlier, it is believed that low mate value or a negative quality of alternatives discrepancy can trigger jealousy (Buss et al., 1992; Buss & Shackelford, 1997), and the mechanism for this may be that the discrepancy activates at-risk (for jealousy) personality traits. It could also be that for males with this negative discrepancy, feelings of jealousy are more easily translated to partner maltreatment. This hypothesis will be tested by performing the four regression analyses associated with mediation for both "low alternatives" and "high alternatives" males, and comparing results for each group.

Hypothesis 5

The fifth, sixth and seventh hypotheses concern interactions between two predictor variables. The fifth hypothesis is that those males high on desire for control but low in actual power in the relationship (so low in power processes discrepancy or power outcomes) will be more likely to use psychological abuse and violence than those high in desire for control and high in actual power (i.e., power in the relationship as a moderator variable). Based on Burger's (1986, 1987, 1990; Burger & Cooper, 1979) explanation of what those higher in desire for control are inclined to do and an evolutionary explanation of power or control in romantic relationships (Buss, 1994; Buss et al., 1992; Buss & Shackelford, 1997), it appears that for those males high in desire for control, a tension may arise when they do not actually have control or power in a relationship, and this tension could lead to partner maltreatment as a desperate or "last-resort" attempt to gain control or power. This hypothesis will be tested by performing two hierarchical regression analyses predicting partner maltreatment, one with desire for control, power processes discrepancy and the desire for control-power processes discrepancy interaction

as predictor variables, and another with desire for control, power outcomes and the desire for control-power outcomes interaction as predictor variables. In each analysis the two main effects will be entered as a group first followed by the interaction, to determine if the interaction accounts for any unique variance.

Hypothesis 6

The sixth hypothesis is that those males high in jealousy and low in actual power in the relationship (processes discrepancy or outcomes) will be more likely to use psychological abuse and violence than those high in jealousy and high in actual power. It could be that jealousy is more easily translated to partner maltreatment when a negative power discrepancy exists, because feelings of jealousy are associated with a desire to have control over one's partner (Buss, 1994), and if one already has control or power, then it may not be necessary to act out on feelings of jealousy. This hypothesis will be tested by performing two hierarchical regression analyses predicting partner maltreatment, one with jealousy, power processes discrepancy and the jealousy-power processes discrepancy interaction as predictor variables, and another with jealousy, power outcomes and the jealousy-power outcomes interaction as predictor variables. Again, in each analysis the two main effects will be entered as a group first followed by the interaction, to determine if the interaction accounts for any unique variance.

Hypothesis 7

The seventh hypothesis is that those males high in rejection sensitivity and high in investment size or commitment will be more likely to use psychological abuse and violence than those high in rejection sensitivity and low in investment or commitment. This is a replication of the Downey et al. (2000) finding but with a different, more

extensive measure of "investment" (Rusbult et al., 1998). The Rusbult et al. (1998) global commitment variable will also be used as an approximation of the Downey et al. (2000) concept of investment. This hypothesis will be tested by performing two hierarchical regression analyses predicting partner maltreatment, one with rejection sensitivity, investment and the rejection sensitivity-investment interaction as predictor variables, and another with rejection sensitivity, commitment and the rejection sensitivity-commitment interaction as predictor variables. Once again, in each analysis the two main effects will be entered as a group first followed by the interaction, to determine if the interaction accounts for any unique variance.

METHOD

Participants

A total of 238 participants (130 females, 108 males) completed this study. Of these 238 participants, 228 reported completing the study (by sending a confirmation email). Of these 228 participants, 137 (90 females, 47 males) were undergraduates from the College of William & Mary who took part in the study for partial fulfillment of a course requirement for introductory psychology, 89 (34 females, 55 males) were a current (heterosexual) romantic partner of one of the introductory psychology students who completed the study (the majority of these partners either attended William & Mary as well or went to some other university), and 2 (both females) were the current partner of an introductory psychology student would had initially registered for the study but failed to complete it. Five couples consisted of partners who were both introductory psychology students. The remaining 10 (4 females, 6 males) out of the 238 participants completed the study but did not report doing so, and therefore it could not be determined whether they were an introductory psychology student or not. All participants were 18 and over.

The introductory psychology participants were selected based on the amount of partner maltreatment in their relationship, as assessed in mass testing with an abbreviated version of the *Revised Conflict Tactics Scales* (CTS2; Straus et al., 1996). The sample was overrepresented with those students who had a relatively high level of reported partner maltreatment in their relationship in order to capture a greater amount of

variance; a "normal" sample of students at William & Mary would have resulted in less variance in reported scores, because the majority of students in mass testing reported very low CTS2 scores.

After these introductory psychology students were selected, their romantic partners were contacted by email and asked to participate. If the student and his or her partner both participated, the couple was given a chance to win one of six $100 prizes in a raffle. Full data were obtained for 90 couples. The average length of a relationship at the time of mass testing was approximately 6-9 months, although about 15% reported that they had been in the relationship for less than a month. The current study took place approximately 1-2 months after mass testing, and part of the selection process was to make sure participants were still dating the same partner. Most of the data analysis in this study was done using the data for the 90 couples, although to look at most reliabilities and certain correlations, the data for all 238 participants were used (or the data for the 108 males or 130 females were used separately).

Materials

All predictor variables and partner maltreatment variables were assessed with online versions of questionnaires. Each of the 90 couples had a "total male score" and a corresponding "total female score" for each variable, and in some cases when the male and female scores represented two perceptions of the same construct, a "total couple score" was computed (i.e., partners' scores were summed together). What follows is a listing of all these variables, a description of the questionnaire or questionnaires used to assess each one, and an explanation of how the total scores were tabulated for each questionnaire.

Rejection sensitivity was assessed with the *Rejection Sensitivity Questionnaire* (RSQ; Downey & Feldman, 1996; see Appendix A). This questionnaire consists of 18 items describing hypothetical situations (e.g., "You ask someone in one of your classes to coffee"), and participants first rated their degree of concern or anxiety over the outcome of each situation (on a scale from 1 = *very unconcerned* to 6 = *very concerned*), and then rated the likelihood that the other person would respond in an accepting fashion (on a scale from 1 = *very unlikely* to 6 = *very likely*). To compute total RSQ scores, the "likelihood of acceptance" scores were reversed (becoming "likelihood of rejection" scores), and then the scores on each "degree of anxiety" item were multiplied by corresponding "likelihood of rejection" scores. For each participant, the products for each of the items were averaged, resulting in a total score. The internal consistency for the RSQ in this study (using data for all 238 participants) was $\alpha = .83$.

Perceptions of risk in intimacy were assessed with the *Risk in Intimacy Inventory* (RII; Pilkington & Richardson, 1988; see Appendix B). This questionnaire consists of 10 items describing attitudes about relationships (e.g., "Being close to people is risky business"), and participants are asked to rate their level of agreement with each statement (on a scale of 1 = *very strong disagreement* to 6 = *very strong agreement*). A total RII score was computed by summing all the items. The internal consistency for the RII was $\alpha = .88$.

Emotionality was assessed with the "emotionality" subscale of the *EAS Temperament Survey for Adults* (EAS; Buss & Plomin, 1984; see Appendix C). This subscale consists of 12 items describing behavioral tendencies (e.g., "I frequently get distressed"); participants rate how well each statement describes them (on a scale of 1 =

not characteristic or typical of yourself to 5 = *very characteristic or typical of yourself*). Two items were reverse-scored, and then a total emotionality score was computed by summing all the items. The internal consistency for the emotionality subscale of the EAS was $\alpha = .83$.

Desire for control was assessed with the *Desirability of Control* (DC) scale (Burger & Cooper, 1979; see Appendix D). This questionnaire consists of 20 items describing attitudes relating to wanting control (e.g., "I would prefer to be a leader rather than a follower"). Participants rate how well each statement describes them (on a scale of 1 = *the statement doesn't apply to me at all* to 7 = *the statement always applies to me*). Five items were reverse-scored, and then a total DC scale score was computed by summing all the items. The internal consistency for the DC scale was $\alpha = .78$.

Power in the relationship was assessed with two questionnaires. Power processes (or prevalence of demand-withdraw patterns of communication) were assessed with the *Communication Patterns Questionnaire* (CPQ; Christensen & Sullaway, 1984; see Appendix E), and power outcomes were assessed with a "power outcomes" questionnaire (see Appendix F) developed for this study (adapted from a questionnaire developed by Beach and Tesser [personal communication, 1990] for married couples). The CPQ consists of a total of 35 items. Four items describe ways in which a couple can act in response to a problem, 18 describe how a couple can act during a discussion of a problem, and 13 describe how a couple can act after discussion of a problem. Participants assess the likelihood of their couple behaving in these ways (on a scale of 1 = *very unlikely* to 9 = *very likely*). Participants replied to all 35 items, but only the 6 items associated with a man-demand, woman-withdraw (e.g., "Man tries to start a discussion

while woman tries to avoid a discussion") or woman-demand, man-withdraw (e.g., "Woman tries to start a discussion while man tries to avoid a discussion") communication patterns (2 items per section) were considered for this study. Using both male and female data, four total couple scores were created (so the power processes variable was essentially divided into four sub-variables). First, a "total man-demand" score was computed by summing the 3 items associated with the man-demand, woman-withdraw communication pattern for both members of the couple (6 items total). The internal consistency for this "subscale" was $\alpha = .68$, and the correlation between the male and female assessments of this variable (i.e., self- and partner report correspondence) was $r = .35$, $p < .01$. Second, a "total woman-demand" score was computed by summing the 3 items associated with the woman-demand, man-withdraw communication pattern for both members of the couple (6 items total). The internal consistency for this subscale was $\alpha = .79$, and the correlation between the male and female assessments of this variable was $r = .50$, $p < .01$. Third, a "total demand-withdraw" score for each couple was computed by summing the total man-demand and woman-demand scores (12 items total). The internal consistency for this subscale was $\alpha = .78$, and the correlation between the total man-demand and woman-demand scores was $r = .47$, $p < .01$. Fourth, a "power processes discrepancy" score was computed by subtracting the total man-demand score from the total woman-demand score; thus a positive score indicates that the male has more power. This last variable seemed to be the best direct measurement of "who has the power in the relationship" (at least in the power processes domain).

The power outcomes questionnaire consists of 17 items describing domains in which couples make decisions (e.g., "How you spend your time together"). Participants

first rated the extent to which they agree with their partner in each domain (on a scale of 1 = *entirely or always* to 5 = *not at all or never*) and then rated who usually makes the decision in each domain (on a scale of 1 = *entirely my decision* to 4 = *entirely partner's decision*). Using both male and female data, a total couple score was created that measured "who makes the decisions in the relationship and to what extent," and this was called a "power outcomes" score. This was done first by reverse scoring all male data for the "who makes the decision" scale (so now all male and female data were on a scale of 1 = *entirely woman's decision* to 4 = *entirely man's decision*), then by mean centering these scores (by recoding 1's as -2's, 2's as -1's, 3's as 1's and 4's as 2's), then by multiplying each score by the corresponding "level of disagreement" score (because the more disagreement, the more indicative "who makes the decision" is of who has power in the relationship), then by transforming these products to z-scores (to give equal weight to male and female assessments), and finally by summing these z-scores for both members of each couple. A positive score would imply that the male has more power in this domain and a negative score would imply that the female has more power. The internal consistency for this scale was only $\alpha = .60$, and the correlation between male and female assessments of the power outcomes variable was only $r = .18, p < .10$, bringing the validity of this new questionnaire into question. Moreover, correlations were very low between this measure of power outcomes and the power processes sub-variables total man-demand ($r = -.04$, n.s.), total woman-demand ($r = .13$, n.s.), total demand-withdraw ($r = .06$, n.s.), and power processes discrepancy ($r = .15, p < .20$).

Jealousy in the relationship was assessed with the *Multidimensional Jealousy Scale* (MJS; Pfeiffer & Wong, 1989; see Appendix G). The MJS is divided into three

subscales, one measuring jealous thoughts in a relationship, the second measuring jealous emotions in a relationship, and the third measuring jealous behaviors in a relationship. The "thoughts" subscale consists of 8 items describing jealous thoughts involving one's partner (e.g., "I suspect that X is secretly seeing someone of the opposite sex"), and participants rate how often they have these thoughts (on a scale of 1 = *never* to 7 = *all the time*). The "emotions" subscale consists of 8 items describing hypothetical situations involving one's partner (e.g., "X is flirting with someone of the opposite sex"), and participants rate how they would emotionally react to these situations (on a scale of 1 = *I would be very pleased* to 7 = *I would be very upset*). The "behaviors" subscale consists of 8 items describing jealous behaviors involving one's partner (e.g., "I question X about his or her telephone calls"), and participants rate how often they engage in these behaviors (on a scale of 1 = *never* to 7 = *all the time*). A total score for each subscale was computed by summing the items on each subscale, and a total MJS score was computed by summing all 24 items. Internal consistencies were $\alpha = .89$ for the thoughts subscale, $\alpha = .84$ for the emotions subscale, $\alpha = .85$ for the behaviors subscale, and $\alpha = .89$ for the total MJS. The correlations between subscales were as follows: thoughts and emotions ($r = .10$, $p < .15$ [but $r = .20$, $p < .05$ for males, $r = .02$, n.s. for females]), thoughts and behaviors ($r = .49$, $p < .01$ [$r = .64$, $p < .01$ for males, $r = .37$, $p < .01$ for females]), and emotions and behaviors ($r = .43$, $p < .01$ [similar r's for males and females]). It is also important to note that the distribution of total MJS scores was highly positively skewed for both males and females.

Commitment to the relationship was assessed with an abbreviated version of the *Investment Model Scale* (Rusbult, Martz, & Agnew, 1998; see Appendix H). This scale

is divided into four subscales, one measuring satisfaction level in a relationship, a second measuring quality of alternatives in a relationship, a third measuring investment in a relationship (or investment size), and a fourth measuring commitment to a relationship (a more global assessment). The first three subscales contain both "facet" and "global" items, although only global items were included in this study. The "satisfaction" subscale consisted of 5 items (in this study) describing attitudes relating to satisfaction level (e.g., "Our relationship makes me very happy"), and participants rate their level of agreement regarding each statement (on a scale of 1 = *do not agree at all* to 8 = *agree completely*). The "alternatives" subscale consisted of 5 items (in this study) describing attitudes relating to alternatives (e.g., "My alternatives are attractive to me [dating another, spending time with friends or on my own, etc.]"), and participants rate their level of agreement (on the same 1 to 8 scale). The "investment" subscale consisted of 5 items (in this study) describing attitudes relating to investment (e.g., "Compared to people I know, I have invested a great deal in my relationship with my partner."), and participants rate their level of agreement (same scale). Lastly, the "commitment" subscale consists of 7 broader items describing attitudes relating to commitment (e.g., "I want our relationship to last for a very long time."), and participants rate their level of agreement (same scale). To compute a total score for each subscale the corresponding items were summed. Internal consistencies were $\alpha = .91$ for the satisfaction subscale, $\alpha = .85$ for the alternatives subscale, $\alpha = .74$ for the investment subscale, and $\alpha = .76$ for the commitment subscale. The correlations between subscales were as follows: satisfaction and alternatives ($r = -.31, p < .01$), satisfaction and investment ($r = .35, p < .01$), satisfaction and commitment ($r = .58, p < .01$), alternatives and investment ($r = -.25, p < .01$),

alternatives and commitment ($r = .29, p < .01$), investment and commitment ($r = .49, p < .01$). In addition, a self-partner "quality of alternatives discrepancy" score was computed for each couple by subtracting the total female alternatives score from the total male alternatives score (so a positive score indicated that the male had better alternatives).

Psychological abuse in the relationship was assessed with the *Subtle and Overt Psychological Abuse of Women Scale* (SOPAS; Marshall, 2000; see Appendix I). For this study, however, the scale was given not only to females to assess psychological abuse by male partners (as has been done in the past), but also to males to assess psychological abuse by female partners. The wording on the scale was changed slightly to accommodate for this (i.e., "he" was changed to "your partner"). The scale given to women can be called the SOPAS-W, and the "new" scale given to men can be called the SOPAS-M. Importantly, SOPAS-W scores were used for predictive analyses and SOPAS-M scores were not, although scores from both scales were used for exploratory correlation analyses. Although both males and females filled out the SOPAS, participants were only asked about psychological abuse by "your partner" and not by "you" because the nature of the items does not lend itself well to self-assessment. The SOPAS consists of 35 items describing various types of overt (items 1-15) and subtle (items 16-35) psychological abuse. On overt items, participants are asked how often their partner does these things (on a scale of 0 = *never*, 1 = *once*, to 5 = *a great many times*) and on subtle items, how often their partner does them "in a loving, joking or serious way" (same scale).

For reasons of simplicity, and because the two subscales are so highly correlated (in this study $r = .87, p < .01$ for SOPAS-W, $r = .87, p < .01$ for SOPAS-M), overt and

subtle abuse scores were not analyzed separately. Only a total SOPAS score was computed (by summing all 35 items). The internal consistencies were $\alpha = .96$ for the SOPAS-W and $\alpha = .96$ for the SOPAS-M (however, these reliabilities may not necessarily be indicative of a good questionnaire, and this is discussed further in the description of the SVAWS and SVAMS). Because this is the first time psychological abuse against males has been assessed with the SOPAS, and the SOPAS was originally developed only to assess psychological abuse of women, the validity of the SOPAS-M is not clear. Other limitations of the SOPAS in general are that it concerns frequency more so than severity of psychological abuse (although its subjective nature may provide some measure of severity), and a very high correlation was found between overt and subtle abuse, suggesting that these two subscales may not be measuring what Marshall intended them to measure (this high correlation, or a failure for two factors to emerge, has been reported previously [Marshall, 2000]). Furthermore, distributions for total SOPAS-W and SOPAS-M scores were slightly positively skewed (more so for the SOPAS-W), although not as skewed as those for SVAWS and SVAMS scores.

Violence in the relationship was assessed with the *Severity of Violence Against Women Scales* (SVAWS; Marshall, 1992a) and the *Severity of Violence Against Men Scales* (SVAMS; Marshall, 1992b; see Appendix J), although the SVAWS as assessed by females was the only scale used for predictive analyses. As stated earlier, the SVAWS and SVAMS are essentially the same scale. The items are the same and in the present study the order of items was the same (Marshall [1992a, 1992b] recommends slightly different orders). For the sake of convenience, in this study the subscales and corresponding items for the SVAWS were used for both the SVAWS and SVAMS

(Marshall [1992a, 1992b] recommends one extra subscale on the SVAWS and a slightly different correspondence of items to subscales for each measure). Because the SVAWS and SVAMS were made perfectly identical, participants were able to assess at the same time the frequency with which both "you" and "your partner" committed certain acts. So technically, in this study there were four separate scales related to violence in the relationship: the "your violence SVAWS" which was assessed by males, the "partner violence SVAWS" which was assessed by females (the only scale used for predictive analyses), the "your violence SVAMS" which was assessed by females, and the "partner violence SVAMS" which was assessed by males.

The SVAWS (and also the SVAMS in this study) consists of 19 items describing threats of violence (e.g., "shake a fist at you/your partner") and 21 items describing acts of violence (e.g., "kick you/your partner"). There are also usually 6 additional items describing acts of sexual aggression, but these were excluded for ethical reasons. Participants rate how often these threats or acts were exhibited by "you" and "your partner" (0 = *never*, 1 = *once,* 2 = *a few times* 3 = *several times*, 4 = *many times*, 5 = *a great many times*, 6 = *I would prefer not to answer*).

For reasons of simplicity, and because the threats and acts subscales are so highly correlated (in this study r's ranging from .62 to .83, $p < .01$, but higher for male reports), scores on these subscales were not analyzed separately. Total "your violence" and "partner violence" scores were computed for each participant by summing all the "your violence" items and all the "partner violence" items. Internal consistencies for the your violence SVAWS, partner violence SVAWS, your violence SVAMS and partner violence SVAMS were $\alpha = .92$, $\alpha = .88$, $\alpha = .89$ and $\alpha = .96$ respectively. However, reliability

estimates may not be the best way to assess the quality of these scales (and the SOPAS to a lesser extent). It is not imperative that all items correlate with each other; one can be just as violent by kicking "a great many times" as one can by slapping "a few times" and kicking a few times. Thus, one would not necessarily expect high internal consistency. The high estimates here may largely be a function of no "activity" on many items.

The SOPAS and SVAWS and SVAMS have been less commonly used in psychological research than the *Conflict Tactics Scales* (CTS; Straus, 1979) and the CTS2 (Straus et al., 1996). However there are advantages to using them (L.L. Marshall, personal communication, January 17, 2005). These scales are more extensive measures (more items) than the psychological aggression and physical assault subscales of the CTS2. The SOPAS has more to do with undermining a partner's sense of self. Items on the SVAWS and SVAMS incorporate a broader range of implied severity than the CTS2. Lastly, unlike the CTS2, both of Marshall's scales are available in the public domain.

There are some limitations of the SVAWS and SVAMS worth mentioning. First, frequency of acts and threats of violence are largely assessed as opposed to severity which brings into question whether violence is being operationalized properly. There are "level of severity" subscales that can be used, and Marshall (1992a, 1992b) has suggested multiplying frequency scores by severity or "impact" weights, but neither technique was employed in this study due to reasons of convenience. Second, the threats subscale may be more of a measure of psychological abuse (as discussed earlier), and third, in this study the distributions of total male and female violence scores were highly positively skewed, with about 4-7 noticeable outliers in each distribution.

As mentioned earlier, in the Introduction, there is usually a very low level of correspondence between male and female assessments of one partner's partner maltreatment. After reviewing studies in which the CTS (Straus, 1979) was administered, Dobash et al. (1992) come to the conclusion that "if couples routinely provide discrepant CTS responses, data derived from the CTS simply cannot be valid" (p.77). One partial solution to this problem is to aggregate self- and partner assessments of one partner's partner maltreatment, which could have been done in this study for violence scores (i.e., aggregate self- and partner assessments of male violence). This method was used in a recent study, when Valencia (2001) aggregated scores after finding a very low correlation between self- and partner reports of physical abuse by males and females ($r = .18, p < .10$; as assessed by the Abusive Behavior Inventory [ABI; Shepard & Campbell, 1992]) and a moderate correlation between reports of psychological abuse ($r = .40, p < .01$; as assessed by an abbreviated version of Buss' [1988] Mate Retention Tactics [MRT] scales).

In the present study, however, self- and partner violence scores were not aggregated for three reasons. First, because the level of correspondence is so low (in this study the correlation between self- and partner reports for male violence was $r = .35, p < .01$, for female violence $r = .36, p < .01$), this type of aggregation may not even be appropriate. Second, self- and partner reports of each partner's psychological abuse were not obtained (only partner reports), and to create a proper "partner maltreatment" variable (i.e., aggregate of psychological abuse and violence) with self-partner aggregate violence scores, self-partner aggregate psychological abuse scores would have been needed as

well. Third, an alternative solution to this problem of low correspondence seemed to offer more.

As stated earlier, this alternative solution was to use only female assessments of violence by males (i.e., partner violence SVAWS) in predictive analyses, but to predict this measure with *male* assessments (or aggregate assessments) of predictor variables. It makes sense to use a partner report of violence rather than a self-report because even though a partner report may not be more accurate, it is the interpretation of the victim with which the researcher is most concerned. Additionally, because the predictor variables were assessed by the other partner (or both partners), using this method should have helped to disentangle any relationships between criterion and predictor variables due solely to the personality of the assessor. Furthermore, this method made for easy calculation of the partner maltreatment variable, because psychological abuse by males as assessed by females were measured with the SOPAS-W, and these scores were simply added to partner violence SVAWS scores.

So importantly, this "partner maltreatment by males as assessed by females" variable used as the criterion variable in all analyses predicting partner maltreatment was computed first by computing z-scores for total SOPAS-W scores and total partner violence SVAWS scores for each couple and then adding these z-scores together. The correlation between the two sets of total scores was $r = .57, p < .01$. A "partner maltreatment by females as assessed by males" variable was created in a similar fashion (i.e., by standardizing and summing the total SOPAS-M and partner violence SVAMS scores), and was used only in correlation analyses (see "Preliminary Analyses" and Table 1). Male and female self-reports of violence (i.e., your violence SVAMS and SVAWS

scores) were also used in these correlation analyses (recall that there were no self-reports of psychological abuse).

Procedure

The introductory psychology student participants, along with most of their partners, completed the RSQ, RII, emotionality subscale of the EAS, DC scale, CPQ, "power outcomes" questionnaire, MJS, Investment Model Scale, SOPAS, and SVAWS and SVAMS ("your violence" and "partner violence" scales) via the internet. The introductory psychology students and their partners were instructed to visit a website that included instructions and the actual questionnaires. They were allotted two separate sessions of 45 minutes each (a certain number of questionnaires were included in each session) to fill out the questionnaires at their leisure, but were told to do so in private. After completion, each participant was debriefed online. Each couple was told to create an id name and password for the website that would be linked to their data, and each participant was told to email the researchers with a confirmation number upon completion (everyone received the same confirmation number but did not know this). The confirmation email gave the participant's name and email address, but did not provide a link between the participant's identity and his or her completed data (unless the email address was used as the website id name), therefore assuring that all data would remain anonymous.

RESULTS

Preliminary Analyses

While distributions for total psychological abuse and violence scores were positively skewed as reported earlier, nearly all couples reported some type of partner maltreatment. One couple reported no female psychological abuse, one different couple reported no male psychological abuse, 16 couples (18%) reported no female violence (i.e., both male and female assessments of female violence showed a score of zero), and 14 couples (16%) reported no male violence. The average male report of male violence was $M = 9.70$, $SD = 18.53$, and of female violence was $M = 9.88$, $SD = 20.15$. The average female report of male violence was $M = 6.39$, $SD = 11.33$, and of female violence was $M = 5.69$, $SD = 9.73$. (The highest possible score on the violence questionnaire was 200.) The average male report of female psychological abuse was $M = 48.30$, $SD = 35.94$, whereas the average female report of male psychological abuse was $M = 41.70$, $SD = 35.20$. (The highest possible score on the psychological abuse scale was 175.) Importantly, all these means were calculated with no outliers removed. Zero-order correlations between all personality and situational predictor variables and the four types of partner maltreatment (i.e., partner maltreatment by males as assessed by females, partner maltreatment by females as assessed by males, male violence as assessed by males, and female violence as assessed by females) are presented in Table 1.

Hypotheses 1 & 2

Recall that the first and second hypotheses dealt with predicting partner maltreatment by males (as assessed by females) with four male individual-level variables (rejection sensitivity, risk in intimacy, emotionality, desire for control) and two couple-level variables (male jealousy and total demand-withdraw). Two hierarchical regression analyses were performed to test these hypotheses. In the first regression analysis, with the individual-level variables entered first, the individual-level variables accounted for a moderate amount of variance ($R^2 = .15, p < .01$), and the situational variables accounted for a large amount of additional unique variance (R^2 change = .24, $p < .01$). With just the individual-level variables entered, only emotionality ($\beta = .32, p < .01$) emerged as a statistically significant predictor. In the second regression analysis, with the couple-level variables entered first, the couple-level variables accounted for a large amount of variance ($R^2 = .35, p < .01$), but the individual-level variables did not add any significant unique variance (R^2 change = .04, n.s.). With just the couple-level variables entered, only total demand-withdraw ($\beta = .53, p < .01$) emerged as a significant predictor. In both analyses, with all six predictor variables entered, only desire for control ($\beta = -.19, p < .05$ [$\beta = -.17, p < .10$ with only individual-level variables entered]) and total demand-withdraw ($\beta = .51, p < .01$) emerged as significant predictors. More detailed results of these analyses are presented in Tables 2 and 3.

Hypothesis 3

Recall that the third hypothesis was that male jealousy would mediate the relationship between the four male individual-level variables and partner maltreatment by males (as assessed by females). Four regression analyses were performed, each one corresponding to a step required to show mediation. In the first regression analysis

predicting partner maltreatment with the four individual-level variables, these variables accounted for a statistically significant amount of variance ($R^2 = .15, p < .01$), meeting the first requirement for a significant mediating effect . In the second regression analysis predicting jealousy with the four individual-level variables, these variables accounted for a significant amount of variance ($R^2 = .15, p < .01$), meeting the second requirement for mediation. Note that emotionality was the only significant predictor ($\beta = .31, p < .01$) of jealousy. In the third regression analysis predicting partner maltreatment with the four individual-level variables and jealousy, controlling for the individual-level variables, jealousy added a significant amount of unique variance (R^2 change = .04, $p < .05$), meeting the third requirement for mediation. In the fourth regression analysis predicting partner maltreatment with the four individual-level variables and jealousy, controlling for jealousy, the individual-level variables added a significant amount of unique variance (R^2 change = .10, $p < .01$). Thus jealousy had only a partial mediating effect. More detailed results of these analyses are presented in Table 4.

Hypothesis 4

Recall that the fourth hypothesis was that jealousy would act as a mediator more so for those males with a lower quality of alternatives in comparison to their partner (i.e., negative quality of alternatives discrepancy score) than those males with a higher quality of alternatives. The same analyses described above (for the third hypothesis) were performed separately for "low alternatives" males (these males [$n = 46$] had quality of alternatives scores that were lower than their partner's) and then for "high alternatives" males (these males [$n = 44$] had quality of alternatives scores that were higher than their partner's). For low alternatives males, in the first regression analysis (predicting partner

maltreatment), the individual-level variables accounted for a moderate amount of variance that was only marginally significant ($R^2 = .18, p < .10$). Because a larger sample size may have provided the power to reach significance, the second regression analysis predicting jealousy was conducted. In this analysis, the individual-level variables accounted for a significant amount of variance ($R^2 = .27, p < .05$), meeting requirement two. As Table 5 indicates, emotionality was the only significant predictor in both regressions, as was the case for the total sample. In the third regression analysis predicting partner maltreatment, jealousy added a significant amount of unique variance (R^2 change = .20, $p < .01$), meeting requirement three. In the fourth regression analysis predicting partner maltreatment, the individual-level variables did not add a significant amount of unique variance (R^2 change = .04, n.s.), indicating that any mediating effect of jealousy was functionally a complete effect.

For high alternatives males, in the first regression analysis predicting partner maltreatment, the individual-level variables accounted for a moderate amount of variance ($R^2 = .24, p < .05$), meeting requirement one; in this subsample, however, desire for control was the only significant predictor ($\beta = -.40, p < .01$). In the second regression analysis predicting jealousy, the individual-level variables did not account for a significant amount of variance ($R^2 = .10$, n.s.), meaning that requirement two was not met. In the third regression analysis predicting partner maltreatment, jealousy did not add a significant amount of unique variance (R^2 change = .01, n.s.), meaning that requirement three was not met. In the fourth regression analysis predicting partner maltreatment, the individual-level variables added a significant amount of unique variance (R^2 change = .25, $p < .05$). This analysis also revealed that jealousy alone was

not predictive of partner maltreatment at all for high alternatives males ($R^2 = .00$, n.s.). More detailed results of these analyses are presented in Table 6, and a multicollinearity matrix for all variables entered in all regression analyses so far is presented in Table 7.

Hypothesis 5

Recall that the fifth hypothesis was that power in the relationship (processes discrepancy or outcomes) would moderate the relationship between male desire for control and partner maltreatment. This hypothesis was tested with two hierarchical regression analyses, one incorporating power processes discrepancy and another incorporating power outcomes. The first analysis predicted partner maltreatment from desire for control, power processes discrepancy and the desire for control-power processes discrepancy interaction. Controlling for the two main effects, the interaction did not add any statistically significant unique variance (R^2 change = .03, $p < .15$). However, the zero-order correlation between desire for control and partner maltreatment for males with a negative power discrepancy ($r = .14$, n.s.; $n = 50$) was significantly different ($z = 3.37$, $p < .01$, using R.A. Fisher's [1921] formula) from that for males with a positive power discrepancy ($r = -.54$, $p < .01$; $n = 50$). The second analysis predicted partner maltreatment from desire for control, power outcomes and the desire for control-power outcomes interaction. Controlling for the two main effects, the interaction appeared to add some unique variance but this effect was only marginal (R^2 change = .04, $p < .10$). The correlation between desire for control and partner maltreatment for males with a low (negative) power outcomes score ($r = -.07$, n.s.; $n = 40$) was not significantly different than that for males with a high (positive) power outcomes score ($r = -.30$, $p < .05$; $n = 50$). More detailed results of these analyses are presented in Tables 8 and 9.

Hypothesis 6

Recall that the sixth hypothesis was that power in the relationship (processes discrepancy or outcomes) would moderate the relationship between male jealousy and partner maltreatment. This hypothesis was tested with two hierarchical regression analyses, one incorporating power processes discrepancy and another incorporating power outcomes. The first analysis predicted partner maltreatment from jealousy, power processes discrepancy, and the jealousy-power processes discrepancy interaction. Controlling for the two main effects, the interaction did not add any statistically significant unique variance (R^2 change = .00, n.s.). Interestingly though, the correlation between jealousy and partner maltreatment for males with a negative power discrepancy ($r = .57, p < .01; n = 50$) was significantly different ($z = 3.28, p < .01$) than that for males with a positive power discrepancy ($r = -.07$, n.s.; $n = 40$). The second analysis predicted partner maltreatment from jealousy, power outcomes, and the jealousy-power outcomes interaction. Controlling for the two main effects, the interaction did not add any statistically significant unique variance (R^2 change = .02, n.s.). More detailed results of these analyses are presented in Tables 10 and 11.

Hypothesis 7

Recall that the seventh hypothesis was that male investment or commitment would moderate the relationship between male rejection sensitivity and partner maltreatment by males. This hypothesis was tested with two hierarchical regression analyses, one incorporating investment and another incorporating commitment. The first analysis predicted partner maltreatment from rejection sensitivity, investment, and the rejection sensitivity-investment interaction. Controlling for the two main effects, the

interaction did not add any statistically significant unique variance (R^2 change = .02, n.s.). However, the correlation between rejection sensitivity and partner maltreatment for low investment males (r = .08, n.s.; n = 43) was slightly (although not significantly) different than that for high investment males (r = .24, p < .15; n = 47). For purposes of interpretation, z-scores were used to classify males as "low" or "high" on commitment and investment; specifically, those with z-scores below and including zero were "low" and those with z-scores above zero were "high." The second analysis predicted partner maltreatment from rejection sensitivity, commitment, and the rejection sensitivity-commitment interaction. Controlling for the two main effects, the interaction did add significant unique variance (R^2 change = .07, p < .01), although the difference between the rejection sensitivity-partner maltreatment correlation for low commitment males (r = .25, p < .20; n = 31) and that for high commitment males (r = .06, n.s.; n = 59) was in the opposite direction as expected. More detailed results of these analyses are presented in Tables 12 and 13.

DISCUSSION

Out of the six variables hypothesized to predict partner maltreatment by males (as assessed by females), three of them emerged as statistically significant predictors in some capacity when entered into the regression analyses associated with the first two hypotheses. Male emotionality significantly predicted partner maltreatment when entered with only the other individual-level variables, male desire for control significantly (and negatively) predicted partner maltreatment when entered with all of the other variables, and total demand-withdraw interactions significantly predicted partner maltreatment when entered with the other couple-level variable and with all variables. So the first hypothesis was only partially supported; not all variables that were hypothesized to significantly predict partner maltreatment actually did so. Male jealousy was close to being a significant predictor, but it is likely that its shared predictive variance with total demand-withdraw prevented this from happening.

More generally, in predicting partner maltreatment by males, the four male individual-level variables (rejection sensitivity, risk in intimacy, emotionality, desire for control) alone accounted for a significant amount of variance, and controlling for these variables, the two couple-level variables (male jealousy and total demand-withdraw) accounted for a significant amount of additional unique variance. Not surprisingly, the two couple-level variables alone accounted for a significant amount of variance, but when controlling for *these* variables, the four individual-level variables did not account for a significant amount of unique variance. So the second hypothesis was not supported.

This finding would imply that personality in the context of a relationship and characteristics of the relationship are more important than personality at the individual level in predicting partner maltreatment by males, but the generalization can only be made for the six variables investigated here; there may be individual-level personality variables other than the ones measured in this study that would add unique variance controlling for the couple-level variables. Unfortunately, it may not even be wise to make this specific generalization, because total demand-withdraw and partner maltreatment appear to be overlapping concepts, likely invalidating the former variable's status as a predictor variable.

In regards to the third hypothesis, male jealousy mediated the relationship between the male individual-level variables and partner maltreatment by males, although whatever mediating effect exists seems to be only partial because there also was a significant direct effect of the individual-level variables on partner maltreatment. Moreover, jealousy did account for a significant amount of unique variance in partner maltreatment when the individual-level variables were held constant, but the effect size was relatively small (R^2 change = .04), further supporting a partial mediating effect. Additionally, since emotionality was the only individual-level variable to significantly predict both partner maltreatment and jealousy, it is likely that jealousy mediates only the relationship between *emotionality* and partner maltreatment, and not the relationships between the other three individual-level variables and partner maltreatment.

The fourth hypothesis (that the mediating effect of jealousy would be more prevalent for low alternatives males than for high alternatives males) was essentially supported. The results corresponding to this hypothesis also seem to clear up any

ambiguous results associated with the third hypothesis. For low alternatives males, all mediational requirements (Baron & Kenny, 1986) were met except that the individual-level variables were not significantly predictive of jealousy. However, the R^2 (.18) likely would have been significant if the sample size was higher, or if only emotionality was included as a predictor variable (again, the other three individual-level variables are likely not involved in this mediating effect). Furthermore, because in step four the individual-level variables did not add any significant unique variance controlling for jealousy, complete (as opposed to just partial) mediation is not out of the question.

For high alternatives males, the only mediational requirement met was that the individual-level variables were significantly predictive of partner maltreatment (first requirement), and desire for control, which was not predictive of jealousy at all, was the main reason why. Emotionality was only slightly predictive of both partner maltreatment and jealousy for high alternatives males. Interestingly, for high alternatives males, jealousy appeared not to be related to partner maltreatment at all. So for high alternatives males, jealousy had no relationship with partner maltreatment, whereas desire for control had a strong negative direct effect. On the other hand, for low alternatives males, jealousy added a significant amount of unique variance and was significantly predictive of partner maltreatment alone, but desire for control had no direct relationship with partner maltreatment and a marginal *positive* relationship with jealousy. So perhaps for males the anxiety of having a lower quality of alternatives than one's partner more easily translates feelings of jealousy into partner maltreatment, while the "comfort" of having a higher quality of alternatives lessens the need to put jealous feelings into action, and

somehow activates a strong negative relationship between desire for control and partner maltreatment.

Whereas quality of alternatives discrepancy seems to moderate the mediating effect of jealousy, power processes discrepancy did not moderate the relationship between male desire for control and partner maltreatment or between male jealousy and partner maltreatment, and neither did power outcomes. In all four cases of potential moderation associated with hypotheses five and six, the interaction term did not add any significant unique variance to the prediction of partner maltreatment. Interestingly though, there was a significant difference between the desire for control-partner maltreatment correlation for low power processes males and that for high power processes males. Specifically, those men who desired a lot of control but were low in actual power were more likely to mistreat their partners than those men who desired a lot of control and were high in actual power.

It appeared at first that the seventh hypothesis was supported, at least partially. Male investment size did not significantly moderate the relationship between male rejection sensitivity and partner maltreatment, but male commitment did (i.e., the commitment-rejection sensitivity interaction term was a significant predictor). However, upon further inspection, the difference between the rejection sensitivity-partner maltreatment correlation for low commitment and high commitment males was the opposite of what was expected. This correlation was higher among low commitment males, suggesting that the lack of security that goes along with a low commitment relationship may cause an individual who is high in rejection sensitivity to become even more anxious (and perhaps more likely to aggress) when rejection-oriented thoughts are

cued. In contrast, although the rejection sensitivity-investment interaction term was not significant, the rejection sensitivity-partner maltreatment correlation was higher for high investment than for low investment males, a finding that may after all support the small effect size that Downey et al. (2000) found. Hence the seventh hypothesis was not supported, but perhaps with a larger sample size it would have been. So although all hypothesized interactive effects were found not to be significantly predictive of partner maltreatment, some interactive effects do warrant more attention in the future (i.e., desire for control-power processes discrepancy, desire for control-quality of alternatives discrepancy, and rejection sensitivity-investment interactions).

Rejection Sensitivity

Except for a few significant zero-order correlations, rejection sensitivity was not predictive of partner maltreatment, especially when entered into regression analyses with other variables. It is likely that high correlations with risk in intimacy and emotionality at least partially accounted for the fact that rejection sensitivity had little or no predictive utility in any regression analysis. The Downey et al. (2000) finding that highly invested HRS males are more likely to use violence did not hold up particularly well when female's reports of their partner's maltreatment were considered and different, more detailed measures of investment were used. The only glint of hope here was that a slight difference was revealed in the expected direction between the two relevant correlations for the (non-significant) rejection sensitivity-investment interaction, perhaps supporting the small effect size found by Downey et al. (2000). It should be noted though that the effect Downey et al. (2000) found concerned violence alone and did not include psychological abuse as the current study did.

Risk in Intimacy

Overall risk in intimacy was not a major factor in this study, maybe because certain interactions with other variables were not considered, or because of high multicollinearity with other individual-level variables (rejection sensitivity and emotionality in particular). Of course it could also be that risk in intimacy in any form is simply not predictive of partner maltreatment. This lack of predictive utility on the part of risk in intimacy does not totally refute Hammock and O'Hearn's (2001, 2002) assertion that risk in intimacy affects partner maltreatment by contributing to threat susceptibility, but it does show that risk in intimacy likely is not predictive of partner maltreatment outside the context of threat susceptibility. In fact, it could be that both risk in intimacy and rejection sensitivity are more related to the *reporting* of partner maltreatment (as opposed to the actual occurrence of it). Significant correlations between male risk in intimacy and male assessments of partner maltreatment by females and violence by males, female risk in intimacy and female assessments of partner maltreatment by males and violence by females, male rejection sensitivity and male assessments of partner maltreatment by females and violence by males, and female rejection sensitivity and female assessments of partner maltreatment by males support this assertion.

Emotionality

Emotionality had not been previously connected to aggression, abuse or violence in relationships (although neuroticism and impulsivity had), but it was clearly the most important of the four male individual-level variables in terms of predicting partner maltreatment with regression analyses, especially in the absence of the couple-level

variables (jealousy and total demand-withdraw. In the regression analyses corresponding to the testing of jealousy as a mediator of the relationship between individual-level variables and partner maltreatment, it was evident that the only individual-level variable associated with a mediating effect of jealousy was emotionality. But it appears that the emotionality-partner maltreatment relationship is mediated by jealousy only for males with a negative quality of alternatives discrepancy. For high alternatives males, jealousy was not predictive of partner maltreatment at all, although there could be a small direct effect of emotionality here. So when males have a lower quality of alternatives than their partner, emotionality is more easily translated into jealousy, and this jealousy is more easily translated into partner maltreatment. When males have a higher quality of alternatives than their partner, emotionality is translated into both jealousy and partner maltreatment to a certain extent, but this jealousy is not translated into partner maltreatment at all. Thus it is not simply the case that high emotionality makes one more likely to take action and therefore more likely to use psychological abuse or violence against his or her partner.

Desire for Control

Desire for control emerged over and over as a negative predictor of partner maltreatment. This is surprising because it was hypothesized that desire for control would be a *positive* predictor of partner maltreatment based on previous findings that the seemingly similar constructs need for power and Machiavellianism were positively related to partner maltreatment (Hammock & O'Hearn, 2001, 2002; Mason & Blankenship, 1987). It makes sense that males high on desire for control would potentially use psychological abuse or violence as a control tactic, but this was not the

case in the present study. So, either this hypothesized relationship does not exist, or the DC scale (Burger & Cooper, 1979) was the wrong measure for this study.

There are a few reasons why the DC scale (Burger & Cooper, 1979) may not have measured what it was intended to measure. Some of the items, such as "I am careful to check everything on an automobile before I leave for a long trip," may be more closely related to conscientiousness than to "desire for control" as conceptualized in the introduction. Furthermore, the scale seems to measure desire for having control *over one's own destiny* as opposed to desire for having control *over other people*, in which case desire for control would not be as related to need for power and Machiavellianism as originally thought. Even if the scale did measure what it was intended to, a global measure of desire for control (over other people) may be misleading, since this variable may be domain-specific. A high desire for control over friends or colleagues does not necessarily imply a high desire for control over a romantic partner, and the extent to which one desires control over a romantic partner may vary from relationship to relationship.

Nonetheless, the significant negative relationship between desire for control (whatever it is) and partner maltreatment is difficult to ignore, especially in the case of high alternatives males. Perhaps males low on desire for control are also less concerned with the consequences of their actions and with the perception others have of them, and therefore more likely to inflict abuse. The fact that quality of alternatives discrepancy significantly moderated the relationship between desire for control and partner maltreatment may provide some hints as to what is going on here. Maybe high alternatives males who also have a carefree, reckless personality or an "I don't care"

attitude (i.e., low desire for control) let their evolutionary tendencies for aggression loose, while low alternatives males who also are low on desire for control may not be given the "opportunity" for this personality trait to take effect. In fact a positive relationship between desire for control and partner maltreatment for low alternatives males is not inconceivable, as low alternatives males who also are highly organized and maybe even obsessive-compulsive (i.e., high desire for control over their own destiny) could use psychological abuse or violence as a desperate attempt to control their relationship and their life given the anxiety-causing situation they are in. Perhaps foreshadowing this potential positive relationship, desire for control was a moderately significant positive predictor of jealousy for low alternatives males in one of the regression analyses associated with the fourth hypothesis.

Power in the Relationship

Power processes discrepancy, an approximation of "who has the power in the relationship and to what extent," and power outcomes, a measure of "who makes the decisions in the relationship and to what extent," did not significantly moderate any relationships between other variables and partner maltreatment. The indices for both power processes discrepancy and power outcomes were created for this study, so it is possible that they just are not valid measures. In support of this assertion, power outcomes has proven difficult to measure in the past (Babcock et al., 1993), and in the current study, power processes discrepancy and power outcomes were uncorrelated. In general, it appears that power in the relationship is a very difficult variable to assess.

The related variable of total demand-withdraw (i.e., "power struggles") emerged as a significant predictor of partner maltreatment, but this does not come as a surprise

considering that demand-withdraw interactions basically seem to be what happens just before psychological abuse or violence occurs. In fact, one demand-withdraw item contains the term "nag," which could in itself be classified as psychological abuse. It could also be argued that the cumulative amount of demand-withdraw behavior in a relationship is not associated with who has power in the relationship, but rather with how much tension there is. Additionally, given its high multicollinearity with three other predictor variables (i.e., rejection sensitivity, emotionality and jealousy), the inclusion of total demand-withdraw in regression analyses predicting partner maltreatment may have artificially deflated betas associated with these variables. Nonetheless, the finding that total demand-withdraw significantly predicted partner maltreatment in college couples replicates findings of this effect in married couples (Babcock et al., 1993).

Jealousy in the Relationship

Male jealousy actually did not emerge as a significant predictor of partner maltreatment when entered with the other couple-level variable and all five other variables, but this was likely due to the inclusion of total demand-withdraw in these analyses (i.e., multicollinearity). More interestingly though, male jealousy was found to mediate the relationship between individual-level variables (mainly just emotionality but potentially others) and partner maltreatment for males low in quality of alternatives relative to their partner, but it played no role in the prediction of partner maltreatment for high alternatives males. It may be important to note that jealousy means for low alternatives ($M = 77.15$, $SD = 20.64$) and high alternatives ($M = 78.80$, $SD = 20.17$) males were roughly the same.

So not only does emotionality more easily translate into jealousy for low alternatives males, but these males are also more likely to act in a harmful way when they experience jealousy. Having a partner with a higher quality of alternatives would probably be accompanied by a feeling that one's partner could be lost to a rival, and using psychological abuse or violence may be a tactic to prevent this. While jealousy has not really been discussed previously as having a mediating effect, the general importance of jealousy as a predictor of partner maltreatment in this study supports previous findings and reports (Valencia, 2001; Wilson & Daly, 1996).

Commitment to the Relationship

Commitment to the relationship by itself was not related to partner maltreatment, and neither were the investment and alternatives facets of commitment. It may be that commitment promotes "relationship maintenance behaviors" (Finkel et al., 2002; Johnson & Rusbult, 1989; Lydon et al., 2003) but does not affect level of negative behaviors. As mentioned earlier, a quality of alternatives discrepancy variable (i.e., male alternatives score minus female alternatives score) was created specifically for this study, and this variable proved to play an important role as a moderator variable in the prediction of partner maltreatment. More specifically, quality of alternatives discrepancy was shown to moderate the mediating effect of male jealousy as discussed above, as well as the relationship between male desire for control and partner maltreatment. Therefore this discrepancy warrants attention in future research. Finally, as mentioned, the Downey et al. (2000) finding that (for males) investment size moderates the relationship between rejection sensitivity and partner maltreatment was not replicated with statistically

significant results, but this does not necessarily negate the potential existence of a small effect here.

Limitations and Future Considerations

There were several methodological, statistical and more general limitations of the current study. One general limitation was that not all predictors of partner maltreatment were measured. For example, one individual-level variable that has repeatedly been studied alongside aggression yet was not considered in this study is self-esteem (SE). For years, researchers have assumed an association between low global SE and aggression, but Kirkpatrick, Waugh, Valencia, and Webster (2002) have revealed a link between aggression and "domain-specific SE." Building off Leary's sociometer theory (Leary & Baumeister, 2001), they describe several types of domain-specific SE, including self-perceived superiority, mate value, social inclusion (perceived level of acceptance in social groups one belongs to), and collective SE (how much value one perceives these social groups as having), reasoning that as humans evolved, they were faced with many different problems relating to their survival, and they would not have been able to solve all these problems with just one SE mechanism (global SE). They needed several functionally different SE mechanisms to help gauge properly their status in multiple domains, thereby improving survival and reproduction strategies (Kirkpatrick et al., 2002; Kirkpatrick & Ellis, 2001). Self-perceived superiority (as a positive predictor) and social inclusion (negative predictor) are among types of domain-specific SE that are thought to be related to aggression in relationships (Valencia, 2001). Furthermore, Buss and Shackelford (1997) found that perceived likelihood of partner infidelity (purportedly a measure of self-partner mate value discrepancy) was predictive of certain mate

retention tactics, and interestingly this variable appears to be related to quality of alternatives discrepancy (although quality of alternatives seems more related to the context of a specific relationship), which in this study played an important role as a moderator variable.

A second general limitation of this study is that it is not clear whether all these "predictor variables" cause partner maltreatment, or whether the variables are affected by level of partner maltreatment. Actually, most of the studies in which Marshall's questionnaires had been employed (e.g., Marshall, 1996; Marshall, 1999) concerned other variables as *consequences* of abuse in a relationship (an important topic in its own right obviously), not predictors. In all actuality, it is likely that the causal relationship is a reciprocal one. A third general limitation of this study and most of the studies discussed in the introduction is that the sample was limited to college students. As Johnson (1995) points out, completely different patterns of psychological abuse or violence may exist in different samples of couples. Obviously, predictors of the "patriarchal terrorism" pattern of violence (the most serious case of partner maltreatment) described by Johnson (1995) cannot be captured by studying only middle-to-upper class college students.

Methodologically, the new power outcomes questionnaires may not have been totally valid, although no important findings rest on its validity. Furthermore, Marshall's questionnaires have some limitations, the main ones being that they do not directly assess severity of psychological abuse and violence (more of a problem for the SVAWS and SVAMS), the threats of violence subscale (used in combination with the acts of violence subscale to compute total violence scores) likely belongs on a psychological abuse questionnaire. Additionally, on the psychological abuse and violence questionnaires

there were no questions about who usually initiates the aggression, abuse or violence in the first place, and the distinction between unprovoked and provoked aggression is an important one to make. On a positive note male and female violence was assessed by self- *and* partner reports in the current study; however, aggregates of self- and partner reports of violence were not used in any regression analysis. Instead male violence as assessed by females (combined with male psychological abuse as assessed by females) was used as a measure of partner maltreatment, and all predictor variables were assessed only by males or were an aggregate of male and female reports. Reasons for using this method to solve the problem of low correspondences between self- and partner reports were mentioned earlier, but whether or not this method is better than using an aggregate of these reports is open to debate. So the way in which this problem was "solved" may potentially be another methodological limitation.

More broadly, some of the questionnaires measuring predictor variables in this study have a few items that are directly associated with psychological abuse, and this "item overlap" may have resulted in higher correlations between predictor variables and partner maltreatment than those that actually exist. The CPQ and MJS are the major culprits here. As an example, one item on the behavior subscale of the MJS is "Say something nasty about someone of the opposite sex if X shows an interest in that person," an act that could easily be considered psychological abuse.

There were also several statistical limitations of this study. First, while not that relevant to the outcome of the study, reports of "your violence" and "partner violence" were very highly correlated ($r = .95, p < .01$ for males, $r = .91, p < .01$ for females). On the one hand, these high correlations could be taken as evidence for reciprocal violence in

the relationship. On the other hand, it may be at least in part an artifact of the fact that the assessment of "your violence" was situated right next to the assessment of "partner violence" on the questionnaire. Second, since the partner maltreatment by males criterion variable was an aggregate of female assessments of male psychological abuse and violence, this study did not differentiate between predictors of psychological abuse versus violence. The two aggregated variables were highly correlated, but low enough so that predictive models may be different for each one.

A third, more important statistical limitation was the presence of outliers and positively skewed distributions for total psychological abuse, violence and jealousy scores. These skewed distributions could have artificially inflated zero-order correlations and betas in regression analyses (and any means that were calculated with these scores) if an outlier on one of these variables also had a very high score on another variable involved in either the correlation or regression analysis. At times, outliers were deleted from the dataset with minimal consequence, but every analysis was not done with and without outliers. Furthermore, the removal of "outliers" in the study would be the removal of precisely the scores for which predictive models need to be developed. Perhaps with a community sample for which partner maltreatment is more prevalent on average, total scores would have been more normally distributed. A related issue is restricted range, in that the range of scores in a community sample may have been much greater and therefore findings would have been more generalizable.

A fifth statistical limitation has to do with the analyses used to test the fourth hypothesis concerning the mediational effect of quality of alternatives. Classifying males as "low alternatives" or "high alternatives" divided the sample size in half for each of the

regression analyses, resulting in less power. Finding a way to perform these sets of regression analyses with quality of alternatives discrepancy as a continuous variable would have added even more meaning to the discrepancy scores (and made for more accurate results). Additionally, the rationale for creating alternatives discrepancy scores in the first place may not be totally sound, as participants were not able to assess *their partner's* quality of alternatives, and consequently this alternatives discrepancy may just be a discrepancy in self-esteem (or mate value).

Another statistical problem related to regression was the high degree of multicollinearity between predictor variables (especially between rejection sensitivity, risk in intimacy and emotionality). To account for this multicollinearity, one or two of the personality variables could simply not have been entered, the three highly correlated personality variables could have been converted to z-scores and added to create a new variable, or a new latent variable could have been created through factor analysis and then included in a more sophisticated structural equation predictive model. Likewise, path analysis (or structural equation modeling) could have been employed to further explore jealousy as a mediator variable.

In the future, perhaps these more complex analyses can be run to determine if quality of alternatives discrepancy (or perhaps power processes discrepancy) really does moderate the mediating effect of jealousy. Moreover, because of its apparent similarity to desire for control, conscientiousness should be explored as a potential negative predictor of psychological abuse and violence in high alternatives males. Future research should also incorporate predictor variables that were not assessed in this study, such as certain types of domain-specific SE. Mate value (or mate value discrepancy) would be of

particular interest as an analog to quality of alternatives. Lastly, with enough resources, the study could be replicated using a community sample.

Conclusion

For males, emotionality, total demand-withdraw interactions, and to a certain extent desire for control and jealousy in the relationship emerged as the main predictors of psychological abuse and violence (as assessed by females) in college romantic relationships. Moreover, it appears that at least for males having a low quality of alternatives in comparison to their partner, jealousy plays a mediating role in the relationship between certain individual-level variables (especially emotionality) and partner maltreatment. Furthermore, quality of alternatives and power processes discrepancies (two couple-level variables) may moderate the role that individual-level variables such as desire for control play in determining levels of psychological abuse and violence. Unfortunately, many of the interesting results of the present study either did not reach statistical significance or came from exploratory analyses, so most conclusions made are not definitive. Nonetheless the current study provides a glimpse of how individual-level variables alone, couple-level variables alone, or more importantly complex interactions between individual- and couple-level variables can influence the level of aggression, abuse or violence in romantic relationships. As always, future research is needed, although it is suggested that researchers come to a consensus regarding how partner maltreatment should be defined and assessed before this happens.

TABLE 1

CORRELATIONS BETWEEN ALL PREDICTOR VARIABLES AND PARTNER MALTREATMENT MEASURES

Predictor Variable	Male PM Assessed by Females	Female PM Assessed by Males	Male Violence Assessed by Males	Female Violence Assessed by Females
Individual-Level Variables				
1. Male Rejection Sensitivity	.18	.23*	.23*	.14
2. Female Rejection Sensitivity	.24*	-.02	.10	.08
3. Male Risk in Intimacy	.17	.21*	.21*	.08
4. Female Risk in Intimacy	.29*	.13	.12	.22*
5. Male Emotionality	.35**	.45**	.34**	.23*
6. Female Emotionality	.23*	.10	-.02	.23*
7. Male Desire for Control	-.20	-.04	-.12	-.31**
8. Female Desire for Control	.02	-.02	-.14	-.05
Couple-Level Variables				
1. Man-Demand	.42**	.40**	.25*	.24*
2. Woman-Demand	.53**	.32**	.16*	.35*
3. Total Demand-Withdraw	.57**	.43**	.25*	.36*
4. Power Processes Discrepancy	.13	-.05	-.07	.11
5. Power Outcomes	.13	-.05	.10	.00
6. Male Jealousy	.30**	.56**	.51**	.19
7. Female Jealousy	.40**	.24*	.16	.22*
8. Male Satisfaction	-.33**	-.16	-.14	-.25*
9. Female Satisfaction	-.53**	-.28**	-.28**	-.29**
10. Male QOA	.18	.26*	.19	.10
11. Female QOA	.09	-.06	-.02	.04
12. QOA Discrepancy	.06	.23*	.15	.04
13. Male Investment Size	.14	.17	.12	.10
14. Female Investment Size	.03	.09	.00	-.02
15. Male Commitment	-.14	-.02	-.07	-.12
16. Female Commitment	-.16	.02	-.03	.01

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

Note: "PM" = Partner Maltreatment (aggregate of psychological abuse and violence). "QOA" = Quality of Alternatives.

TABLE 2

HIERARCHICAL REGRESSION ANALYSIS: PREDICTING PARTNER MALTREATMENT BY MALES (AS ASSESSED BY FEMALES) WITH INDIVIDUAL-LEVEL VARIABLES ENTERED FIRST

Model Summary

	R	R^2	R^2 Change
Model 1	.39	.15**	.15**
Model 2	.63	.39**	.24**

Model 1

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	.00	.06	.00
2. Male Risk in Intimacy	.01	.02	.03
3. Male Emotionality	.07	.03	.32**
4. Male Desire for Control	-.02	.02	-.17

Model 2

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	-.04	.05	-.07
2. Male Risk in Intimacy	.02	.02	.09
3. Male Emotionality	.01	.02	.04
4. Male Desire for Control	-.03	.01	-.19*
5. Male Jealousy	.01	.01	.16
6. Total Demand-Withdraw	.06	.01	.51**

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

TABLE 3

HIERARCHICAL REGRESSION ANALYSIS: PREDICTING PARTNER MALTREATMENT BY MALES (AS ASSESSED BY FEMALES) WITH COUPLE-LEVEL VARIABLES ENTERED FIRST

Model Summary

	R	R^2	R^2 Change
Model 1	.59	.35**	.35**
Model 2	.63	.39**	.04

Model 1

Variable	*B*	*SE B*	β
1. Male Jealousy	.01	.01	.16
2. Total Demand-Withdraw	.06	.01	.53**

Model 2

Variable	*B*	*SE B*	β
1. Male Jealousy	.01	.01	.16
2. Total Demand-Withdraw	.06	.01	.51**
3. Male Rejection Sensitivity	-.04	.05	-.07
4. Male Risk in Intimacy	.02	.02	.09
5. Male Emotionality	.01	.02	.04
6. Male Desire for Control	-.03	.01	-.19*

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

TABLE 4

REGRESSION ANALYSES: MALE JEALOUSY AS A MEDIATOR VARIABLE

Step 1: Predicting partner maltreatment by males (as assessed by females) with male individual-level variables

Model Summary			
	R	R^2	R^2 Change
Model 1	.39	.15**	.15**

Model 1			
Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	.00	.06	.00
2. Male Risk in Intimacy	.01	.02	.03
3. Male Emotionality	.07	.03	.32**
4. Male Desire for Control	-.02	.02	-.17

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

Step 2: Predicting male jealousy with male individual-level variables

Model Summary			
	R	R^2	R^2 Change
Model 1	.39	.15**	.15**

Model 1			
Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	.59	.67	.10
2. Male Risk in Intimacy	.12	.24	.06
3. Male Emotionality	.78	.28	.31**
4. Male Desire for Control	.20	.17	.12

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

Table Continues

Step 3: Predicting partner maltreatment by males (as assessed by females) with male jealousy controlling for male individual-level variables

Model Summary

	R	R^2	R^2 Change
Model 1	.39	.15**	.15**
Model 2	.44	.19**	.04*

Model 1

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	.00	.06	.00
2. Male Risk in Intimacy	.01	.02	.03
3. Male Emotionality	.07	.03	.32**
4. Male Desire for Control	-.02	.02	-.17

Model 2

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	-.01	.06	-.03
2. Male Risk in Intimacy	.00	.02	.02
3. Male Emotionality	.06	.03	.25*
4. Male Desire for Control	-.03	.02	-.19
5. Male Jealousy	.02	.01	.22*

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

Step 4: Predicting partner maltreatment by males (as assessed by females) with male individual-level variables controlling for male jealousy

Model Summary

	R	R^2	R^2 Change
Model 1	.30	.09**	.09**
Model 2	.44	.19**	.10*

Model 1

Variable	*B*	*SE B*	β
1. Male Jealousy	.03	.01	.30**

Model 2

Variable	*B*	*SE B*	β
1. Male Jealousy	.02	.01	.22*
2. Male Rejection Sensitivity	-.01	.06	-.03
3. Male Risk in Intimacy	.00	.02	.02
4. Male Emotionality	.06	.03	.25*
5. Male Desire for Control	-.03	.02	-.19

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

TABLE 5

REGRESSION ANALYSES: MALE JEALOUSY AS A MEDIATOR VARIABLE FOR LOW ALTERNATIVES MALES

Step 1: Predicting partner maltreatment by males (as assessed by females) with male individual-level variables

Model Summary

	R	R^2	R^2 Change
Model 1	.42	.18	.18

Model 1

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	.02	.09	.03
2. Male Risk in Intimacy	-.01	.03	-.03
3. Male Emotionality	.09	.04	.42*
4. Male Desire for Control	.01	.02	.07

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

Step 2: Predicting male jealousy with male individual-level variables

Model Summary

	R	R^2	R^2 Change
Model 1	.52	.27*	.27*

Model 1

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	1.28	1.00	.20
2. Male Risk in Intimacy	-.13	.38	-.05
3. Male Emotionality	1.01	.41	.38*
4. Male Desire for Control	.43	.22	.27

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

Table Continues

Step 3: Predicting partner maltreatment by males (as assessed by females) with male jealousy controlling for male individual-level variables

Model Summary

	R	R^2	R^2 Change
Model 1	.42	.18	.18
Model 2	.62	.38**	.20**

Model 1

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	.02	.09	.03
2. Male Risk in Intimacy	-.01	.03	-.03
3. Male Emotionality	.09	.04	.42*
4. Male Desire for Control	.01	.02	.07

Model 2

Variable	*B*	*SE B*	B
1. Male Rejection Sensitivity	-.04	.08	-.07
2. Male Risk in Intimacy	.00	.03	.00
3. Male Emotionality	.05	.03	.22
4. Male Desire for Control	-.01	.02	-.07
5. Male Jealousy	.04	.01	.52**

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

Step 4: Predicting partner maltreatment by males (as assessed by females) with male individual-level variables controlling for male jealousy

Model Summary

	R	R^2	R^2 Change
Model 1	.58	.34**	.34**
Model 2	.62	.38**	.04

Model 1

Variable	*B*	*SE B*	β
1. Male Jealousy	.05	.01	.58**

Model 2

Variable	*B*	*SE B*	β
1. Male Jealousy	.04	.01	.52**
2. Male Rejection Sensitivity	-.04	.08	-.07
3. Male Risk in Intimacy	.00	.03	.00
4. Male Emotionality	.05	.03	.22
5. Male Desire for Control	-.01	.02	-.07

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

TABLE 6

REGRESSION ANALYSES: MALE JEALOUSY AS A MEDIATOR VARIABLE FOR HIGH ALTERNATIVES MALES

Step 1: Predicting partner maltreatment by males (as assessed by females) with male individual-level variables

Model Summary

	R	R^2	R^2 Change
Model 1	.49	.24*	.24*

Model 1

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	-.02	.08	-.03
2. Male Risk in Intimacy	.01	.03	.05
3. Male Emotionality	.05	.03	.22
4. Male Desire for Control	-.07	.02	-.40**

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

Step 2: Predicting male jealousy with male individual-level variables

Model Summary

	R	R^2	R^2 Change
Model 1	.32	.10	.10

Model 1

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	.08	.97	.01
2. Male Risk in Intimacy	.25	.33	.12
3. Male Emotionality	.56	.40	.24
4. Male Desire for Control	-.09	.27	-.05

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

Table Continues

Step 3: Predicting partner maltreatment by males (as assessed by females) with male jealousy controlling for male individual-level variables

Model Summary

	R	R^2	R^2 Change
Model 1	.49	.24*	.24*
Model 2	.50	.25*	.01

Model 1

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	-.02	.08	-.03
2. Male Risk in Intimacy	.01	.03	.05
3. Male Emotionality	.05	.03	.22
4. Male Desire for Control	-.07	.02	-.41**

Model 2

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	-.02	.08	-.03
2. Male Risk in Intimacy	.01	.03	.06
3. Male Emotionality	.05	.04	.24
4. Male Desire for Control	-.07	.02	-.41**
5. Male Jealousy	-.01	.01	-.09

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

Step 4: Predicting partner maltreatment by males (as assessed by females) with male individual-level variables controlling for male jealousy

Model Summary

	R	R^2	R^2 Change
Model 1	.02	.00	.00
Model 2	.50	.25*	.25*

Model 1

Variable	*B*	*SE B*	β
1. Male Jealousy	.00	.03	.02

Model 2

Variable	*B*	*SE B*	β
1. Male Jealousy	-.02	.03	-.12
2. Male Rejection Sensitivity	-.02	.08	-.04
3. Male Risk in Intimacy	.02	.03	.08
4. Male Emotionality	.05	.03	.23
5. Male Desire for Control	-.07	.02	-.42**

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

TABLE 7

MULTICOLLINEARITY MATRIX FOR PREDICTOR VARIABLES

Variable	1	2	3	4	5	6	7
1. Male Rejection Sensitivity	-						
2. Male Risk in Intimacy	.38**	-					
3. Male Emotionality	.41**	.37**	-				
4. Male Desire for Control	-.22*	-.08	-.10	-			
5. Male Jealousy in Relationship	.14	.28**	.21*	-.05	-		
6. Total Demand-Withdraw	.24*	.09	.46**	-.04	.27**		

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

TABLE 8

HIERARCHICAL REGRESSION ANALYSIS: PREDICTING PARTNER MALTREATMENT BY MALES (AS ASSESSED BY FEMALES) WITH MALE DESIRE FOR CONTROL-POWER PROCESSES DISCREPANCY INTERACTION

Model Summary

	R	R^2	R^2 Change
Model 1	.25	.06	.06
Model 2	.30	.09*	.03

Model 1

Variable	*B*	*SE B*	β
1. Male Desire for Control	-.38	.19	-.22*
2. Power Processes Discrepancy	.27	.19	.11

Model 2

Variable	*B*	*SE B*	β
1. Male Desire for Control	-.37	.18	-.21*
2. Power Processes Discrepancy	.20	.19	.11
3. DC-PPD Interaction	-.32	.20	-.17

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

Note: "DC" = Desire for Control, "PPD" = Power Processes Discrepancy.

TABLE 9

HIERARCHICAL REGRESSION ANALYSIS: PREDICTING PARTNER MALTREATMENT BY MALES (AS ASSESSED BY FEMALES) WITH MALE DESIRE FOR CONTROL-POWER OUTCOMES INTERACTION

Model Summary

	R	R^2	R^2 Change
Model 1	.22	.05	.05
Model 2	.30	.09*	.04

Model 1

Variable	*B*	*SE B*	β
1. Male Desire for Control	-.33	.19	-.19
2. Power Outcomes	.17	.19	.10

Model 2

Variable	*B*	*SE B*	β
1. Male Desire for Control	-.39	.19	-.22*
2. Power Outcomes	.10	.19	.06
3. DC-PO Interaction	-.40	.20	-.21

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

Note: "DC" = Desire for Control, "PO" = Power Outcomes.

TABLE 10

HIERARCHICAL REGRESSION ANALYSIS: PREDICTING PARTNER MALTREATMENT BY MALES (AS ASSESSED BY FEMALES) WITH MALE JEALOUSY-POWER PROCESSES DISCREPANCY INTERACTION

Model Summary

	R	R^2	R^2 Change
Model 1	.36	.13**	.13**
Model 2	.36	.13**	.00

Model 1

Variable	*B*	*SE B*	β
1. Male Jealousy	.61	.18	.34**
2. Power Processes Discrepancy	.35	.18	.20

Model 2

Variable	*B*	*SE B*	β
1. Male Jealousy	.57	.19	.32**
2. Power Processes Discrepancy	.35	.18	.20
3. Jealousy-PPD Interaction	-.09	.14	-.07

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

TABLE 11

HIERARCHICAL REGRESSION ANALYSIS: PREDICTING PARTNER MALTREATMENT BY MALES (AS ASSESSED BY FEMALES) WITH MALE JEALOUSY-POWER OUTCOMES INTERACTION

Model Summary

	R	R^2	R^2 Change
Model 1	.32	.10**	.10**
Model 2	.35	.13**	.02

Model 1

Variable	*B*	*SE B*	β
1. Male Jealousy	.52	.18	.29**
2. Power Outcomes	.20	.18	.11

Model 2

Variable	*B*	*SE B*	β
1. Male Jealousy	.53	.18	.30**
2. Power Outcomes	.29	.19	.16
3. Jealousy-PO Interaction	-.22	.14	-.16

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

TABLE 12

HIERARCHICAL REGRESSION ANALYSIS: PREDICTING PARTNER MALTREATMENT BY MALES (AS ASSESSED BY FEMALES) WITH MALE REJECTION SENSITIVITY-MALE INVESTMENT SIZE INTERACTION

Model Summary

	R	R^2	R^2 Change
Model 1	.21	.05	.05
Model 2	.25	.06	.02

Model 1

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	.29	.19	.16
2. Male Investment Size	.21	.19	.12

Model 2

Variable	*B*	*SE B*	B
1. Male Rejection Sensitivity	.29	.19	.16
2. Male Investment Size	.21	.19	.12
3. RS-Investment Interaction	.25	.20	.13

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

Note: "RS" = Rejection Sensitivity.

TABLE 13

HIERARCHICAL REGRESSION ANALYSIS: PREDICTING PARTNER MALTREATMENT BY MALES (AS ASSESSED BY FEMALES) WITH MALE REJECTION SENSITIVITY-MALE COMMITMENT INTERACTION

Model Summary

	R	R^2	R^2 Change
Model 1	.22	.05	.05
Model 2	.35	.12*	.07**

Model 1

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	.30	.19	.17
2. Male Commitment	-.22	.19	-.13

Model 2

Variable	*B*	*SE B*	β
1. Male Rejection Sensitivity	.37	.18	.21*
2. Male Commitment	-.33	.18	-.19
3. RS-Commitment Interaction	-.58	.22	-.28**

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

APPENDIX A

REJECTION SENSITIVITY QUESTIONNAIRE (RSQ)

On a 6-point scale ranging from "very unconcerned" (1) to "very concerned" (6), please indicate your degree of concern or anxiety about the outcome of each of the following situations:

___1. You ask someone in class if you can borrow his/her notes.
___2. You ask your boyfriend/girlfriend to move in with you.
___3. You ask your parents for help in deciding what programs to apply to.
___4. You ask someone you don't know well out on a date.
___5. Your boyfriend/girlfriend had plans to go out with friends tonight, but you really want to spend the evening with him/her, and you tell him/her so.
___6. You ask your parents for extra money to cover living expenses.
___7. After class, you tell your professor that you have been having some trouble with a section of the course and ask if he/she can give you some extra help.
___8. You approach a close friend to talk after doing or saying something that seriously upset him/her.
___9. You ask someone in one of your classes to coffee.
___10. After graduation you can't find a job and you ask your parents if you can live at home for a while.
___11. You ask a friend to go on vacation with you over Spring Break.
___12. You call your boyfriend/girlfriend after a bitter argument and tell him/her you want to see him/her.
___13. You ask a friend if you can borrow something of his/hers.
___14. You ask your parents to come to an occasion important to you.
___15. You ask a friend to do you a big favor.
___16. You ask your boyfriend/girlfriend if he/she really loves you.
___17. You go to a party and notice someone on the other side if the room, and then you ask them to dance.
___18. You ask your boyfriend/girlfriend to come home to meet your parents.

On a 6-point scale ranging from "very unlikely" (1) to "very likely" (6), please indicate the likelihood that the other person(s) would respond in an accepting fashion in each following situations:

___1. You ask someone in class if you can borrow his/her notes.
___2. You ask your boyfriend/girlfriend to move in with you.
___3. You ask your parents for help in deciding what programs to apply to.
___4. You ask someone you don't know well out on a date.

___5. Your boyfriend/girlfriend had plans to go out with friends tonight, but you really want to spend the evening with him/her, and you tell him/her so.
___6. You ask your parents for extra money to cover living expenses.
___7. After class, you tell your professor that you have been having some trouble with a section of the course and ask if he/she can give you some extra help.
___8. You approach a close friend to talk after doing or saying something that seriously upset him/her.
___9. You ask someone in one of your classes to coffee.
___10. After graduation you can't find a job and you ask your parents if you can live at home for a while.
___11. You ask a friend to go on vacation with you over Spring Break.
___12. You call your boyfriend/girlfriend after a bitter argument and tell him/her you want to see him/her.
___13. You ask a friend if you can borrow something of his/hers.
___14. You ask your parents to come to an occasion important to you.
___15. You ask a friend to do you a big favor.
___16. You ask your boyfriend/girlfriend if he/she really loves you.
___17. You go to a party and notice someone on the other side if the room, and then you ask them to dance.
___18. You ask your boyfriend/girlfriend to come home to meet your parents.

APPENDIX B

RISK IN INTIMACY INVENTORY (RII)

Listed below are several statements that reflect different attitudes about relationships. Some of the items refer to general attitudes or beliefs about relationships. Other items refer to more specific kinds of interactions, such as those with acquaintances (e.g., someone you've met only once, someone you know only from class), with casual friends, or with people you are very close to.

Using the scale below, indicate the extent to which you agree with each statement by writing the appropriate number in the blank beside each item.

1 = very strong disagreement	4 = slight agreement
2 = moderate disagreement	5 = moderate agreement
3 = slight disagreement	6 = very strong agreement

There are no right or wrong answers. This is simply a measure of how you feel. Please try to give an honest appraisal of yourself.

___ 1. It is dangerous to get really close to people.
___ 2. I prefer that people keep their distance from me.
___ 3. I'm afraid to get really close to someone because I might get hurt.
___ 4. At best, I can handle only one or two close friendships at a time.
___ 5. I find it difficult to trust other people.
___ 6. I avoid intimacy.
___ 7. Being close to other people makes me feel afraid.
___ 8. I'm hesitant to share personal information about myself.
___ 9. Being close to people is a risky business.
___10. The most important thing to consider in a relationship is whether I might get hurt.

APPENDIX C

EAS TEMPERMENT SURVEY FOR ADULTS (EAS)
(just emotionality items)

Please rate each of the following items on a scale of 1 (not characteristic or typical of yourself) to 5 (very characteristic or typical of yourself).

___1. I am easily frightened.
___2. I am frequently distressed.
___3. When displeased, I let people know it right away.
___4. I am known as hot-blooded and quick-tempered.
___5. I often feel frustrated.
___6. Everyday events make me troubled and fretful.
___7. I often feel insecure.
___8. There are many things that annoy me.
___9. When I get scared, I panic.
___10. I get emotionally upset easily.
___11. It takes a lot to make me mad.
___12. I have fewer fears than most people my age.

APPENDIX D

DESIRABILITY OF CONTROL (DC) SCALE

Below you will find a series of statements. Please read each statement carefully and respond to it by expressing the extent to which you believe the statement applies to you. For all items a response from 1 to 7 is required. Use the number that best reflects your belief when the scale is defined as follows:

1 = The statement doesn't apply to me at all.
2 = The statement usually doesn't apply to me.
3 = Most often, the statement does not apply.
4 = I am unsure about whether or not the statement applies to me, or it applies to me about half the time.
5 = The statement applies to me more often than not.
6 = The statement usually applies to me.
7 = The statement always applies to me.

___1. I prefer a job where I have a lot of control over what I do and when I do it.
___2. I enjoy political participation because I want to have as much of a say in running government as possible.
___3. I try to avoid situations where someone else tells me what to do.
___4. I would prefer to be a leader than a follower.
___5. I enjoy being able to influence the actions of others.
___6. I am careful to check everything on an automobile before I leave for a long trip.
___7. Others usually know what is best for me.
___8. I enjoy making my own decisions.
___9. I enjoy having control over my own destiny.
___10. I would rather someone else take over the leadership role when I'm involved in a group project.
___11. I consider myself to be generally more capable of handling situations than others are.
___12. I'd rather run my own business and make my own mistakes than listen to someone else's orders.
___13. I like to get a good idea of what a job is all about before I begin.
___14. When I see a problem, I prefer to do something about it rather than sit by and let it continue.
___15. When it comes to orders, I would rather give them than receive them.
___16. I wish I could push many of life's daily decisions off on someone else.
___17. When driving, I try to avoid putting myself in a situation where I could be hurt by someone else's mistake.

___18. I prefer to avoid situations where someone else has to tell me what it is I should be doing.
___19. There are many situations in which I would prefer only one choice rather than having to make a decision.
___20. I like to wait and see if someone else is going to solve a problem so that I don't have to be bothered with it.

APPENDIX E

COMMUNICATIONS PATTERNS QUESTIONNAIRE (CPQ)

Directions: We are interested in how you and your partner typically deal with problems in your relationship. Please rate each item on a scale of 1 (= very unlikely) to 9 (= very likely).

A. WHEN SOME PROBLEM IN THE RELATIONSHIP ARISES,

1. Mutual Avoidance.
   ___Both members avoid discussing the problem.
2. Mutual Discussion.
   ___Both members try to discuss the problem.
3. *Discussion/Avoidance.
   ___Man tries to start a discussion while Woman tries to avoid a discussion. ("man-demand, woman-withdraw" [MDWW])
   ___Woman tries to start a discussion while Man tries to avoid a discussion. ("woman-demand, man-withdraw" [WDMW])

B. DURING A DISCUSSION OF A RELATIONSHIP PROBLEM,

1. Mutual Blame.
   ___Both members blame, accuse, and criticize each other.
2. Mutual Expression.
   ___Both members express their feelings to each other.
3. Mutual Threat.
   ___Both members threaten each other with negative consequences.
4. Mutual Negotiation.
   ___Both members suggest possible solutions and compromises.
5. *Demand/Withdraw.
   ___Man nags and demands while Woman withdraws, becomes silent, or refuses to discuss the matter further. (MDWW)
   ___Woman nags and demands while Man withdraws, becomes silent, or refuses to discuss the matter further. (WDMW)
6. Criticize/Defend.
   ___Man criticizes while Woman defends herself.
   ___Woman criticizes while Man defends himself.
7. Pressure/Resist.
   ___Man pressures Woman to take some action or stop some action, while Woman resists.
   ___Woman pressures Man to take some action or stop some action, while Man

resists.

8. Emotional/Logical.
   ___Man expresses feelings while Woman offers reasons and solutions.
   ___Woman expresses feelings while Man offers reasons and solutions.
9. Threat/Back down.
   ___Man threatens negative consequences and Woman gives in or backs down.
   ___Woman threatens negative consequences and Man gives in or backs down.
10. Verbal Aggression.
   ___Man calls Woman names, swears at her, or attacks her character.
   ___Woman calls Man names, swears at him, or attack his character.
11. Physical Aggression.
   ___Man pushes, shoves, slaps, hits, or kicks Woman.
   ___Woman pushes, shoves, slaps, hits, or kicks Man.

C. AFTER A DISCUSSION OF A RELATIONSHIP PROBLEM,

1. Mutual Understanding.
   ___Both feel each other has understood his/her position.
2. Mutual Withdrawal.
   ___Both withdraw from each other after the discussion.
3. Mutual Resolution.
   ___Both feel that the problem has been solved.
4. Mutual Withholding.
   ___Neither partner is giving to the other after the discussion.
5. Mutual Reconciliation.
   ___After the discussion, both try to be especially nice to each other.
6. Guilt/Hurt.
   ___Man feels guilty for what he said or did while Woman feels hurt.
   ___Woman feels guilty for what she said or did while Man feels hurt.
7. *Reconcile/Withdraw.
   ___Man tries to be especially nice, acts as if things are back to normal, while Woman acts distant. (MDWW)
   ___Woman tries to be especially nice, acts as if things are back to normal, while Man acts distant. (WDMW)
8. Pressure/Resist.
   ___Man pressures Woman to apologize or promise to do better, while Woman resists.
   ___Woman pressures Man to apologize or promise to do better, while Man resists.
9. Support Seeking.
   ___Man seeks support from others (parent, friend, children)
   ___Woman seeks support from others (parent, friend, children)

APPENDIX F

"POWER OUTCOMES" QUESTIONNAIRE

Listed below are several areas that romantic couples make decisions on. Please consider each of these areas and indicate the extent to which you and your partner agree on these things (or would agree on these things) even before any discussion takes place, and also indicate who usually makes the decisions in these areas, or who usually would make the decision in these areas.

	Extent to which you And your partner Agree					Who decides			
	1	2	3	4	5	1	2	3	4
	Entirely Or always		Often		not at all or Never	Entirely My Decision	Mostly My Decision	Mostly Partner's Decision	Entirely Partner's Decision
1. How much time you spend together.	1	2	3	4	5	1	2	3	4
2. How you spend your time together.	1	2	3	4	5	1	2	3	4
3. How to spend your free time apart from your partner.	1	2	3	4	5	1	2	3	4
4. How your partner spends free time apart from you.	1	2	3	4	5	1	2	3	4
5. How much time you spend with same-sex friends.	1	2	3	4	5	1	2	3	4
6. How much time your partner spends with same-sex friends.	1	2	3	4	5	1	2	3	4
7. Whether or not you spend time with opposite-sex friends.	1	2	3	4	5	1	2	3	4
8. Whether or not your partner spends time with opposite sex friends.	1	2	3	4	5	1	2	3	4

9. Whose friends you socialize with as a couple.	1	2	3	4	5	1	2	3	4
10. Where to go for dinner together.	1	2	3	4	5	1	2	3	4
11. Whether you and your partner do things together on Friday and/or Saturday nights.	1	2	3	4	5	1	2	3	4
12. What you and your partner do together on Friday and/or Saturday nights.	1	2	3	4	5	1	2	3	4
13. Whether or not you and your partner spend spring break together.	1	2	3	4	5	1	2	3	4
14. How much time you spend together during the summer.	1	2	3	4	5	1	2	3	4
15. Where you spend time together during the summer.	1	2	3	4	5	1	2	3	4
16. How much money you spend on gifts for your partner.	1	2	3	4	5	1	2	3	4
17. How much money your partner spends on gifts for you.	1	2	3	4	5	1	2	3	4

APPENDIX G

MULTIDIMENSIONAL JEALOUSY SCALE (MJS)

Please answer the following questions about your current romantic partner, whom we will call X.

Using the following 7-point scale, please indicate how often you have the following thoughts about X:

1	2	3	4	5	6	7
Never						All the time

___1. "I suspect that X is secretly seeing someone of the opposite sex."
___2. "I am worried that some member of the opposite sex may be chasing after X."
___3. "I suspect that X may be attracted to someone else."
___4. "I suspect that X may be physically intimate with another member of the opposite sex behind my back."
___5. "I think that some members of the opposite sex may be romantically interested in X."
___6. "I am worried that someone of the opposite sex is trying to seduce X."
___7. "I think that X is secretly developing an intimate relationship with someone of the opposite sex."
___8. "I suspect that X is crazy about members of the opposite sex."

Using the following 7-point scale, please indicate how you would emotionally react to the following situations:

1	2	3	4	5	6	7
I would be very pleased						I would be very upset

___1. X comments to you how great looking a particular member of the opposite sex is.
___2. X shows a great deal of interest or excitement in talking to someone of the opposite sex.
___3. X smiles in a very friendly manner to someone of the opposite sex.
___4. A member of the opposite sex is trying to get close to X all the time.
___5. X is flirting with someone of the opposite sex.
___6. Someone of the opposite sex is dating X.
___7. X hugs and kisses someone of the opposite sex.
___8. X works very closely with a member of the opposite sex (in school or office).

Using the following 7-point scale, please indicate how often you engage in the following behaviors:

1 2 3 4 5 6 7
Never All the time

___1. Look through X's drawers, handbags, or pockets.
___2. Call X unexpectedly, just to see if he or she is there.
___3. Question X about previous or present romantic relationships.
___4. Say something nasty about someone of the opposite sex if X shows an interest in that person.
___5. Question X about his or her telephone calls.
___6. Question X about his or her whereabouts.
___7. Join in whenever I see X talking to a member of the opposite sex.
___8. Pay X a surprise visit just to see who is with him or her.

APPENDIX H

INVESTMENT MODEL SCALE
(facet items excluded)

Using the scale below, please indicate with a number the degree to which you agree with each of the following statements regarding your current relationship.

0	1	2	3	4	5	6	7	8
Do Not Agree At All				Agree Somewhat				Agree Completely

___ 1. I feel satisfied with our relationship.
___ 2. My relationship is much better than others' relationships.
___ 3. My relationship is close to ideal.
___ 4. Our relationship makes me very happy.
___ 5. Our relationship does a good job of fulfilling my needs for intimacy, companionship, etc.
___ 6. The people other than my partner with whom I might become involved are very appealing.
___ 7. My alternatives to our relationship are close to ideal (dating another, spending time with friends or on my own, etc.)
___ 8. If I weren't dating my partner, I would do fine--I would find another appealing person to date.
___ 9. My alternatives are attractive to me (dating another, spending time with friends or on my own, etc.).
___ 10. My needs for intimacy, companionship, etc., could easily be fulfilled in an alternative relationship.
___ 11. I have put a great deal into our relationship that I would lose if the relationship were to end.
___ 12. Many aspects of my life have become linked to my partner (i.e., recreational activities, etc.), and I would lose all of this if we were to break up.
___ 13. I feel very involved in our relationship--like I have put a great deal into it.
___ 14. My relationships with friends and family members would be complicated if my partner and I were to break up (e.g., partner is friends with people I care about).
___ 15. Compared to other people I know, I have invested a great deal in my relationship with my partner.
___ 16. I want our relationship to last for a very long time.
___ 17. I am committed to maintaining my relationship with my partner.
___ 18. I would feel very upset if our relationship were to end in the near future.
___ 19. It is likely that I will date someone other than my partner within the next year.
___ 20. I feel very attached to our relationship--very strongly linked to my partner.

___ 21. I want our relationship to last forever.
___ 22. I am oriented toward the long-term future of my relationship (for example, imagining being with my partner several years from now).

APPENDIX I

SUBTLE AND OVERT PSYCHOLOGICAL ABUSE SCALE (SOPAS-W, SOPAS-M)

0	1	2	3	4	5
never	once				a great many times

Most of these things happen in all relationships. These are things your partner may do in a loving, joking or serious way. Choose a number from the above scale to show how often he does each thing.

HOW OFTEN DOES YOUR PARTNER...

____ play games with your head (Overt Psychological Abuse [O])
____ act like he/she knows what you did when he/she wasn't around (O)
____ blame you for him/her being angry or upset (O)
____ change his/her mind but not tell you until it's too late (O)
____ discourage you from having interests that he/she isn't part of (O)
____ do or say something that harms your self-respect or your pride in yourself (O)
____ encourage you to do something then somehow make it difficult to do it (O)
____ belittle, find fault or put down something you were pleased with or felt good about (O)
____ get more upset than you are when you tell him/her how you feel (O)
____ make you feel bad when you did something he/she didn't want you to do (O)
____ make you feel like nothing you say will have an effect on him/her (O)
____ make you choose between something he/she wants and something you want or need (O)
____ say or do something that makes you feel unloved or unlovable (O)
____ make you worry about whether you could take care of yourself (O)
____ make you feel guilty about something you have done or have not done (O)

IN A LOVING, JOKING OR SERIOUS WAY, HOW OFTEN DOES YOUR PARTNER...

____ use things you've said against you, like if you say you made a mistake, how often does he/she use that against you later (Subtle Psychological Abuse [S])
____ make you worry about your emotional health and well-being (S)
____ make you feel like you have to fix something he/she did that turned out badly (S)
____ put himself/herself first, not seeming to care what you want (S)
____ get you to question yourself, making you feel insecure or less confident (S)
____ remind you of times he/she was right and you were wrong (S)
____ say his/her actions, which hurt you, are good for you or will make you a better person (S)
____ say something that makes you worry about whether you're going crazy (S)

_____ act like he/she owns you (S)
_____ somehow make you feel worried or scared even if you're not sure why (S)
_____ somehow make it difficult for you to go somewhere or talk to someone (S)
_____ somehow keep you from having time for yourself (S)
_____ act like you over-react or get too upset (S)
_____ get upset when you did something he/she didn't know about (S)
_____ tell you the problems in your relationship are your fault (S)
_____ interrupt or sidetrack you when you're doing something important (S)
_____ blame you for his/her problems (S)
_____ try to keep you from showing what you feel (S)
_____ try to keep you from doing something you want to do or have to do (S)
_____ try to convince you something was like he/she said when you know that isn't true (S)

APPENDIX J

SEVERITY OF VIOLENCE AGAINST WOMEN SCALES (SVAWS) and SEVERITY OF VIOLENCE AGAINST MEN SCALES (SVAMS)
(sexual aggression subscale excluded)

0	1	2	3	4	5	6
never	once				a great many times	prefer not to answer

The next questions are about things that are more physical and threatening; acts that are not pleasant. Everyone gets frustrated or upset sometimes. Sometimes these acts occur during fights, but sometimes they just happen. First answer describing your partner's behavior then for your own behavior.

How often did your partner...
How often did you...

partner	*you*	
___	___	hit or kick a wall, door or furniture (Threats of Violence [T])
___	___	throw, smash or break an object (T)
___	___	drive dangerously with you (your partner) in the car (T)
___	___	throw an object at you (your partner) (T)
___	___	shake a finger at you (your partner) (T)
___	___	make threatening gestures or faces at you (your partner) (T)
___	___	shake a fist at you (your partner) (T)
___	___	act like a bully toward you (your partner) (T)
___	___	destroy something belonging to you (your partner) (T)
___	___	threaten to harm or damage things you (your partner) care(s) about (T)
___	___	threaten to destroy property (T)
___	___	threaten someone you (your partner) care(s) about (T)
___	___	threaten to hurt you (your partner) (T)
___	___	threaten to kill himself/herself (yourself) (T)
___	___	threaten to kill you (your partner) (T)
___	___	threaten you (your partner) with a weapon (T)
___	___	threaten you (your partner) with a club-like object (T)
___	___	act like he/she (you) wanted to kill you (your partner) (T)
___	___	threaten you (your partner) with a knife or gun (T)
___	___	hold you (your partner) down pinning you (him/her) in place (Acts of Violence [A])
___	___	push or shove you (your partner) (A)

___ ___ grab you (your partner) suddenly or forcefully (A)
___ ___ shake or roughly handle you (your partner) (A)
___ ___ scratch you (your partner) (A)
___ ___ pull your (your partner's) hair (A)
___ ___ twist your (your partner's) arm (A)
___ ___ spank you (your partner) (A)
___ ___ bite you (your partner) (A)
___ ___ slap you (your partner) with the palm of his/her (your) hand (A)
___ ___ slap you (your partner) with the back of his/her (your) hand (A)
___ ___ slap you (your partner) around your (his/her) face and head (A)
___ ___ hit you (your partner) with an object (A)
___ ___ punch you (your partner) (A)
___ ___ kick you (your partner) (A)
___ ___ stomp on you (your partner) (A)
___ ___ choke you (your partner) (A)
___ ___ burn you (your partner) with something (A)
___ ___ use a club-like object on you (your partner) (A)
___ ___ beat you (your partner) up (A)
___ ___ use a knife or gun on you (your partner) (A)

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VITA

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