THE ABUSIVE PERSONALITY IN WOMEN IN DATING RELATIONSHIPS

by

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ABSTRACT

There is ample evidence to suggest that, in the context of dating relationships, female-perpetrated intimate abuse is as common as male-perpetrated intimate abuse (e.g., Archer, 2000). Despite awareness of this fact, female-perpetrated intimate abuse remains an understudied area. The current study adds to the available literature on female-perpetrated intimate abuse by examining Dutton's (2007) theory of the Abusive Personality in a sample of 914 women who had been involved in dating relationships. This is the first study to examine all elements of the Abusive Personality in women simultaneously.

Consistent with the Abusive Personality, recalled parental rejection, borderline personality organization (BPO), anger, and trauma symptoms all demonstrated moderate to strong relationships with women's self-reported intimate psychological abuse perpetration. Fearful attachment style demonstrated a weak to moderate relationship with psychological abuse perpetration. With the exception of fearful attachment, all elements of the Abusive Personality demonstrated a relationship with women's self-reported intimate violence perpetration. However, these relationships were comparatively weak.

A potential model for explaining the interrelationships between the elements of the Abusive Personality was tested using structural equation modeling. This is the first study with either sex to examine all elements of the Abusive Personality simultaneously using structural equation modeling. Consistent with the proposed model, recalled parental rejection demonstrated a relationship with BPO, trauma symptoms, and fearful attachment. Also consistent with the model, trauma symptoms demonstrated a relationship with anger, and BPO demonstrated strong relationships with trauma

symptoms, fearful attachment, and anger. Additionally, anger itself had a strong relationship with women's self-reported perpetration of intimate psychological and physical abuse. Contrary to the proposed model, fearful attachment had a non-significant relationship with anger – when this relationship was examined using structural equation modeling. Based on findings from the current study, fearful attachment has a weaker relationship with college women's perpetration of intimate abuse than it does with clinical samples' perpetration of intimate abuse. Following a discussion of the results, limitations of the study are discussed in conjunction with possible future directions for this line of research.

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INTRODUCTION

The empirical study of intimate assault originated in the 1970s (e.g., Bulcroft & Straus, 1975; Gelles 1974; Gelles & Straus, 1979; London, 1978; Straus, 1971, 1973, 1974a, 1974b). However, these early studies focused on wife assault and did not address violence in dating relationships. There are several differences between marital and dating relationships (Archer, 2000; Dutton & Nicholls, 2005). Notably, dating relationships are terminated more easily than marital relationships, due to the fact that marriage is a legal contract (Chapman, 1974). Many authors combine marital and cohabiting relationships into one category (e.g., Archer, 2000). Therefore, dating relationships may be differentiated from non-dating relationships by a lack of cohabitation. Additionally, individuals in dating relationships tend to be younger than individuals in marital relationships (Archer, 2000). Despite these differences, there is one important similarity between dating and marital relationships: "both are intimate relationships where intimacy problems may play out" (Dutton & Nicholls, 2005, p. 697).

The first study of dating violence was conducted by Makepeace in 1981. Since that time, a large body of evidence has accumulated verifying that intimate violence is a common occurrence within dating relationships (see next paragraph; e.g., Archer, 2000; Douglas & Straus, 2003; Magdol et al., 1997; White & Koss, 1991; Fremouw, Westrup & Pennypacker, 1997). It has also been recognized that dating violence is perpetrated by both males and females (e.g., Archer, 2000; Magdol et al., 1997). However, many authors continue to approach dating violence as an act that is perpetrated exclusively by males against female victims (e.g., DeKeseredy & Schwartz, 1998; Levy, 1998). In other words, the factors associated with female perpetration of dating violence are often ignored.

Early studies of dating violence

In Makepeace's (1981) seminal article on "courtship violence," he reported that one-fifth of students at a college in Minnesota had experienced an incident of violence in a dating relationship. Although Makepeace reported incidents ranging from threats to assault with a weapon, the most common forms of violence were pushing and slapping. Oddly, Makepeace did not report whether it was the man or woman who used violence. He did, however, ask respondents if they felt like they were the "victim" or the "aggressor" in the situation. Women were much more likely than men to report themselves as feeling like the victim (91.7% versus 30.8%). However, due to the way that the questionnaire was designed, subjects were not able to report that they felt like both a victim and an aggressor.

Since Makepeace's article, many researchers have tried to replicate his findings. In 1989, Sugarman and Hotaling conducted a review of published prevalence rates for dating violence. At that time, more than 20 articles had been published on high school and college dating violence. In their review, Sugarman & Hotaling (1989) found that estimates of lifetime prevalence rates for dating violence vary from 9 to 65%. Overall, college samples reported a mean prevalence of 31.9% in dating relationships, whereas high school samples reported a mean prevalence of 22.3%. Unfortunately, as the authors pointed out, it is difficult to make meaningful comparisons across studies for several reasons. Although most researchers have used Straus' (1979) Conflict Tactics Scale or a variant of it to measure violence, authors diverge in what they are willing to label violence. Some authors only include acts of physical violence, whereas others include threats, and still others include verbal aggression. Also, some studies look at incidence of

abuse (i.e. abuse that occurred in the year before the study) whereas others look at prevalence (i.e. events that occurred over a longer time period—often one's entire life; DeKeseredy & Schwartz, 1998). Because of these variations in methodology, Sugarman & Hotaling (1989) recommend that readers use caution when comparing different statistics.

Clarifying key terms

As mentioned above, different authors have used different definitions of violence. Gelles (1990) noted that violence has "proven to be a concept that is not easily defined" (p. 21). For the purposes of the current paper, *violence* will be defined as "an act carried out with the intention or perceived intention of physically hurting another person" (Gelles, 1990, p. 21; Gelles & Straus, 1979). Aggression has been defined as "any malevolent act that is intended to hurt another person" (Gelles, 1990, p. 21). Therefore, *physical aggression* and violence will be used interchangeably throughout the current paper.

The broader term *intimate aggression* incorporates all acts that are intended to hurt another person in an intimate relationship – or perceived as having that intention. These may include verbal, psychological or physical acts. Finally, the term *abuse* is defined as the use of some form of aggression against another person (e.g., Gordon, 2000).

Incidence and prevalence rates

In order to get a more complete understanding of incidence rates of verbal and physical aggression in dating relationships, White and Koss (1991) conducted a national survey of college students in the United States. The total sample consisted of 2602

women and 2105 men who were thought to be representative of American college students.[1] The authors assessed both verbal-symbolic aggression and physical aggression using Straus' Conflict Tactics Scale (1979). No statistically significant differences were found between men and women in terms of perpetrating or sustaining verbal-symbolic or physical aggression. The vast majority of male (80.8%) and female (87.7%) participants reported inflicting verbal-symbolic aggression in the previous year. Similarly, most male (81.9%) and female (86.8%) participants reported sustaining verbal-symbolic aggression in the previous year. Overall, 36.7% of men reported inflicting physical aggression and 38.7% reported sustaining physical aggression in an intimate relationship in the previous year. Thirty-five percent (35.1%) of women reported inflicting physical aggression and 32.4% reported sustaining it. Therefore, although the men and women were reporting on different relationships, they reported similar rates of intimate violence.

DeKeseredy and Kelly conducted a Canadian National Survey (CNS) of dating violence at universities and colleges in 1992 (DeKeseredy & Schwartz, 1998). The CNS sample consisted of over 3000 men and women, and was thought to be nationally representative.[2] Because the intent of the study was largely to look at male violence directed at female victims, men and women were given different surveys. To some degree this limits the conclusions that can be drawn from the CNS, but it remains the most comprehensive survey of dating violence conducted in Canada.

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[1] The criteria for selection of institutions in White and Koss' (1991) study included regional location, size of metropolitan area, enrollment size, type of institutional authority (public, private, religious or secular), type of institution (university, college, or technical school) and percentage enrollment of minority students. Within each institution that was chosen, a random sample of classes was selected.
[2] The criteria for selection of institutions in DeKeseredy and Schwartz's (1998) study included geographical location, type of institution (college or university) and language (English or French). Two classes were chosen at each institution to represent incoming students and more advanced students. Finally, the type of class was taken into consideration (e.g., art or science).

On Straus' Conflict Tactics Scale, 13.7% of males reported physically abusing their partners in the previous year while 22.3% of women reported that they had sustained physical abuse (DeKeseredy & Schwartz, 1998). Since leaving high school, 35% of women reported having been physically abused and 17.8% of men reported that they had been perpetrators of physical abuse. As is typically found, "milder" forms of violence such as pushing and shoving were more commonly reported than more severe forms such as punching. With respect to psychological abuse, 74.1% of men reported perpetrating it in the previous year, and 79.1% of women reported sustaining it. The number of men who reported perpetrating psychological abuse increased to 80% when looking at their behavior since leaving high school. The comparable figure was not given for women.

Although men were not asked about their victimization in the CNS, women were asked a number of questions about their perpetration of physical abuse in intimate relationships (DeKeseredy & Schwartz, 1998). Since leaving high school, 46.1% of women reported using violence of some form. Perpetration of "milder" forms of violence was reported by 38.4% of women, and 19.2% reported using severe forms of violence. Women were also asked what percentage of their violence was used in "self-defense," what percentage was "fighting back," and what percentage of the time they initiated the attack. Of those women who had used minor violence, 37% said that they had initiated the violence at least some of the time. Forty-three percent of women who had used severe violence made this admission. Overall then, 8.4% of women surveyed claimed to have initiated an act of severe violence since leaving high school and 13.2% claimed to have initiated minor violence. It is difficult to compare these figures to the ones given for

men's violence because men were not asked whether they initiated acts of violence, and their responses were not broken down into minor and severe categories.

Another influential study of dating violence is the Dunedin Multidisciplinary Health and Development Study (Magdol et al., 1997). The Dunedin project is a "longitudinal investigation of the health, development, and behavior of a complete cohort of births between April 1, 1972 and March 31, 1973, in Dunedin, New Zealand" (Magdol et al., 1997, p. 69). Initially, 91% of the people who were eligible agreed to participate. There continues to be a very low rate of attrition.

During the Dunedin study's age-21 assessment, those men and women who had been in a relationship, or regularly dating in the previous 12 months, participated in a study of "partner violence". The vast majority of participants were in dating relationships (71%), or cohabiting (26%), although a small percentage were married (3%). Overall, 37.2% of women and 21.8% of men claimed to have committed an act of violence in an intimate relationship. Men's and women's reports of victimization roughly corresponded. That is, men reported greater victimization than women. Additionally, 18.6% of women and 5.7% of men said that they had used severe acts of violence against their partners (e.g., kicking). Reporting on their victimization, 12.7% of women and 21.2% of men said that their partner had used a severe form of violence against them.

Women's violence

Although a range of dating violence prevalence rates have been found, most studies find that women use violent tactics *at least* as frequently as men do (Lewis & Fremouw, 2001; Sugarman & Hotaling, 1989). Furthermore, like their male counterparts, women have been found to use both "mild" and severe forms of violence (e.g.,

DeKeseredy & Schwartz, 1998). This finding lead Billingham and associates to conclude, "perhaps it is time for society to accept the fact that in dating relationships women are as aggressive and violent as are men" (Billingham, Bland, & Leary, 1999, p. 577). The strongest evidence of female dating violence comes from a meta-analysis conducted by Archer (2000). Archer examined 82 discrete samples totaling over 64,000 subjects. The sample included both dating and cohabiting couples. Overall, women were slightly more likely than men to use violence against their partners ($d = 0.05$). However, women in dating relationships had used significantly more violence (relative to their male counterparts) than cohabiting women.

Some researchers assert that equating men's violence to women's based solely on "hit counts" is naïve. One reason for this assertion is that women have been found to sustain more injuries as the result of dating violence (e.g., Makepeace, 1986). Archer's (2000) meta-analysis supports this claim. Overall, women are slightly more likely to be injured ($d = 0.15$). However, when looking at injuries sustained by young people (aged 14-22), the effect size is nearly zero ($d = 0.02$).

It has also been argued that women generally use dating violence in self-defense. This claim is largely based on studies that were intended to study female victimization, and not female perpetration of violence. For example, some of the women in DeKeseredy and Schwartz's study (1998) said that had used violence in self-defense. However, a substantial minority of women said that they had initiated violence at least some of the time, and 62.3% of the women who had used violence said it was *never* in self-defense (i.e., they either initiated the violence or used it in retaliation). Because it was a study of male violence, DeKeseredy and Schwartz did not analyze men's use of self-defense.

Fiebert and Gonzalez (1997) directly assessed college women's reasons for using violence. In a sample of 978 women, 283 (28.9%) said they had initiated a violent act within an intimate relationship in the past 5 years. Of those women who had initiated a violent act, the most common reasons endorsed were feeling like their partner was insensitive to their needs, and wanting to gain their partner's attention. However, it is difficult to interpret the data because women were free to endorse more than one reason for initiating violence, or leave the question blank if none of the supplied reasons corresponded to their own. When inquiring about secondary reasons for instigated violence, Fiebert and Gonzalez (1997) included a line for "other," in addition to a list of suggested reasons. Under those circumstances 24% of the women who had instigated violence said that they did not think their partner would be hurt, and 19% said that they did not think their partner would retaliate.

Follingstad, Wright, Lloyd and Sebastian (1991) also assessed college women's motivations for using dating violence. Of the 288 women who participated in their study, 59 (20%) admitted to perpetrating an act of dating violence. Of those women who perpetrated an act of dating violence, 13.6% said that they had used violence in retaliation and 18.6% said that they used an act of violence in self-defense. However, the most common reasons given for perpetration of dating violence were to demonstrate anger (57.6%), and in retaliation for emotional hurt (55.9%). Therefore, it seems reasonable to assume that a substantial percentage of women are the physical aggressors in their relationship.

Female-initiated dating violence is important for at least two reasons. First, men can be injured from it—both physically and emotionally (e.g., Foshee, 1996; George,

1999; Ehrensaft, Moffitt & Caspi, 2004). And second, women themselves experience negative consequences from their violence. The most common emotional response that men and women experience after perpetrating dating violence is sorrow (Sugarman & Hotaling, 1989), and many men and women experience emotional trauma (Makepeace, 1986). Given that intimate violence can have negative consequences for the victim and perpetrator, one may question why men and women perpetrate such violence. This question will be addressed below.

Theories of intimate violence

Since the 1970's several major types of theories have been put forth to explain intimate assault behaviors. These types of theories can be broadly classified as: (1) sociological feminist; (2) sociobiological; (3) social learning; and (4) those relating to individual psychology or psychopathology. As will be seen below, the first three types of theories are largely intended to explain intimate assault committed by men against female partners. However, the fourth type of theory is not limited by gender assumptions.

Sociological feminist theory

Sociological feminists would argue that we live in a patriarchal society, and that intimate assault is a direct result of this social structure (Dobash & Dobash, 1979; Yllo & Bograd, 1988). That is, we live in a society where men have power and women are treated as secondary or inferior to men. According to sociological feminist theory, the power imbalance between men and women is sustained through differential access to financial and "symbolic" resources, and supported by patriarchal ideology (Yllo & Bograd, 1988, p. 14). Although sociological feminists acknowledge that men vary in

social class, they would argue that "all men can potentially use violence as a powerful means of subordinating women" (Yllo & Bograd, 1988, p. 14).

As should be apparent from this description, sociological feminists do not attempt to explain individual differences in behavior. Instead, they seek to understand "why men in general use physical force against their partners" (Yllo & Bograd, 1988, p 13). In other words, the sociological feminist perspective is that intimate assault is most likely to occur in heterosexual relationships, and that men are most likely to be the perpetrators. Sociological feminists would argue that this is particularly true within the context of marriage, which they believe to be a microcosm of societal structure in general (Dobash & Dobash, 1979; Yllo & Bograd, 1988).

Consistent with sociological feminist theory, several studies have found an empirical relationship between acceptance of patriarchal ideology and wife assault (Smith, 1990; Yllo & Straus, 1990). However, the sociological feminist perspective has been criticized based on a number of findings (e.g., Dutton, 1994a). Notably, Yllo and Straus (1990) found a curvilinear relationship between economic, educational, political and legal inequality (structural patriarchy) and men's perpetration of severe wife assault across the 30 states they examined. States with either the highest or lowest levels of structural patriarchy displayed the highest rates of severe wife assault, while states with moderate levels of structural patriarchy displayed the lowest rates of severe wife assault. If patriarchy is the sole cause of wife assault, then it is not clear why states with low levels of structural patriarchy would have higher rates of wife assault than states with moderate levels of structural patriarchy.

Another critique of sociological feminist theory comes from studies of gay and lesbian intimate relationships. These studies tend to find rates of intimate assault that are as high, or higher than rates found with heterosexual couples (Bologna, Waterman & Dawson, 1987; Island & Letellier, 1991; Kelly & Warshafsky, 1997; Landolt & Dutton, 1997; Lie & Gentlewarrior, 1991; Renzetti, 1992; Waldener-Haugrud, Gratch & Magruder, 1997). It is difficult to explain intimate violence within same-sex relationships using sociological feminist theory. This is particularly true in lesbian relationships where there is no male that could benefit from the greater physical and symbolic power that is thought to be conferred on men.

Studies of female perpetrated heterosexual violence also cause problems for a sociological feminist explanation of intimate assault. As described above, these studies tend to find that heterosexual women perpetrate intimate violence against their male partners at around the same rates as their male counterparts (e.g., Archer 2000). If all men are capable of using violence to control women (Yllo & Bograd, 1988), it is difficult to understand why they would experience such high levels of victimization.

Sociobiological theory

Sociobiological theory – or evolutionary psychology – is founded on Darwin and Wallace's (1858) theory of evolution, Natural Selection. Darwin and Wallace suggested that individual traits with the greatest "fitness" were the most likely to survive over time, and therefore survive extinction. In this context, fitness refers to reproductive success. In other words, the characteristics or behaviors that enable an organism to survive to reproductive age and reproduce are the ones that are most likely to be represented in

future generations. Or looked at another way, the characteristics or behaviors that are represented in living organisms are the ones that have survived extinction.

Sociobiologists would argue that natural selection applies to human psychology in the same way that it applies to human biology (Wilson, 1975). In other words, the psychological traits with the greatest probability of ensuring reproductive success are the ones that are most likely to be seen in the population. The trait that sociobiologists have used to explain intimate assault behaviors is sexual jealousy (Daly & Wilson, 1988). As Wilson and Daly (1988) explain, natural selection has favored sexually jealous males who ward off competing males and intimidate their female partners into remaining monogamous. Sociobiologists, much like sociological feminists, argue that heterosexual men use intimate violence as a form of control. However, unlike the sociological feminist explanation, sociobiological theory does not assume that men are aware of the reasons for their feelings or behavior (i.e. why they react with jealously and violence to sexual threat). Men may be aware of the reason for their jealousy; however, according to sociobiologists, the trait of sexual jealousy exists solely because it increases men's fitness.

Felson and Outlaw (2007) directly examined the sociobiological explanation of intimate assault in the United States. They did so using information collected from married and formerly married men and women who responded to the National Violence Against Women Survey (Tjaden & Thoennes, 2000). Overall, there was little evidence to suggest that men experience higher levels of sexual jealousy than women, or that men display higher levels of control behaviors. In fact, across all *current* marriages (violent and nonviolent), women were significantly more likely than men to express jealousy and

to use controlling behaviors. Looking at all *past* marriages (violent and nonviolent), there were no gender differences in terms of jealousy. Men were slightly more likely to use controlling behaviors in past marriages; however, this difference was not statistically significant.

Felson and Outlaw (2007) found a significant relationship between jealousy and perpetration of marital assault for both current and past marriages. However, they found little evidence to support the sociobiological claim that men are particularly influenced by sexual jealousy. Looking at current marriages, jealous spouses were more likely to perpetrate marital assault regardless of their gender. On the other hand, Felson and Outlaw did find some limited support for sociobiological theory when examining past marriages. For that sub-sample, jealousy was more strongly related to violence in men than it was in women.

Similar results were found for the relationship between controlling behaviors and spousal assault. There was a relationship between use of control behaviors and perpetration of violence; however, the relationship between controlling behaviors and spousal assault was only stronger for men in the sub-sample that was responding to questions about past marriages. Overall, Felson and Outlaw's study (2007) provides little support for the sociobiologcal explanation of intimate assault perpetration. As a whole, men display no more jealousy or controlling behaviors than their female counterparts, and in current relationships their jealousy and controlling behaviors are no more strongly related to violence perpetration than are women's.

The sociobiological explanation of intimate assault has also been criticized on theoretical grounds. Like the sociological feminist explanation of intimate assault,

sociobiological theory in unable to explain gay and lesbian intimate violence. It is not clear how controlling a gay partner's sexual behavior would add to one's evolutionary fitness, or what other purpose homosexual intimate assault would serve. Similarly, it is not clear how heterosexual women's evolutionary fitness would be increased by controlling their partners.

Social learning theory

Bandura (1973; 1978; 1979) developed a comprehensive theory of human aggression based on social learning. He described three determinants of aggressive behavior: (1) the origins of aggression; (2) the instigators of aggression; and (3) the regulators of aggression. In other words, Bandura's theory of aggression attempts to explain "how aggressive patterns are developed, what provokes people to behave aggressively, and what sustains such actions after they have been initiated" (Bandura, 1978, p. 13-14).

The three major origins of aggressive behavior are: (1) biological factors; (2) observational learning; and (3) reinforced performance (Bandura, 1978). Biological factors affecting aggressive behavior are things like activity level, physical size and musculature. From a social learning perspective, stronger, larger individuals are more likely to use aggressive behavior. This is because stronger people are more likely to achieve the desired results from using physical aggression (e.g., compliance with one's demands). Based on biological factors alone (e.g., physical size and musculature), we may expect to see physical aggression being used more often by men than by women.

Observational learning occurs when an individual observes someone else being rewarded or punished for a behavior (Bandura, 1973; 1978; 1979). In other words, not all

behaviors that are observed will become part of an individual's behavioral repertoire. For a behavior to be imitated, it must have functional value and be rewarded (or at least not punished). Due to the private nature of intimate assault, observational learning may be most likely to occur in one's family of origin. However, intimate assault behaviors could also be modeled by the subculture the family is embedded in, and mass media such as television and films.

Although social learning theorists believe that modeling influences are universal, they also suggest that simple forms of aggressive behavior can arise solely through trial-and-error learning. In fact, Bandura (1973) argued that observational learning itself is likely to produce only rough approximations of the observed behavior. These rough approximations are then refined through reinforced practice. In other words, through trial-and-error experimentation unsuccessful behaviors tend to be discarded whereas rewarded behaviors tend to be progressively strengthened.

The second major determinant of aggressive behavior is the instigators of aggression. Social learning theorists would argue that acquired behaviors will not be demonstrated until there is an appropriate stimulus or "instigator" of aggression present in the environment (Bandura, 1973; 1978; 1979). The motivation for one to act aggressively comes from either an aversive stimulus that one is working to remove, or an incentive inducement that one is hoping gain from the aggressive action. Dutton (1995a) suggested that the three most common types of instigation mechanisms in cases of intimate assault are incentive instigators, aversive instigators, and delusional instigators (e.g., conjugal paranoia, or the delusional belief that one's partner is being unfaithful to them).

According to social learning theory, the final major determinant of aggressive behavior is the regulators of aggression (i.e. various mechanisms that maintain the behavior). If aggression has a positive outcome (e.g., enabling one to gain control of a relationship conflict), reinforcement occurs and the behavior is likely to continue. Conversely, if the aggressive behavior has a negative or punishing outcome then it is unlikely to be repeated.

Many studies have been conducted to examine the relationship between experiencing violence in one's family of origin and later perpetration of intimate violence (i.e. observational learning). Stith and colleagues conducted a meta-analysis of 39 studies and over 12,000 subjects that specifically addressed the relationship between experiencing family of origin violence and later perpetration of *marital violence* (Stith, Rosen, Middleton, Busch, Lundberg & Carlton, 2000). The authors found a weak to moderate relationship between experiencing child abuse and later perpetration of marital violence, as well as witnessing interparental violence and later perpetration of marital violence (rs = .16 and .18, respectively). However, these relationships were far stronger for men than they were for women. In other words, this meta-analysis provides some evidence that intimate violence modeling influences may be gender specific.

Studies that included participants in dating relationships have also found a relationship between experiencing family of origin violence and later perpetration of dating violence (e.g., Follette & Alexander, 1992; O'Keefe, 1997). Additionally, one large Canadian study of married and dating men and women found that the relationship between experiencing family of origin violence and later perpetration of intimate violence was not sex specific (Kwong, Bartholomew, Henderson & Trinke, 2003).

However, it is clear from the available research that the social-learning theory of intimate violence, and specifically the concept of observation learning, does not account for a large amount of variance in intimate abuse behaviors.

The social learning theory of aggression has also been criticized on theoretical grounds. For example, Dutton (1995a) noted that social learning theory describes intimate abuse perpetrators as individuals who passively respond to proximal external stimuli. This description contradicts the features of some male batterers. As described by Walker (1979), some men appear to go through a "battering cycle," in which a tension-building phase is followed by a violent episode. This tension building phase does not seem dependant on external stimuli, and therefore would be difficult to explain from a social-learning perspective.

Models of individual psychopathology

The final type of theory that has been applied to intimate abuse perpetration relates to individual psychology and psychopathology. Unlike other theories of intimate violence, the individual psychopathology model does not assume that all violent individuals perpetrate intimate violence for the same reasons. Individuals with the same psychological make-up may perpetrate violence in the same situations for the same reasons; however, several researchers have empirically validated "batterer" typologies which demonstrate that more than one psychological constellation can result in violence perpetration (e.g., Hamberger, Lohr, Bonge & Tolin, 1996; Holtzworth-Munroe & Stuart, 1994; Saunders, 1992; Tweed & Dutton, 1998). Psychological factors that have been associated with intimate violence perpetration include personality disorders such as borderline personality, aggressive personality, and negative emotionality (e.g., Dutton,

2007; Ehrensaft et al., 2004, Moffitt, Krueger, Caspi & Fagan, 2000), substance abuse disorders (e.g., Stith, Smith, Penn, Ward & Tritt, 2004), attachment disorders (e.g., Dutton, 2007), anger (e.g., Norlander and Eckhardt, 2005), jealousy (e.g., O'Leary, Smith Slep & O'Leary, 2007), trauma symptoms (e.g., Dutton, 2007), and social skill deficits (e.g., Holtzwoth-Munroe, 1992). Although many psychological traits associated with intimate violence perpetration were initially studied in samples of married men, they can theoretically be applied to both men and women in dating relationships. Perhaps the most comprehensive psychological explanation of intimate abuse perpetration to date is Dutton's (2007, 1998) model of the Abusive Personality. This will be described in detail below.

The theory of the Abusive Personality

Working with maritally violent men, Dutton (1994b) noted the similarity between some men's personality structures and that of the "borderline personality" (BP) described by Gunderson (1984). The essential features of the BP, as described by Gunderson, are: (1) a proclivity for intense, unstable interpersonal relationships characterized by intermittent undermining of the significant other, devaluation, manipulation, and masked dependency; (2) an unstable sense of self, with an intolerance for being alone, and acute abandonment anxiety; and (3) intense anger (expressed "more or less directly"), demandingness and impulsivity, which may lead to substance abuse or promiscuity. As Dutton (1994b) noted, this description is remarkably similar to the description of maritally violent men given by Walker (1979) in her seminal work with wives in battered women's shelters.

Walker described abusive husbands as going through an "abuse cycle" where as Gunderson described the BP as going through three levels of psychological function. The first stage of Walker's (1979) abuse cycle is the "tension-building phase" (Walker, 1979), during which the battered wife may feel as though she is "walking on eggshells" (Walker, 1996, p. 342). In other words, tension builds within the abusive husband irrespective of his wife's behavior. Similarly, Gunderson (1984) described the BP's first level of psychological function as a "dysphoric stalemate" where intimacy needs are unmet and the BP lacks the motivation and skills to assert his or her needs.

The second stage of Walker's (1979) abuse cycle is the "acute battering incident". Again, Walker (1979) described this as an event that happens irrespective of the woman's behavior, due to internal psychological processes of the male or other external events. This stage is comparable to Gunderson's (1984) second level of psychological functioning. According to Gunderson, this level of functioning occurs when the BP perceives their relationship as potentially lost. The BP reacts to this possibility with anger, devaluation of the significant other, manipulation or open rage.

The final stage of the abuse cycle described by Walker (1984) was "loving contrition," where the abusive husband attempts to appease his partner and regain the relationship. This is analogous to Gunderson's (1984) third level of psychological functioning, which occurs when the BP feels that they have lost their significant other. According to Gunderson, the BP reacts to this situation by engaging in behaviors that are designed to ward off their subjective experience of aloneness. These behaviors may include substance abuse or promiscuity. As Dutton suggested (1994b), the exaggerated types of appeasement behaviors described by Walker would also be an example of this.

Rather than directly examining Borderline Personality Disorder in maritally abusive men, Dutton (1994b) chose to focus on borderline personality organization (BPO). Borderline personality organization is related to, but not synonymous with Borderline Personality Disorder (Oldham et al., 1985). Dutton chose this construct in an attempt to "depathologize" the "perpetrator personality profile of wife abuse" (Dutton & Starzomski, 1993, p. 328). Initially described by Kernberg (1977), BPO presents as a "continuum of personality problems characterized by identity difficulties that become salient in intimate relationships" (Dutton & Starzomski, 1993, p. 328). Individuals with BPO suffer from identity diffusion, use primitive defenses, and to a lesser extent, experience failures in reality testing (Oldham et al., 1985). In this context, identity diffusion refers to an uncertainty about, or fluctuations in one's sense of self, uncertainty about others, and instability in intimate relationships. Primitive defenses refer to psychological defense mechanisms such as splitting (i.e. the tendency to divide the self and external objects into "all good" and "all bad" derivatives), omnipotence and idealization. Finally, failures in reality testing may be reflected by difficulties in differentiating the self from the non-self, differentiating external from internal origins of perceptions or stimuli, or evaluating one's behavior in terms of appropriate social criteria. Individuals diagnosed with paranoid, schizoid, histrionic, narcissistic, antisocial and borderline personality disorders would all be expected to show some degree of BPO (Oldham et al., 1985).

Dutton (1994b) assessed the relationship between BPO and perpetration of verbal aggression and intimate violence in a group of 120 men who were in treatment for wife assault. He found a significant positive correlation between the men's self-reports of

intimate abuse perpetration and BPO. Similarly, Dutton and Starzomski (1993) assessed the relationship between BPO and psychological and physical abuse perpetration in a mixed sample of men who were in treatment for intimate assault, incarcerated in Canadian federal prisons, and demographically matched controls.[3] They found that men's self-reported BPO scores positively and significantly correlated with their wives' reports of psychological and physical abuse victimization.

The centrality of BPO

Having found a relationship between BPO and intimately abusive behaviors, Dutton and his colleagues went on to examine the relationship between BPO and a number of other psychological constructs (Dutton, 1994b; Dutton & Starzomski, 1993; Dutton, Saunders, Starzomski & Bartholomew, 1994). As might be expected from the description of BPO above, Dutton (1994b) found a strong relationship between BPO scores and chronic anger and hostile outlook. However, he also found strong relationships between BPO and trauma symptoms, "fearful attachment style," and recollections of paternal rejection. In addition, Dutton and his colleagues found strong relationships between each of these psychological traits and men's perpetration of intimate abuse (see below). Dutton referred to this constellation of psychological traits as the Abusive Personality, and demonstrated that BPO is the central component of this personality structure (Dutton, 1994b). He then sought to identify the origins of the Abusive Personality.

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[3] The men who were in treatment for wife assault represented a subset of the sample used in Dutton (1994b).

The origins of the Abusive Personality

Building on work by attachment theorists, Dutton (1995a) hypothesized that the origin of the Abusive Personality may be in early experiences of abuse and rejection by one's parents. Bowlby (1979) asserted that attachment behavior is characteristic of human beings from infancy through adulthood. According to Bowlby, one's confidence – or lack of confidence – in the availability of attachment figures is built slowly through infancy, childhood and adolescence, and "whatever expectations are developed during those years tend to persist relatively unchanged throughout the rest of life" (p. 235). In Bowlby's view, interpersonal anger is an expression of unmet attachment needs, and functions as a form of "protest behavior" directed at regaining contact with an attachment figure. Extending on this view, Dutton et al. suggested that chronic childhood frustration of attachment needs may lead to an adult tendency to act with extreme anger when "relevant attachment cues are present" (1994, p. 1368). In other words, attachment theory would suggest that intimately abusive individuals are reacting with violence as a form of protest behavior when they perceive a threat of separation or abandonment.

Although Bowlby's focus was parent-child relationships, Hazan and Shaver (1987) extended his theory to romantic love. Bartholomew (1990) then built on Hazan and Shaver's (1987) work to develop a categorical model of adult attachment that defines attachment patterns in terms of how individuals perceive themselves and others. An individual who has a positive model of themselves and a positive model of romantic partners is said to have a secure attachment style (Griffin & Bartholomew, 1994). Individuals who have a negative model of themselves and a negative model of potential romantic partners have a fearful attachment style. Individuals with a positive model of

themselves and a negative model of potential romantic partners have a dismissing attachment style. Finally, those individuals with a positive model of potential romantic partners and a negative model of themselves have a preoccupied attachment style.

As noted above, Dutton found a strong relationship between BPO and fearful attachment style in men in treatment for wife assault. Individuals with a fearful attachment style are described as people who desire social contact and intimacy, but experience pervasive interpersonal distrust and fear of rejection (Bartholomew, 1990). In addition to examining the relationship between attachment styles and BPO, Dutton et al. (1994) directly assessed the relationship between attachment style and perpetration of intimate abuse. They found that men's scores on fearful attachment and preoccupied attachment both correlated strongly with their use of emotional abuse and dominance-isolation tactics. Men's perpetration of dominance-isolation tactics was significantly and negatively correlated with their scores on secure attachment. However, there was no relationship between secure attachment scores and perpetration of emotional abuse. Using the same sample, Dutton et al. (1994) showed that, as a group, men in treatment for wife assault scored significantly higher on fearful attachment and preoccupied attachment than their non-assaultive counterparts. They also scored significantly lower on secure attachment than their non-assaultive counterparts. Although Dutton et al. (1994) did not follow their sample from childhood, this study offers some support – based on attachment theory – that the Abusive Personality has its origins in negative parental treatment early in life.

A second area of research that lead Dutton (1995b) to believe that the Abusive Personality has its origins in childhood relates to psychological trauma. As noted by van

der Kolk (1987), being traumatized as a child – including through physical abuse – can lead to difficulties in modulating aggression. Furthermore, McCormack, Burgess, and Hartman (1988) found that adolescent runaways who perceived ongoing familial abuse to be uncontrollable were at a heightened risk for developing posttraumatic stress disorder. Based on these and similar studies, Dutton (1995b) hypothesized that harsh parenting styles (e.g., physical abuse and shaming) may lead to chronic symptoms of traumatic stress. Dutton further hypothesized that the irritability and dysphoria associated with men's trauma symptoms, in conjunction with other traits found in the Abusive Personality (i.e. an inability to self-soothe, dysfunctional thinking during conflict, and insecure attachment) could create a higher likelihood of abuse perpetration in intimate relationships. According to this hypothesis, abuse is directed towards the female intimate partner for a variety of reasons, including the man's expectations that his partner will alleviate his suffering, her general availability, and the private nature of their relationship (i.e., protection from public censure).

Dutton (1995b) tested this hypothesis on men in treatment for wife assault, and demographically matched controls. He assessed trauma symptoms with both the Trauma Symptoms Checklist (TSC-33; Briere & Runtz, 1989) and the Millon Clinical Multiaxial Inventory (MCMI-II; Millon, 1987). Vietnam veterans diagnosed with Post Traumatic Stress Disorder (PTSD) have been shown to have an "82C profile" (passive-aggressive/avoidant/borderline) on the MCMI (Hyer, Woods, Bruno & Boudewynns, 1989; Robert et al., 1985). Therefore, Dutton (1995b) used MCMI-II scores to assess PTSD-like profiles.

Men in treatment for wife assault reported significantly more trauma symptoms on the TSC-33 than control subjects. Across the entire sample, men's TSC-33 scores correlated significantly and positively with their self-reports of anger, and perpetration of intimate violence, as well as their wives' reports of emotional abuse and dominance-isolation victimization. Similar to PTSD clients, the men in treatment for wife assault scored highly on passive-aggressiveness and avoidant traits on the MCMI-II. They also had a secondary peak on borderline traits. However, the assaultive men scored lower on anxiety and dysthymia than men who have been diagnosed with PTSD. Additionally, they scored higher on antisocial traits.

In the same study, Dutton (1995b) directly assessed the relationship between men's early childhood experiences and their current trauma symptoms. Childhood experiences were assessed with the Egna Minnen Beträffande Uppfostran (EMBU; Perris, Jacobsson, Lindstrom, von Knorring & Perris, 1980) and the Conflict Tactics Scale (CTS; Straus, 1979). The EMBU asks respondents about their recollections of their parents' warmth and rejection (towards the respondent) during childhood. The Conflict Tactics Scale was used to assess men's experiences of verbal and physical abuse victimization perpetrated by their mothers and fathers.

Dutton found that the men's negative childhood experiences predicted 26% of the variance in their TSC-33 scores. Additionally, a discriminant function analysis performed using the early childhood experience variables correctly classified 81% of the men into low and high trauma symptom groups, as measured by the TSC-33. Therefore, this study showed that negative childhood experiences are associated with adult presentation of trauma symptoms. It also showed that current trauma symptoms are associated with

perpetration of intimate abuse. Dutton (1995b) did not directly assess the link between negative childhood experiences and adult perpetration of intimate abuse. However, this study offers some support for the hypothesis that the Abusive Personality of assaultive males begins to develop in childhood.

Partial tests of the Abusive Personality

Since Dutton's initial assessment of the Abusive Personality a number of researchers have examined parts of his theory. Three studies are of particular interest because they included borderline personality traits – the central feature of the Abusive Personality. Mauricio, Tein and Lopez (2007) examined attachment, personality disorders and intimate abuse perpetration in a sample of 192 "male batterers" attending an intervention program. Personality disorders were assessed with the Personality Diagnostic Questionnaire—Revised, a self-report screening measure based on the Diagnostic and Statistical Manual of Mental Disorders (APA, 2000). The authors used the Experience in Close Relationships (ECR) scale to measure attachment. The ECR is based on the dimensions of anxiety and avoidance. Although dimensional scales are not generally used to create attachment categories, the underlying theory is the same. Securely attached individuals score low on anxiety and low on avoidance whereas fearfully attached individuals score high on anxiety and high on avoidance. Individuals with a preoccupied attachment style sore high on anxiety, but low on avoidance. Finally, individuals with a dismissing attachment style would score low on anxiety, but high on avoidance.

Building on previous work on attachment and personality disorders, Mauricio et al. (2007) chose to examine the ability of borderline personality disorder to mediate the

relationship between "anxious attachment" and intimate abusiveness. In other words, they tested the hypothesis that borderline personality disorder functions as a mechanism through which anxious attachment is related to psychological and physical abusiveness. Mauricio et al. also assessed the ability of antisocial personality disorder to mediate the relationship between avoidant attachment and intimate abusiveness. The authors chose these particular personality disorders and attachment styles because most typologies of intimately abusive men include a subgroup of men who are avoidantly attached and have antisocial personality disorder characteristics, and a subgroup that is anxiously attached and have borderline personality disorder characteristics (e.g., Hamberger et al., 1996; Holtworth-Monroe Meehan, Herron, Rehman, & Stuart, 2000; Tweed & Dutton, 1998; Waltz, Babcock, Jacobson & Gottman, 2000). The latter group is most directly comparable to the Abusive Personality. However, it should be noted that individuals with antisocial personality disorder would also be expected to display BPO (Oldham et al, 1985).

Mauricio et al.'s (2007) hypotheses were supported. That is, borderline personality disorder mediated the relationship between anxious attachment and intimate abusiveness, and antisocial personality disorder mediated the relationship between avoidant attachment and intimate abusiveness. However, the authors also found a relationship between borderline personality disorder and avoidant attachment and a relationship between antisocial personality disorder and anxious attachment. Additionally, the authors found that anxious attachment had a direct effect on psychological, but not physical aggression. Therefore, this study offered some support for

the authors' mediational hypothesis, and also some support for a direct link between anxious attachment and psychological abuse.

Goldenson, Geffner, Foster and Clipson (2007) examined personality disorders, trauma symptoms and attachment in a sample of 33 women in an intimate violence offender group and 32 women from a clinical comparison group. The offender group scored significantly higher than the comparison group on the Antisocial, Borderline and Dependant subscales of the MCMI-III. Additionally, significantly more women from the offender group met the clinical cutoff for the Antisocial subscale (12) and the Borderline subscale (15). The offender group also scored significantly higher than comparison subjects on a measure of trauma symptoms and measures of both anxious and avoidant attachment. Individuals with a fearful attachment style would be expected to score high on anxious and avoidant attachment. Therefore, the findings on attachment style in conjunction with the findings on personality disorders and trauma symptoms are consistent with the Abusive Personality. This study would suggest that some components of the Abusive Personality are prevalent in intimately assaultive women. However, the authors caution that this was a small exploratory study.

Stuart, Moore, Gordon, Ramsey and Kahler (2006) also conducted a study on women in treatment for perpetration of intimate assault. These authors assessed borderline personality disorder and antisocial personality disorder using the Personality Diagnostic Questionnaire (PDQ). They assessed depression, anxiety disorders, PTSD and alcohol and drug abuse using the Psychiatric Diagnostic Screening Questionnaire (PDSQ). Nearly 30% of the 103 women in this sample met the PDSQ criteria for borderline personality disorder, and 7% met the PDSQ criteria for antisocial personality

disorder. The most common diagnosis on the PDQ was PTSD, with 44% of the sample meeting or exceeding the cutoff score for this diagnosis. Therefore, consistent with the findings from Goldenson et al. (2007), this study suggests that clinically violent women suffer from borderline personality disorder as well as trauma symptoms. However, it should be noted that the women in this study reported higher levels of intimate violence victimization than intimate violence perpetration.

Research on the elements of the Abusive Personality

Although Goldenson et al. (2007) and Stuart et al. (2006) examined many elements of the Abusive Personality, no studies since Dutton's initial work on the topic have examined all elements of the Abusive Personality simultaneously. However, there are a number of studies that have examined one or more elements of the Abusive Personality in different samples. The most notable studies are presented below, with particular emphasis being given to studies that assessed elements of the Abusive Personality in women in dating relationships.

Borderline personality

As described above, several studies have been conducted which examined borderline personality disorder or BPO in samples of men and women in marital relationships. Hines (in press) recently assessed the relationship between borderline personality traits and intimate violence using data from the International Dating Violence Study (IDVS). The data for Hines' sample came from 14,154 male and female university students assessed at 66 separate institutions. All respondents were involved in dating relationships, or had been in the past year. Borderline personality traits were assessed using the Borderline Personality scale of the Personal and Relationships Profile. The

Borderline Personality scale is a 9-item scale based on the DSM-IV (APA, 2000). Each of the 9 items was rated on a 4-point scale and then the ratings were average to give each participant a score out of four. Intimate abuse perpetration was scored as the number of different types of physically aggressive, psychologically aggressive, and sexually aggressive acts that the respondent used in the previous year.

After controlling for gender, age, relationship length, whether sex was part of the relationship, and social desirability, borderline personality traits were found to be a significant predictor of the number of different types of physical, psychological and sexual intimate partner aggression that were used in the previous year. Using event rate ratios, Hines found that every one point increase on the 4-point BP scale accounted for an increase in the number of types of physical aggression used by 2.45 times, an increase in the number of types of psychological aggression used by 1.52 times, and an increase in the number of types of sexual aggression used by 1.56 times. Hines also tested the effect of gender, and found that gender did not moderate the relationship between borderline personality traits and any of the three types of intimate partner aggression that she assessed. Therefore, this study supplies evidence that borderline personality traits are related to the perpetration of dating aggression and that this relationship is equally strong for men and women.

Attachment styles

Several studies have been conducted on the relationship between attachment styles and abusiveness in dating relationships. For example, Wheeler (2002) assessed attachment in a sample of 435 college males. Wheeler used the Relationship Scales Questionnaire (RSQ) – a measure that assesses Bartholomew's (1990) four categories of

adult romantic attachment. Wheeler found that perpetration of intimate violence was negatively correlated with a secure attachment style, and positively correlated with a preoccupied attachment style. Interestingly, there was only a small nonsignificant correlation between fearful attachment and perpetration of dating violence. There was no relationship between dismissing attachment style and perpetration of dating violence.

Davis, Ace and Andra (2000) assessed the relationship between attachment style and perpetration of emotional abuse in two samples of male *and* female university students. Using path analysis, Davis et al. (2000) found a small, but significant direct relationship between anxious attachment and perpetration of psychological abuse in both samples. Anxiously attached individuals are typified by a negative view of themselves, and a fear of abandonment (Bartholomew & Shaver, 1998; Davis et al., 2000). Both fearful and preoccupied attachment styles are subsumed by the label anxious attachment (Bartholomew & Shaver, 1998).

Follingstad, Bradley, Helff & Laughlin (2002) used structural equation modeling to examine anxious attachment. However, they did not assess the direct relationship between anxious attachment and perpetration of intimate abuse. Instead, consistent with the Abusive Personality, they hypothesized that anxious attachment would result in angry reactivity in intimate relationships (due to real or perceived threats of abandonment or rejection). In turn, Follingstad et al. (2002) hypothesized that this anger would lead the individual to attempt to exert control over his or her dating partner.

The authors tested their hypothesis in two samples of undergraduate men and women, using a variation of the RSQ. Instead of using all of the items on the RSQ, Follingstad et al. chose to select 5 items which have been found to have a strong

relationship with anxiety. The authors' hypothesis was supported. That is, in both samples they found that anxious attachment lead to angry temperament, which lead to attempts to control one's partner through dating violence. Taken together, these studies suggest that anxious attachment is a risk factor for perpetration of dating violence, and that the relationship may be at least partially mediated by anger.

Anger

Norlander and Eckhardt (2005) have performed a meta-analysis on studies of the relationship between anger and male perpetration of intimate partner violence in *non-dating relationships*. The authors found an effect size of $d = 0.47$, based on 25 studies that had compared violent men to nonviolent men. It has been suggested that the relationship between anger and perpetration of intimate violence may be mediated by marital distress (e.g., Schumacher, Feldbau-Kohn, Slep & Heyman, 2001). However, Norlander and Eckhardt (2005) found an effect size of $d = 0.28$, based on 8 studies which had compared violent men to relationship-discordant nonviolent men. Therefore, the relationship between anger and violence perpetration cannot be explained by relationship distress alone.

Although Norlander and Eckhardt's (2005) meta-analysis did not include men or women in dating relationships, research has been conducted on anger in the dating population. For example, Eckhardt, Jamison and Watts (2002) examined the relationship between anger and dating violence in a small sample of male university students ($N = 33$). They found that men who had used dating violence scored significantly higher on the Trait Anger, Anger In, and Anger Out subscales of the State-Trait Anger Expression Inventory (STAXI; Spielberger, 1988). The Trait Anger subscale assesses the general

frequency with which angry feelings are experienced. The Anger In and Anger Out subscales measure the tendency to withhold anger expression, and the tendency to express anger behaviorally, respectively. Men who had used dating violence scored significantly lower on the Anger Control subscale. The Anger Control subscale assesses respondents' ability to control and reduce angry feelings.

Parrott and Zeichner (2003) have also assessed Trait Anger using the STAXI. In a sample of 263 college males they found that Trait Anger was significantly correlated with college men's perpetration of dating violence. That is, scores on the Trait Anger scale were positively associated with frequency of physical assaults in the previous year.

Dye and Eckhardt (2000) assessed anger in a sample of both male *and* female university students ($N = 247$). Controlling for social desirability, they found that both men and women who had used dating violence scored significantly higher on the Anger Out subscale, and significantly lower on the Anger Control subscale of the STAXI. However, there were no differences between violent men and women and nonviolent men and women on the Trait Anger or Anger In subscales.

Overall, the evidence supports the hypothesis that anger is a risk factor for dating violence. However, it is not clear which aspects of anger are most relevant. For example, Eckhardt et al. (2002) and Parrott and Zeichner (2003) found that trait anger was related to dating violence in males, where as Dye and Eckhardt (2000) found no relationship between trait anger in either sex. Trait anger represents a general tendency to have angry feelings (Eckhardt et al., 2002). Similarly, Eckhardt et al. (2002) and Dye and Eckhardt (2000) found that different anger expression styles were related to the perpetration of

dating violence. Anger expression styles reflect the way in which individuals express their angry feelings (e.g., withholding them versus expressing them behaviorally).

Trauma symptoms

Wolfe and his colleagues have conducted some interesting research on the relationship between childhood maltreatment, trauma symptoms and later perpetration of dating violence (Wekerle et al., 2001; Wolfe, Wekerle, Scott, Straatman & Grasle, 2004). Similar to Dutton's (2007) hypothesis on the origins of the Abusive Personality, Wolfe et al. (2004) hypothesized that trauma symptoms (related to childhood maltreatment and chronic family stressors) could act as a mediator between childhood maltreatment and later perpetration of dating violence. They examined this hypothesis in a sample of over 1000 male and female high school students (age range: 14 to 19). Childhood maltreatment was assessed with the Childhood Trauma Questionnaire—Short Form (CTQ-SF; Bernstein et al., 2003), which measures emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect. Trauma symptoms were assessed with the Trauma Symptom Checklist for Children (Briere, 1996). Students completed these measures twice, with the testing sessions separated by approximately one year.

Using structural equation modeling, Wolfe et al. (2004) found that having a history of childhood maltreatment was significantly related to trauma symptoms, and perpetration of dating violence in both males and females – at both Time One and Time Two. Trauma symptoms were also significantly related to perpetration of dating violence at Time One and Time Two, for both males and females. Furthermore, trauma symptoms were highly stable across testing sessions, for both males and females. Finally, cross-lagged effects demonstrated that the males' trauma symptoms at Time One predicted

their use of emotional abuse at Time Two. That is, greater trauma symptoms predicted increased rates of emotional abuse at Time Two. Similarly, females' trauma-related anger predicted change in their use of dating violence at Time Two. Therefore, in addition to predicting perpetration of intimate abuse, trauma symptoms may also predict change in patterns of intimate abuse over time.

A second study by the same group of authors utilized a sample of over 1300 high school students (age range: 13 to 20), and a sample of over 200 youths (age range: 13 to 18) from active caseloads of Child Protective Services (CPS) agencies (Wekerle et al., 2001). This study utilized similar measures, but did not use a longitudinal design. In both samples, experiencing childhood maltreatment was significantly correlated with trauma symptoms in adolescence, for both males and females. Similarly, in both samples, trauma symptoms in adolescents were significantly correlated with perpetration of dating violence, for both males and females. The direct relationship between childhood maltreatment and perpetration of dating violence only reached significance for males in the CPS sample and females in the school sample. However, there was a trend apparent for females in the CPS sample.

The authors went on to test the theory that trauma symptoms mediate the relationship between childhood maltreatment and later perpetration of dating violence. They did so using a method proposed by Baron and Kenny (1986). Childhood maltreatment scores were entered into a hierarchical regression analysis, followed by trauma scores. Mediation was considered to be demonstrated if a previously significant maltreatment score became nonsignificant upon entry of the trauma variable. Using this method, trauma symptoms were shown to mediate the relationship between childhood

maltreatment and female perpetration of dating violence in both samples. For males, the relationship between variables was more complicated. In the school sample, there was no relationship between childhood maltreatment and violence perpetration. Therefore, there was no relationship to mediate (i.e., the trauma symptoms displayed by these males were not related childhood maltreatment). In the CPS sample, childhood maltreatment was significantly correlated with male perpetration of dating violence. However, trauma symptoms did not mediate that relationship (i.e., they did not significantly reduce the contribution that childhood maltreatment made to the regression equation). In fact, trauma symptoms did not add significantly to the prediction of dating violence perpetration.

In summary, based on current research, trauma symptoms appear to be a risk factor for dating violence perpetration by both males and females (Wekerle et al., 2001; Wolfe et al., 2004). There is also evidence to suggest that trauma symptoms predict changes in abuse perpetration in dating relationships over time (Wolfe et al., 2004). Furthermore, there is some evidence to suggest that trauma symptoms mediate the relationship between childhood maltreatment and perpetration of dating violence. However, this relationship may be stronger in females than males (Wekerle et al., 2001).

Parental warmth and rejection

As discussed above, Dutton (1995b) assessed the relationship between intimately violent men's early childhood experiences and their current trauma symptoms. Dutton, Starzomski and Ryan (1996) directly assessed the relationship between the Rejection subscale of the EMBU and intimate violence perpetration in a sample of men in treatment for wife assault and a demographically matched control group. The intimately violent

men scored significantly higher than the control group on both maternal and paternal rejection.

The relationship between parental rejection and dating violence has not been directly examined. However, a number of researchers have examined the relationship between childhood abuse and later perpetration of dating violence. Findings from these studies have been mixed. Some researchers have found a relationship between childhood abuse and dating violence (e.g., Laner & Thompson, 1982; Marshall & Rose, 1987), whereas others researchers have not found this relationship (e.g., Foo & Margolin, 1995; O'Keefe, 1997; O'Keefe, Brockopp & Chew, 1986). Still others have found that childhood abuse is a risk factor for female perpetration of dating violence, but not for male perpetration of dating violence (e.g., Follette & Alexander, 1992; O'Keefe, 1998; Tontodonato & Crew, 1992). These inconclusive findings led Lewis and Fremouw (2001) to speculate that there may be variables that moderate the intergenerational transmission of abuse. For example, the frequency and duration of childhood abuse may determine whether or not it leads to perpetration of dating violence.

In addition to assessing the relationship between parental rejection and intimate violence, Dutton et al. (1996) indirectly assessed the relationship between the Parental Warmth subscale of the EMBU and perpetration of intimate violence. Both maternal and paternal warmth displayed strong negative correlations with a discriminant function for the Abusive Personality. The Abusive Personality was in turn strongly correlated with perpetration of intimate abuse. The relationship between (lack of) parental warmth and perpetration of intimate violence has not been directly assessed. However, Straus and Savage (2005) have examined the relationship between various types of neglect –

including emotional neglect – and perpetration of dating violence. They did so using data from the International Dating Violence study (described above). In total, over 7,000 male and female university students at 33 universities reported on their experiences with neglect.

Due to the number of constructs that are being assessed in the International Dating Violence study, Straus and Savage (2005) used a scale with only eight items to measure four types of parental neglect (i.e., two items per form of neglect). The four types of parental neglect examined were: cognitive (e.g., "my parents helped me with homework if I needed it"; negatively scored); emotional (e.g., "my parents did not comfort me when I was upset"); physical (e.g., "my parents gave me enough clothes to keep me warm"; negatively scored); and supervisory (e.g., "my parents did not care if I got in trouble at school"). These items may also reflect parental rejection.

Straus and Savage (2005) found that each increase of one point on the scale was associated with an 11% increase in the probability of assaulting a dating partner. Additionally, each increase of one point was associated with a 21% increase in the probability of injuring a dating partner. Therefore, in addition to childhood abuse, childhood neglect appears to be an important risk factor for perpetration of dating violence.

Purpose of the current study

Although the Abusive Personality was originally identified in married men, current theory and research suggest that the components of the Abusive Personality may be found in other individuals who perpetrate intimate abuse. Given that there is ample evidence to suggest that – in the context of dating relationships – female-perpetrated

violence is at least as common as male-perpetrated violence (e.g., Archer, 2000), I chose to examine the components of the Abusive Personality in this population. Researchers have recently begun studying intimately violent women, and there is already some evidence to suggest that women who perpetrate intimate abuse in dating relationships may display the components of the Abusive Personality. These components include BPO, anger and hostility, fearful attachment, trauma symptoms, and recalled negative parental treatment.

In the current paper I present five major findings. First, I examine the incidence of female-perpetrated intimate psychological abuse and intimate violence in a sample of women who had been involved in dating relationships. This is accomplished by asking a large sample of women to self-report on their intimate abuse perpetration, and also by asking a subset of their male intimate partners to self-report on their intimate abuse victimization. Second, I examine the relationship between the elements of the Abusive Personality, as self-reported by women, and women's self-reported intimate abuse perpetration. Third, I examine the correlations between women's self-reported BPO and the other elements of the Abusive Personality. This analysis is intended to replicate the findings on the centrality of BPO to the Abusive Personality, originally noted in male batterers (e.g., Dutton, 1994b; Dutton & Starzomski, 1993; Dutton, Saunders, Starzomski & Bartholomew, 1994). Forth, I examine the relationships between women's self-reported romantic attachment styles, and the other elements of the Abusive Personality. Again, this is intended to replicate findings from previous studies conducted with intimately abusive men (e.g., Dutton, Saunders, Starzomski & Bartholomew, 1994). Finally, using structural equation modeling (SEM), I test a proposed model for explaining

the interrelationships between the elements of the Abusive Personality, and women's

self-reported intimate abuse perpetration (see Figure 1, and Methods for a description of

the scales).

While each element of the Abusive Personality has demonstrated a relationship

with intimate abuse perpetration in men and women, we would expect certain elements of

the Abusive Personality to act as mediators between the other elements of the Abusive

Personality and intimate abusiveness. Based on established theory and research, we

would expect childhood maltreatment to have a direct relationship with attachment (e.g.,

Bartholomew, 1990; Dutton, 1994b; Dutton et al., 1996), BPO (e.g., Gunderson, 1984;

Dutton, 1994b; Dutton & Starzomski, 1993; Dutton et al., 1996) and trauma symptoms

(e.g., van der Kolk, 1987; Dutton, 1995b; Dutton et al., 1996; Wekerle et al., 2001; Wolfe

et al., 2004). Based on Dutton's work on the centrality of BPO, we would also expect

BPO to have a direct relationship with fearful attachment and trauma symptoms (e.g.,

Dutton, 1994b; Dutton & Starzomski, 1993; Dutton, Saunders, Starzomski &

Bartholomew, 1994).

Furthermore, based on established research and theory, we would expect fearful

attachment, BPO and trauma symptoms to have a direct relationship with anger.

Individuals with anxious or fearful attachment have been found to experience intimacy

anger (e.g., Davis et al., 2000; Dutton et al., 1996; Dutton et al., 1994; Follingstad et al.,

2002); borderlines have been found to experience hostility and anger (e.g., Gunderson,

1984; Dutton, 1994a; Dutton et al., 1996); and individuals with trauma symptoms have

been found to experience disturbances in affect regulation, including trauma-related

anger (e.g., Dutton, 1995b; van der Kolk, 1987; Wolfe et al., 2004). Finally, Anger itself

has demonstrated a strong relationship with intimate abuse perpetration in both married men (e.g., Norlander and Eckhardt, 2005) and dating women (e.g., Follingstad et al., 1991). Therefore, in the proposed model of the Abusive Personality, I hypothesized that parental rejection causes BPO, fearful attachment and trauma symptoms, and that these psychological traits cause individuals to have a high degree of anger. This anger is then hypothesized to be the direct cause of elevated psychological and physical abusiveness. To date, these relationships have not been tested simultaneously using structural equation modeling.

METHODS

Participants

Female participants were recruited through the Human Subject Pool in the Department of Psychology at the University of British Columbia. Some research packages could not be analyzed because the respondents had never been in an intimate relationship (n = 22). Of the 914 female participants who completed valid research packages, 536 (58.6%) were reporting on current intimate relationships and the remaining 378 (41.4%) were reporting on an intimate relationship that had ended. Most participants were reporting on dating relationships (96.7%); however, 3.3% were reporting on common law or marital relationships.[4] Additionally, five (0.6%) of the female participants who were reporting on dating relationships stated that they had been married in a previous relationship. Half of the female participants (49.9%) were reporting on relationships that were less than one year in length; 23.8% were reporting on relationships were between one and two years in length; and the remaining 26.3% were reporting on relationships that were longer than two years in length. The mean age of female respondents was 20.5 years (SD = 2.7). The vast majority of the sample self-identified as Asian (48.8%) or Caucasian (36.9%). Most subjects were born in Canada (50.9%); however, a substantial minority were born in Asia (37.6%).

Beginning in the third year of recruitment, female participants were asked if their intimate partner would be willing to participate. In total, 99 partner packages were

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[4] Participants were allowed to self-define their relationships as dating relationships or common law or marital relationships.

completed by heterosexual male partners.[5] Most male partners were reporting on dating relationships (87.9%); however, 12.1% were reporting on common law or marital relationships. Additionally, one male who was reporting on a dating relationship had been married in a previous relationship. Approximately two fifths of the male partners (41.4%) were reporting on relationships that were less than one year in length; 22.2% were reporting on relationships were between one and two years in length; and the remaining 36.6% were reporting on relationships that were longer than two years in length. The mean age of the male partners was 22.0 years (SD = 4.1). As with the female participants, the vast majority of the male partners self-identified as Asian (50.5%) or Caucasian (45.5%). As with the female participants, most male partners were born in Canada (58.6%), although a substantial minority were born in Asia (33.3%).

Measures

Borderline personality organization

Borderline personality organization was assessed using Oldham and associates' (1985) borderline personality organization (BPO) scale. Borderline personality organization, as captured by Oldham's BPO scale, applies to patients suffering from many DSM-IV (APA, 2000) Axis II disorders, including: paranoid, schizoid, histrionic, narcissistic, antisocial and borderline personality disorders. The BPO scale was developed by having diagnosed borderlines (as described above), non-borderlines, psychotics, and "normals" rate 130 items on a five-point Likert-type scale indicating how true each item was of them (i.e. each item was scored from one to five). Three subscales were identified, each having a high internal consistency. The three subscales and their

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[5] Two participants were removed from the sample because they were females in lesbian relationships.

respective Cronbach's alphas are: Identity Diffusion (.92), Primitive Defenses (.87), and Reality Testing (.84; Oldham et al., 1985).

Identity Diffusion items on the BPO scale reflect a poorly integrated sense of self or of significant others. Items on the Primitive Defenses subscale reflect splitting, omnipotence, idealization, and projective identification. The Reality Testing items are thought to reveal the transient psychotic episodes that some authors believe borderlines experience. Items in this category measure differentiation of the self from non-self; evaluation of behavior in terms of social criteria; differentiation of external from internal origins of perceptions or stimuli; and internal reality testing.

Oldham and associates chose the ten items from each subscale that had the highest correlation with that subscale's total score. The resulting 30-item measure constitutes the current form of the BPO scale. The BPO scale has been shown to successfully differentiate borderlines from non-borderlines, psychotic patients, and normals (Oldham et al., 1985). Possible scores on the BPO scale range from 30 to 150. The mean score in the current sample was 62.2 (SD = 17.2; see Table 1 for the means, standard deviations, and ranges of all scales and subscales used in the current study).

Attachment style

Attachment style was assessed with the Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994). The RSQ consists of 30 items, which were taken from Hazan and Shaver's (1987) attachment measure, Bartholomew and Horowitz's (1991) Relationship Questionnaire, and Collins and Read's (1990) Adult Attachment Scale. Respondents rate each item on how well it fits their characteristic style in close relationships. Possible responses range from "not at all like me" to "very much like me"

on a five-point scale. Scores for the four prototypical attachment styles (secure, preoccupied, fearful, and dismissing) are obtained by computing the mean of the items representing each prototype. Therefore, each respondent is given a rating for each attachment style. Preoccupied and fearful attachment styles are represented by four items, where as secure and dismissing attachment styles are represented by five items each. The RSQ correlates reasonably well with attachment style classifications obtained through more time consuming interviews (Griffin & Bartholomew, 1994).

Anger

Anger was assessed with the Multidimensional Anger Inventory (MAI; Siegel, 1986). The MAI is a 38-item measure, which assesses different dimensions of anger. The five subscales of the MAI include: Anger-arousal (eight items), Range of Anger-Eliciting Situations (seven items), Hostile Outlook (four items), Anger-in (five items), and Anger-out (two items). The Anger-arousal subscale measures the frequency, duration and magnitude with which one becomes angry. Range of Anger-eliciting Situations and Hostile Outlook measure what their names imply. Anger-in and Anger-out measure the respondent's tendency to hold anger in and his/her tendency to openly express anger, respectively. Using a five-point scale respondents are asked to state how descriptive the items are of them. Possible responses range from "completely undescriptive of you" (scored as one) to "completely descriptive of you" (scored as five). Cronbach's alpha for the entire scale was 0.88 in a mixed sample of college students and factory workers (Siegel, 1986). Cronbach's alphas for the subscales ranged from 0.51 to 0.83. A test-retest reliability of $r = 0.75$ has been found with college students over a three to four week period (Siegel, 1986).

Trauma symptoms

Trauma Symptoms were assessed with the Trauma Symptom Checklist (TSC-33; Briere & Runtz, 1989). The TSC-33 asks respondents to state how often they have experienced each of 33 trauma symptoms in the previous two months. Possible responses range from "never" (scored as zero) to "very often" (scored as three). The TSC-33 produces five subscales and a total score. The subscales include: Dissociation (six items), Anxiety (nine items), Depression (nine items), Sleep Disturbance (four items), and Post-sexual Abuse Trauma-hypothesized (PSAT-hypothesized; six items). The PSAT-hypothesized subscale measures symptoms that are thought to be characteristic of people who have been sexually abused. However, they may also occur as a result of other types of trauma.

Cronbach's alphas for the subscales have been found to range from 0.66 to 0.75 (Briere & Runtz, 1989). The entire scale has been found to have a Cronbach's alpha of 0.89. The TCS-33 has been shown to discriminate victims of childhood sexual abuse from nonvictimized respondents (Briere & Runtz, 1989; Briere, Evans, Runtz & Wall, 1988).

Parental warmth and rejection

Parental warmth and rejection were assessed with the Egna Minnen Beträffande Uppfostran (EMBU; Perris et al., 1980). The EMBU is an 81-item scale that assesses one's memories of their parents' childrearing behavior. The scale was initially developed in Sweden; however, it has since been adapted for use in over 25 countries (Gerslma, Emmelkamp & Arrindell, 1990). The English version has 14 subscales scored separately for the respondent's mother and father. For the current study, participants only completed

the Emotional Warmth and Rejection subscales. These two subscales contain 43 items (18 for Emotional Warmth and 25 for Rejection). An example of an Emotional Warmth item would be, "My parent showed with words and gestures that he/she liked me". An example of a Rejection item is, "I felt that my parent liked my brother(s) and/or sister(s) more than he/she liked me." Respondents state how often each experience happened to them while they were growing up, on a four-point scale. Possible responses range from "never occurred" (scored as one) to "always occurred" (scored as four). Cronbach's alphas for the mother and father's versions of the two subscales range from 0.72 to 0.87.

Psychological abuse

The Psychological Maltreatment Inventory (PMI; Tolman, 1989) was used to assess psychological maltreatment. The PMI, as developed by Tolman (1989), asks respondents about their use of 58 psychologically abusive behaviors in the last year. It also asks about their partner's use of the same psychologically abusive behaviors in the last year. Each item is scored on a five-point Likert-type scale from never (scored as one) to very frequently (scored as five). If the item does not apply to the respondent, they circle "not applicable" (scored as zero). The PMI contains two subscales, one measuring Dominance-Isolation (26 items) and the other measuring Emotional-Verbal abuse (22 items). Examples of Dominance-Isolation items are: "tried to keep him/her from seeing his/her family" and "tried to keep him/her from doing things to help his/herself." Examples of Emotional-Verbal abuse items are: "Treated him/her like he/she was stupid" and "blamed him/her when I was upset about something, even when it had nothing to do with him/her." In Tolman's original sample of male batterers and battered women, both

the Dominance-Isolation factor and the Emotional-Verbal factor were highly internally

consistent (Cronbach's alpha is over .90 for both factors).

The PMI is a continuous measure, with higher scores indicating greater levels of

psychological abuse. However, it should be noted that there are no cutoff scores to

indicate that an individual is "psychologically abusive". Most studies find that a high

percentage of men and women have used at least one of the behaviors listed on the PMI

in an intimate relationship (e.g. DeKeseredy & Schwartz, 1998).

Intimate violence

Intimate violence was assessed with the Conflict Tactics Scale (CTS; Straus,

1979). The CTS asks respondents to state how often they have used 19 different tactics

during conflicts with their intimate partner in the last year. The CTS also asks how often

their partner has used the same 19 tactics during conflicts in the last year. The possible

answers for all questions range from "never" (scored as zero) to "more than 20 times"

(scored as six).

The three subscales of the CTS are Reasoning, Verbal Aggression, and Violence.

An example of a Reasoning item would be "discussed the issue calmly." The Verbal

Aggression subscale contains items that reflect both verbal and symbolic aggression such

as, "insulted, yelled or swore at the other one" and, "threw or smashed or hit or kicked

something." Finally, the Violence subscale asks about acts of violence directed at the

respondent's intimate partner. Examples of Violence items are: "threw something at the

other one," and "slapped the other one." Straus reported Cronbach's alphas for the three

subscales of .50 (Reasoning), .80 (Verbal Aggression), and .83 (Violence) for tactics used

by husbands, and .51 (Reasoning), .79 (Verbal Aggression), and .82 (Violence) for tactics used by wives.

In the current study, only the Violence subscale of the CTS is reported (eight items). However, a subset of items on the Violence subscale was used to form a measure of Severe Violence perpetration (five items). As described by Straus (1990), the Severe Violence subscale includes behaviors such as kicking and biting or punching, which are more likely to lead to injury than less severe forms of violence such as pushing or grabbing.

Socially desirable responding

Socially desirable responding was assessed with the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1988, 1991). The BIDR measures two types of socially desirable responding: Impression Management (IM) and Self-Deception (SD). The BIDR contains a list of 40 desirable behaviors and beliefs that any one person is unlikely to have in combination. Therefore, if a respondent scores highly on the BIDR, it is likely that they are responding in a socially desirable fashion, either intentionally or unintentionally.

The tendency to intentionally distort one's responses is measured by the IM subscale of the BIDR. The IM subscale contains statements that reflect overt behaviors such as, "I always declare everything at customs" and, "I never swear." Respondents should be aware of their own past behaviors; therefore, "any distortion is presumably a conscious lie" (Paulhus, 1991, p. 37). Alpha coefficients have ranged from .75 to .86 for the IM scale in reported studies.

The SD subscale is intended to assess respondents' tendency to give self-reports that are "honest, but positively biased" (Paulhus, 1991, p. 36). The items on the SD scale are thought to represent an overconfidence in one's rationality and judgments. Examples of SD items are, "I have not always been honest with myself" and, "I never regret my decisions". Alpha coefficients have ranged from .68 to .80 for the SD scale in reported studies.

The IM subscale and the SD subscale contain 20 items each. Participants respond to the items on a seven-point Likert scale ranging from "not true" (scored as one) to "very true" (scored as seven). Although there is more than one method of scoring the BIDR, the method that was used in the current study was to give subjects one point for each item they answered as a six or seven, and a zero for all other responses (after reverse-scoring items that are keyed in a negative direction). Therefore, possible scores on each subscale range from zero to 20. Using this scoring method, mean scores have ranged from 4.3 to 11.9 for the IM scale, and from 6.8 to 7.6 for the SD scale in previous studies with varying populations (Paulhus, 1991).

Procedure

For two consecutive school years a sign was posted in the Department of Psychology asking undergraduate volunteers to participate in a study of "personality and relationships". Interested participants came to the Relationship Lab where there was a box containing research packages. They then took a package away and filled it out on their own time, in a place of their choosing. This was done to facilitate full disclosure, and to allow the participants the opportunity to take as many breaks as they needed while completing the package. Each package contained a demographics questionnaire; the

Multidimensional Anger Inventory; the Trauma Symptoms Checklist-33; the BPO scale; the Relationship Scales Questionnaire; the EMBU Warmth and Rejection subscales; the Psychological Maltreatment Inventory; the Conflict Tactics Scale; and the Balanced Inventory of Desirable Responding. If a participant was not in a relationship at the time they completed the research package, they were instructed to complete the PMI and the CTS in reference to the last year of their most recent intimate relationship.

Participants were not required to sign a consent form. Instead, a form was included at the beginning of each package, which gave a brief description of the study and ended with the statement, "Your completion of this package indicates your consent to participate in this study". This was done to increase the participants' feelings of anonymity, and facilitate full disclosure. When a participant completed filling out the research package, they returned it to the Relationship Lab. At that time they were given a "debriefing form," which described the objectives of the study. They were also given an opportunity to ask questions. Finally, they were thanked for their participation and given a slip that would enable them to receive course credit for their participation.

During the third year of data collection, the Human Subjects Research Policy Committee in the Department of Psychology changed the guidelines for using undergraduate volunteers as research participants. Due to these changes, a minor modification was made to the procedure. Women who were interested in participating in the study were directed to go to the Relationship Lab. At that time they read and signed a consent form. They were informed that the consent form would be kept separately from any questionnaires they completed, and that they would only be identified by a subject number.

One major change was made to the procedure in the third year of data collection. When female participants returned their research packages, they were informed that their male partner was eligible to participate in the study. They were then given a notice inviting their partner to participate, which included their subject number on it. This was done in order to determine the reliability of female participants' reports of their psychological and physical abuse perpetration.

Those male partners who choose to participate in the study were asked to come to the Relationship Lab. They then read and signed a consent form. They were then asked to leave and complete a research package on their own time, in a place of their choosing. Again, this was done to facilitate full disclosure and allow participants to take as many breaks as needed. To increase independence of the data, men and women were asked not to discuss the study with their partner until they had completed the package.

The male partner research package contained a demographics questionnaire, the Psychological Maltreatment Inventory; the Conflict Tactics Scale; and the Balanced Inventory of Desirable Responding. Once the male partners completed the research package they returned it to the Relationship Lab. At that time they were given a "debriefing form," which described the objectives of the study. They were also given an opportunity to ask any questions that they may have. Male partners were paid $20 for their participation in the study.

Data Analysis

Incidence of abuse

Women's self-reports were used to determine their level of psychological and physical abuse perpetration. This made it possible to use the entire sample for analysis.

Some researchers have suggested that information on abuse perpetration should be collected from both partners (e.g., Szinovacz, 1983), and then averaged (e.g., Moffitt, Robins & Caspi, 2001). This is because partners have been found to have low agreement on whether specific abusive behaviors have occurred in their relationship (e.g., Edleson and Brygger, 1986; Jouriles & O'Leary, 1985; Szinovacz, 1983). However, agreement is considerably higher when items are aggregated into scales. This reduces the need for corroboration in studies that are not interested in a particular kind of abuse (e.g., pushing). Taking this into consideration, Moffitt et al. (1997) concluded that, "under research conditions that guarantee confidentiality, either abuser reports or victim reports are suitable for use in research on partner abuse" (p. 47).

In the current study, every effort was made to assure the participants of their anonymity. They were allowed to complete the questionnaires in a private place of their choosing, and they were told that their names would not be associated with the data in any way (i.e., there was no identifying information on any of the forms that they completed). However, male partner reports of women's psychological and physical abuse perpetration were collected and used to assess the concurrent validity of the women's self-reports. This can also be interpreted as interrater reliability.

In order to assess the concurrent validity of men and women's reports of intimate abusiveness, scores on the Dominance-Isolation and Emotional-Verbal subscales of the PMI were converted to binary form. That is, partner reports of both male and female perpetration of psychological abuse were coded for whether a particular man or woman had or had not perpetrated *any* Dominance-Isolation or Emotional-Verbal behaviors in the last year of their relationship. This same coding procedure was used for partner

reports of male and female perpetration of violence and severe violence on the CTS. This data was then used to compute kappa coefficients. Kappa is useful statistic because it controls for chance agreements. Kappa has a range from -1.00 to 1.00 (Cohen, 1960). Generally, a kappa > .70 is considered satisfactory.

Relationships between measures

In the first between-measures analysis, I examine the relationship between social desirability and measures of abusiveness using Pearson correlations coefficients. This analysis is followed by an examination of the relationship between the elements of the Abusive Personality and female-reported perpetration of psychological and physical abuse using Pearson correlation coefficients. All elements of the Abusive Personality were expected to positively correlate with psychological and physical abuse perpetration.

In the following analysis, the relationship between BPO and the components of the Abusive Personality is assessed using Pearson correlation coefficients. For each of these sets of comparisons, the Bonferroni method was used to control the familywise (FW) error rate to 0.05. All elements of the Abusive Personality were expected to positively correlate with BPO, as BPO is thought to be the central component of the Abusive Personality (Dutton, 1995a). Following that analysis, the relationships between each category of attachment style and the components of the Abusive Personality were examined using Pearson correlation coefficients. Based on previous theory and research, fearful and preoccupied attachment styles were expected to positively correlate with the elements of the Abusive Personality, and secure attachment style was expected to negatively correlate with the Abusive Personality (e.g., Dutton, 1998, 2007). Again, the Bonferroni method was used to control the familywise (FW) error rate to 0.05.

Proposed model of the Abusive Personality

After examining the correlations between elements of the Abusive Personality, I

used Analysis of Moment Structures (AMOS) version 16 to examine a proposed model

for the Abusive Personality with SEM (see Figure 1).[6] Structural equation modeling has

several advantages over more traditional statistical techniques. Notably, SEM allows

researchers to test several relationships simultaneously, and gives researchers the ability

to make stronger statements about causality than correlational analysis does. Structural

equation modeling also allows researchers to control for measurement error more

effectively than other techniques such as path analysis.

In SEM there are really two types of models that are being evaluated

simultaneously: a measurement model, and a structural model (Meyers, Gamst &

Guarino, 2006). The measurement model represents the degree to which the "indicator

variables" (i.e. scores on the scales or subscales of an instrument) capture the essence of

the "latent factors" (i.e. intangible, unmeasured constructs). An example of this would be

the subscales of the MAI (indicator variables) which were used to capture the construct

"anger" (latent factor) in the current study. Essentially, the measurement model is a

"confirmatory factor analysis for each latent variable" (Meyers et al., 2006, p. 613). The

structural model, on the other hand, examines the causal relationships between the major

variables of interest. This is very similar to path analysis, except that the major variables

of interest in SEM are usually latent variables.

In the proposed model of the Abusive Personality (see Figure 1), parental

rejection is a latent exogenous variable (i.e. latent variable that is not being predicted or

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[6] This analysis was limited to those subjects who completed the Rejection subscale of the EMBU for both their mother and father ($N = 896$).

explained by other variables in the model). The indicator variables used to capture

parental rejection were the two Rejection subscales of the EMBU. Trauma symptoms,

BPO, anger and intimate abuse are each latent endogenous variables (i.e. latent variables

that are being predicted or explained by other variables in the model). These variables

were represented by the subscales of the TSC-33, the BPO scale, the MAI, and the PMI

and CTS, respectively. Finally, fearful attachment is an observed or "manifest"

endogenous variable (i.e. a manifest variable that is being predicted or explained by other

variables in the model). Fearful attachment is referred to as a manifest variable because it

is only reflected by one scale score (i.e. participants' fearful attachment scores on the

RSQ).

Structural equation modeling programs such as AMOS produce standardized

pattern coefficients which estimate the strength of the relationship between each latent

factor and its indicator variables (standardized coefficients are equivalent to standardized

regression weights). Structural equation modeling programs also produce standardized

structural coefficients which estimate the direct effect of one factor on another factor.

Structural coefficients are produced for each of the hypothesized relationships in the

model.

In order to test the overall model fit, SEM programs such as AMOS supply

several different "fit measures". There is disagreement among SEM researchers as to

which fit measures are the most appropriate to report; however, most researchers agree

that more than one measure should be reported (e.g., Bentler, 1990; Jaccard & Wan,

1996; Joreskog & Sobom, 1989). Thompson (2004) specifically recommended that

researchers report the χ^2 test, the normed fit index (NFI), the comparative fit index (CFI)

and the root mean square error of approximation (RMSEA). These fit measures are reported in the current study.

The χ^2 test and the RMSEA are both absolute fit measures, meaning that they compare how well the proposed interrelationships between the variables correspond to the actual or observed interrelationships between the variables (i.e. how well the predicted correlation/covariance matrix corresponds to the observed correlation/covariance matrix). The χ^2 statistic was the first measure used as a test of model fit (Joreskog, 1969). A non-significant χ^2 statistic is preferred, as it suggests that the proposed model corresponds well the data. In practice, however, the χ^2 statistic may be significant even for good-fitting models, as the χ^2 statistic is highly sensitive to sample size (Bentler, 1990; Joreskog & Sobom, 1989). The RMSEA is the average of the residuals between the observed correlation/covariance and the expected correlation/covariance for the proposed model (Meyers et al., 2006). Therefore, the RMSEA takes the complexity of the model being tested into account. Authors vary in what RMSEA value they consider to indicate good fit. However, values less than .08 are generally considered to represent adequate fit, and values greater than .10 are generally considered to represent poor fit (e.g., Loehlin, 2004).

The CFI and NFI are measures of relative fit. In other words, they are measures of fit relative to the null model, which assumes that there are no relationships in the data, and the saturated model, which assumes a perfect fit (Meyers et al., 2006). Greater values on these statistics represent better fit, and values greater than .90 are generally considered to suggest an acceptable fit. However, SEM researchers disagree on this issue. For example, some authors have suggested that scores as low as .80 could represent adequate

fit (e.g., Knight, Virdin, Ocampo & Roosa, 1994), where as other authors have advocated using more stringent criteria (e.g., Hu & Bentler, 1999). Although both the CFI and NFI are measures of relative fit, the CFI may be preferable to the NFI as it is less sensitive to sample size (e.g., De Wulf, 1999).

RESULTS

Incidence rates reported by women

Of the 914 valid female research packages that were returned, the majority of women (95.4%) reported that they had perpetrated some form of emotional-verbal abuse in the last year of their relationship, and that they had used some form of dominance-isolation tactic (84.9%) during that time period (Table 2). The majority of women also reported that their partners had used emotional-verbal abuse (87.9%) and dominance isolation tactics (71.4%) against them in the last year of their relationship. Women were significantly more likely to report that they perpetrated emotional-verbal abuse than that they were victimized by emotional-verbal abuse [χ^2 (1, $N = 914$) = 102.2, $p < .001$]. Similarly, women were significantly more likely to report that they used dominance-isolation tactics than that they were victimized by them [χ^2 (1, $N = 914$) = 148.6, $p < .001$].

Overall, 28.3% of women reported that they had perpetrated at least one act of violence, and 19.3% reported that they had perpetrated more than one act of violence against their romantic partner in the last year of their intimate relationship (Table 2). The percentages of women who reported perpetrating specific types of violent acts are given in Table 3. Comparatively, 19.3% of women reported that their partners had perpetrated at least one act of violence against them, and 12.0% reported that their partners had perpetrated more than one act of violence against them in the last year of their intimate relationship (Table 2). The percentages of women who reported being victimized by specific types of violent acts are given in Table 3. Women were significantly more likely

to report that they had perpetrated a violent act than that they had been victimized by a violent act [χ^2 (1, $N = 914$) = 263.0, $p < .001$].

Fourteen percent (14.4%) of women reported that they had used at least one act of severe violence (e.g., kicking or hitting with a fist) in the last year of their intimate relationship and 9.1% reported that they had used more than one act of severe violence during that time period. Comparatively, 8.0% of women reported that their partner had perpetrated at least one act of severe violence in the last year of their relationship, and only 5.1% reported that their partner had perpetrated more than one act of severe violence during that time. Women were significantly more likely to report that they had perpetrated a severe violent act in the last year than that they had been victimized by a severe violent act [χ^2 (1, $N = 914$) = 187.6, $p < .001$].

For comparison purposes, I calculated incidence rates for the subset of female participants whose male partners completed research packages (Table 2). As with the sample as a whole, the vast majority of women whose partner's completed packages reported that they had used emotional-verbal abuse in the past year (97.0%) and that they had been victimized by emotional-verbal abuse in the past year (98.0%). These percentages are not significantly different [χ^2 (1, $N = 99$) = 3.353, $p = .067$; Yates' correction was applied]. Similarly, the vast majority of these women reported that they had used dominance-isolation tactics in the past year (89.9%) of their relationship and that they had been victimized by dominance-isolation tactics during that time period (80.8%). These percentages are significantly different [χ^2 (1, $N = 99$) = 4.77, $p = .029$; Yates' correction was applied].

Of the 99 women whose partners completed research packages, 25.3% reported that they had perpetrated at least one act of violence in the last year of their intimate relationship and 14.1% reported that they had perpetrated more than one act of violence during that time. Comparatively, 16.2% of women reported that their partners had perpetrated at least one act of violence against them and 7.1% reported that their partners had perpetrated more than one act of violence against them in the last year of their intimate relationship. This subset of women was significantly more likely to report that they had perpetrated a violent act in the last year than that they had been victimized by a violent act [χ^2 (1, $N = 99$) $= 26.5$, $p < .001$; Yates' correction was applied].

Thirteen percent (13.1%) of women reported that they had used at least one act of severe violence in the last year of their intimate relationship and 6.1% reported that they had used more than one act of severe violence during that time period. Comparatively, 6.1% of women reported that their partner had perpetrated at least one act of severe violence in the last year of their relationship, and only 3.0% of women reported that their partner had perpetrated more than one act of severe violence during that time. After using the Bonferroni method to control the FW error rate to 0.05 (i.e. $\alpha = .025$, as two comparisons were being made) the difference between these women's self-reports of perpetration of severe violence and victimization of severe violence was not statistically significant [χ^2 (1, $N = 914$) $= 4.6$, $p = .033$; Yates' correction was applied].

Incidence rates reported by male partners

The incidence rates reported by men were similar to those reported by women. The majority of men reported that they had used emotional-verbal abuse in the past year (86.9%) and that they had been victimized by emotional-verbal abuse in the past year

(97.0%). These percentages are significantly different [χ^2 (1, $N = 99$) = 13.4, $p < .001$; Yates' correction was applied]. Similarly, the vast majority of men reported that they had used dominance-isolation tactics (75.8%) and that they had been victimized by dominance-isolation tactics in the past year of their relationship (80.8%). These percentages are not significantly different [χ^2 (1, $N = 99$) = 12.3, $p < .001$; Yates' correction was applied].

Overall, 14.1% of men reported that they had perpetrated at least one act of violence in the last year of their intimate relationship and 11.1% reported that they had perpetrated more than one act of violence during that time. Comparatively, 28.3% of men reported that their partners had perpetrated at least one act of violence against them and 20.2% reported that their partners had perpetrated more than one act of violence against them in the last year of their intimate relationship. Men were significantly less likely to report that they had perpetrated a violent act in the last year than that they had been victimized by a violent act [χ^2 (1, $N = 99$) = 29.9, $p < .001$; Yates' correction was applied].

Six percent (6.1%) of men reported that they had used at least one act of severe violence in the last year of their intimate relationship and 4.0% reported that they had used more than one act of severe violence during that time period. Comparatively, 11.1% of men reported that their female partner had perpetrated at least one act of severe violence in the last year of their relationship, and 10.1% of men reported that their partner had perpetrated more than one act of severe violence during that time. After using the Bonferroni method to control the FW error rate to 0.05 (i.e. $\alpha = .025$, as two comparisons were being made) the difference between men's self-reports of perpetration of severe

violence and victimization of severe violence was not statistically significant [χ^2 (1, N = 99) = 4.6, p = .033; Yates' correction was applied].

Concurrent validity of partner reports of intimate abusiveness

Overall, male and female intimate partners had a fair to moderate rate of agreement (cf. Landis & Koch, 1977) on whether or not women had perpetrated any form of psychological abuse in the last year of their romantic relationship. These statistics are presented in Table 4 for ease of comparison. The kappa statistics for women's perpetration of emotional-verbal abuse and dominance-isolation tactics were .312 and .404, respectively (ps < .003). Male and female intimate partners had a lower rate of agreement on whether men had perpetrated any form of psychological abuse in the past year of their intimate relationship. The kappa statistic for men's use of dominance-isolation tactics was .378 (p <.001), whereas the kappa statistic for men's perpetration of emotional-verbal abuse was less than zero (-.036, p = .579).

Male and female intimate partners had a fair rate of agreement on whether they or their partners had perpetrated any acts of violence or severe violence in the last year of their intimate relationship (Table 4). The kappa statistics for women's perpetration of violence and severe violence were .389 and .337, respectively (ps < .002). The kappa statistics for men's perpetration of violence and severe violence were .372 and .290, respectively (ps < .005).

Social desirability and intimate abusiveness

Overall, women's scores on the BIDR would suggest that they were responding openly and honestly. The female participants' mean score on the Self-Deception subscale of the BIDR was 3.40 (SD = 2.22). This mean is significantly lower than the mean Self-

Deception score found for a previous sample of female university students ($M = 6.8$, $t = -46.089$, $p < .001$, $df = 908$; Paulhus, 1988).[7] In the current study, the female participants' mean score on the Impression Management subscale of the BIDR was 4.40 (SD = 2.44). This mean is also significantly lower than the mean Impression Management score found for a previous sample of female university students ($M = 4.9$, $t = -6.201$, $p < .001$, $df = 908$; Paulhus, 1988).

In the current study, women's scores on the Impression Management subscale of the BIDR were uncorrelated with their self-reports of perpetration and victimization on the Dominance-Isolation and Emotional-Verbal subscales of the PMI (*rs* ranged from -.007 to .031; all *p*s > .35; see Table 5). Women's scores on the Self-Deception subscale had a statistically significant weak negative correlation with their self-reported perpetration of emotional-verbal abuse ($r = .092$, $p = .006$). However, their scores on the Self-Deception subscale were not significantly correlated with their use of dominance-isolation tactics or their psychological abuse victimization (*rs* ranged from .050 to .057; all *p*s > .08).

Women's scores on the Self-Deception subscale of the BIDR were uncorrelated with their self-reports of violence perpetration, as well as their self-reports of violence victimization (*rs* ranged from -.048 to -.005; all *p*s > .15). However, women's scores on the Impression Management subscale of the BIDR demonstrated weak negative correlations with their self-reports of violence perpetration ($r = -.093$; $p = .005$), as well as their self-reports of violence victimization ($r = -.105$; p = .002).

Overall, the male partners' scores on the BIDR also indicated that they were responding openly and honestly. The male partners' mean score on the Self-Deception

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[7] The degrees of freedom reflect the fact that 5 female subjects did not complete the BIDR.

subscale of the BIDR was 3.88 (SD = 2.28). This mean is significantly lower than the

mean Self-Deception score found for a previous sample of male university students (M =

7.5, t = - 15.817, p < .001, df = 98; Paulhus, 1988). Similarly, the male partners' mean

score on the Impression Management subscale of the BIDR was 4.16 (SD = 2.47). This

mean is not significantly different than the mean Self-Deception score found for the same

previous sample of male university students (M = 4.3, t = - .558, p =.578, df = 98;

Paulhus, 1988).

In the current study, the male partners' scores on the Impression Management

subscale of the BIDR were not significantly correlated with their self-reports of

perpetration and victimization on the Dominance-Isolation and Emotional-Verbal

subscales (rs ranged from .016 to .132; all ps > .19; see Table 5). Additionally, the male

partners' scores on the Self-Deception subscale of the BIDR were not significantly

correlated with their self-reports of perpetration and victimization on the Emotional-

Verbal subscale (rs = -.105 and -.074, respectively; both ps > .30). Using an alpha level

of .05 for each comparison, the male partners' scores on the Self-Deception subscale of

the BIDR demonstrated a significant negative correlation with their self-reports of

victimization on the Dominance-Isolation subscale (r = -.205, p = .042), but not with

their self-reports of perpetration (r = -.187, p = .064).[8] In other words, men with an

"honest, but positively biased" reporting style (Paulhus, 1991, p. 36) were less likely to

report being the victim of dominance-isolation tactics.

The male partners' scores on the Impression Management subscale of the BIDR

were not significantly correlated with their self-reports of violence perpetration or

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[8] Given the number of comparisons that were made with each scale, an α level of .05 would be considered conservative for these analyses.

violence victimization on the CTS (rs = -.183 to -.123, respectively; both ps > .06). The male partners' scores on the Self-Deception subscale of the BIDR were not significantly correlated with their self-reported use of violent tactics (r = -.186, p = .065); however, they were significantly and negatively correlated with self-reported violence victimization at an alpha level of .05 (r = -.214, p = .034). These results suggest that men with higher levels of self-deception were less likely to report being victims of intimate violence.

The Abusive Personality and intimate abusiveness

The relationships between the elements of the Abusive Personality and women's self-reported perpetration of emotional-verbal abuse, dominance-isolation tactics and violence are reported in Table 6.[9] The Bonferroni method was used to control FW error rate to 0.05 and obtain a suitable alpha level for each of the 8 comparisons made with each scale ($α$ = .0063). After controlling for FW error rate, all elements of the Abusive Personality were positively and significantly correlated with women's self-reported perpetration of emotional-verbal abuse and dominance-isolation tactics. The strength of these correlations ranged from .165 to .373. A recent study by Hemphill (2003) helps put the strength of these correlations in context. Hemphill examined large meta-analyses in the psychological assessment (Meyer et al., 2001) and treatment literature (Lipsey & Wilson, 1993). He found that the lower third of published correlation coefficients in these areas were below .20, the middle third were between .20 and .30, and the upper third were above .30. Based on these guidelines, the components of the Abusive Personality had relationships with psychological abuse perpetration that ranged from weak to strong.

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[9] The correlations between all scales used in the current study are given in Appendix A.

Additionally, maternal and paternal warmth demonstrated statistically significant weak negative correlations with women's self-reported perpetration of emotional-verbal abuse and dominance-isolation tactics. Most elements of the Abusive Personality (anger, trauma, BPO and parental rejection) were positively and significantly correlated with women's self-reported violence perpetration. However, these correlations were generally weak.

The centrality of BPO

The relationships between BPO and the other elements of the Abusive Personality are presented in Figure 2. As expected, all elements of the Abusive Personality were positively and significantly correlated with BPO. These correlations were strong, ranging from .299 to .616. Of note, however, BPO demonstrated a weak relationship with women's self-reported violence perpetration.

The Abusive Personality and attachment

The relationships between the four categories of attachment style and the other elements of the Abusive Personality are presented in Table 7. The relationship between the four categories of attachment style and women's self-reported abuse perpetration is also presented. The Bonferroni method was used to control FW error rate to 0.05 and obtain a suitable alpha level for each of the 10 comparisons made with each attachment style ($\alpha = .005$). After controlling for the large number of comparisons being made all elements of the Abusive Personality were negatively and significantly associated with secure attachment style. These correlations ranged from moderate to strong when compared with other findings in the psychological assessment and treatment literature (cf.

Hemphill, 2003). Parental warmth demonstrated statistically significant positive correlations with secure attachment style in the moderate range.

All elements of the Abusive Personality were positively and significantly correlated with fearful attachment style. The strength of these correlations ranged from moderate to strong. Parental warmth was negatively correlated with fearful attachment style, although this relationship ranged from weak to moderate. All elements of the Abusive Personality (with the exception of maternal rejection) were positively and significantly correlated with preoccupied attachment style. These correlations ranged considerably in strength from weak to strong. Parental warmth was not significantly correlated with preoccupied attachment.

Looking at women's self-reports of intimate abuse perpetration, secure attachment style demonstrated a significant negative correlation with emotional-verbal abuse and dominance-isolations tactics, whereas fearful and preoccupied attachment styles demonstrated significant positive correlations with emotional-verbal abuse and dominance-isolations tactics. These correlations were all weak to moderate. Interestingly, none of the attachment styles were significantly correlated with women's self-reported intimate violence perpetration.

Proposed model of the Abusive Personality

The standardized coefficients for the proposed model of the Abusive Personality can be seen in Figure 3. Overall, the measurement model for the latent variables was good. However, there was some variability in the strength of the relationships. For example, the indicator variables for BPO had standardized pattern coefficients that ranged from .803 to .881. Indicators are generally expected to have pattern coefficients of

.7 or higher (Schumacker & Lomax, 2004). These findings would suggest that the subscales of the BPO scale are measuring similar things. The indicator variables for parental rejection, trauma symptoms and intimate abuse also performed reasonably well. On the other hand, the indicator variables for anger had pattern coefficients that ranged from -.147 to .778. Anger Out was the indicator with the weakest pattern coefficient (i.e. -.147). This would suggest that the Anger Out subscale of the MAI is measuring a different underlying construct than the other subscales of the MAI. Of note, the Anger Out subscale had low internal consistency in one of the MAI development samples (Cronbach's alpha of 0.41 in a sample of factory workers; Siegel, 1986). It may be that this two-item subscale is not an effective measure of anger out (i.e. the tendency to express anger behaviorally) or an effective indicator of anger.

All specified structural paths were significant, except for the direct path between fearful attachment and anger (Figure 3). However, some relationships were stronger than others. While authors diverge in their opinion of what constitutes a strong effect, most authors agree that standardized structural coefficients greater than .3 are meaningful (e.g., Holmes-Smith, 2000; Meyers et al., 2006). Kline (1998) has suggested that values below .1 are weak, values around .3 represent moderate effects, and values above .5 represent strong effects. Based on those guidelines, the path from parental rejection to BPO is moderately strong, as is the path from BPO to fearful attachment. The path from BPO to trauma symptoms is strong, as is the path from BPO to anger. Additionally, the pathway from anger to intimate abuse perpetration is strong. While the path from parental rejection to trauma symptoms and the path from trauma symptoms to anger are

statistically significant, these effects are weak. Similarly, the path from parental rejection to fearful attachment is weak.

Taken as a whole, the fit measures for the overall model indicate that the proposed model for the Abusive Personality has adequate fit with the observed data [χ^2 = 984.9, df = 144, p < .001; RMSEA = .081; CFI = .90; NFI = .88]. The χ^2 statistic and the NFI both indicated that the model fit the data poorly. However, both the χ^2 statistic and the NFI are sensitive to sample size. The RMSEA and the CFI, which are not sensitive to sample size, indicated an adequate fit between the proposed model for the Abusive Personality and the observed data.

DISCUSSION

Incidence rates

Consistent with previous studies of college students, the vast majority of women reported that they had perpetrated some form of psychological abuse (cf. DeKeseredy & Schwartz, 1998; White & Koss, 1991), and nearly 30% reported that they had perpetrated some form of intimate violence in the last year of their intimate relationship (cf. Sugarman & Hotaling, 1989). Women self-reported significantly more psychological abuse and intimate violence perpetration than victimization, which would suggest that a significant proportion of intimately abusive women were the aggressors in their relationship (i.e. that they were not using psychological or physical abuse in retaliation or self-defense). This finding is consistent with previous research on women's motivations for using dating violence. For example, Follingstad et al. (1991) found that the most common reasons women gave for using dating violence were to express anger and to retaliate for emotional hurt.

The rates of psychological and physical abuse perpetration self-reported by women whose partners completed packages were similar to the rates reported by the sample of women as a whole. This is somewhat surprising due to the method of recruitment that was used for male partners in this study. For a man to be included in the study, their female intimate partner (who had already completed a research package) had to ask them to participate. Female participants were not asked why they did or did not agree to ask their partners to participate; however, it would appear that the amount of female-perpetrated violence in participants' relationships was not a prominent factor in

these decisions. This would suggest that recruiting men through their intimate partners can produce a representative sample of female violence perpetration rates, so long as participants are guaranteed anonymity and asked not to discuss their responses until they have both completed the package. Further research is needed to determine if there are personality or other differences between subjects who are willing to "recruit" their intimate partners for research participation and those who are not.

The rates of intimate abuse reported by male partners were similar to the rates of intimate abuse reported by women. However, agreement within couples about whether psychological or physical abuse had or had not occurred in their relationship was only fair to moderate. While this rate of agreement may seem surprising, it is consistent with previous research (e.g., Jouriles & O'Leary, 1985; Szinovacz, 1983). For example, Jouriles and O'Leary (1985) found kappas in the low-moderate range for husbands' and wives' perpetration of intimate violence in community and treatment samples. It is not clear why one member of a dyad would report that violence occurred in their relationship, and the other member would not. However, it seems unlikely that respondents would report violence that did not occur. One possible explanation for differences in reports of violence is that individual members of a dyad differ in their willingness to report intimate violent acts due to embarrassment. Another possible explanation offered by Szinovacz (1983) is that individual members of a dyad may differ in their perception of certain behaviors, or the importance that they place on them. The example Szinovacz gave was a wife throwing a kitchen utensil at her husband. The wife may view this as a serious behavior, whereas the husband may not take it seriously if he is not injured. It is possible that men and women may not report – or even remember – behaviors that they did not

take seriously. It would be difficult to control for this possibility without interviewing couples together, and a face-to-face interview could potentially decrease reporting of sensitive behaviors such as intimate abuse. This may be especially true for reporting of serious forms of violence such as punching or beating someone up.

It has been suggested that one way to combat low concurrent validity would be to have both members of a dyad report on violence in their relationship separately (Szinovacz, 1983). The partner reports would then be averaged to produce a score for each member's violence perpetration (e.g., Moffitt et al., 2001). Given an unlimited amount of time and funds, this may be the ideal method of determining whether violence has occurred in an intimate relationship. However, in practice it may be difficult to assess both members of an intimate dyad due to time constraints, financial constraints, and unwillingness of individuals to participate in research studies. The participants in the Dunedin Multidisciplinary Health and Development Study have been associated with that project for over 20 years, and it has a very low rate of attrition. Yet, at the age-21 assessment, when subjects were asked to bring their intimate partner with them, only 76% of the eligible intimate partners agreed to participate (Moffitt et al., 1997). This would suggest that cross-sectional studies may have difficulty recruiting couples even with unlimited time and resources.

In studies that rely solely on self-reports of intimate abuse perpetration, such as the current study, it is important to remember that some participants may underreport their psychological and physical abusiveness (Dutton & Hemphill, 1992). Although this is unavoidable, certain precautions can be taken to increase the likelihood of honest responding (Moffitt et al., 1997). In the current study, every attempt was made to assure

the participants that their responses were anonymous. This was done by supplying the participants with unmarked research packages, specifically instructing the participants not to write any identifying information on the research packages, and allowing them to complete the packages in a place of their choosing. Despite these precautions, it is possible that some participants under-reported their abuse perpetration or victimization. The BIDR was also included as a check for socially desirable responding. The female subjects in this study had significantly lower scores on the BIDR than female university students in a previous study (Paulhus, 1988). Additionally, the female participants' social desirability scores were unrelated to most of their self-reported measures of intimate abuse perpetration and victimization. There was a significant negative relationship between self-deception and women's self-reported emotional-verbal abuse perpetration, as well as a significant negative relationship between impression management and women's self-reported violence perpetration and victimization. However, these relationships were weak. This would suggest that most women did not intentionally or unintentionally distort their reports of intimate abusiveness. Conversely, there were moderate negative relationships between men's scores on the Self-Deception subscale and their self-reports of victimization on the Dominance-Isolation subscale and the Violence subscale. In other words, men who supplied honest but positively biased reports were unlikely to admit to being victims of dominance-isolation tactics, or to being victims of dating violence. This finding suggests that it may be preferable to rely on women's self-reports of intimate abuse, when studying dating violence, if researchers must rely on one source of information for financial or other reasons. In support of this suggestion, previous research with married couples has found that wives report higher

levels of intimate violence than their husbands do (Browning & Dutton, 1986; Edleson & Brygger, 1986; Jouriles & O'Leary, 1985; Szinovacz, 1983). In Szinovacz's study (1983) this was true for both female victimization and female perpetration.

The Abusive Personality and intimate abusiveness

Consistent with Dutton's (2007) findings with maritally violent men, all elements of the Abusive Personality were significantly correlated with women's self-reported perpetration of psychological abuse. Additionally, with the exception of fearful attachment, all elements of the Abusive Personality were significantly correlated with women's self-reported violence perpetration. However, the relationships between the components of the Abusive Personality and psychological and physical abuse perpetration ranged from weak to strong. The strongest relationships were found between psychological abuse and BPO, anger and trauma symptoms. Each of these correlations was above 0.30, meaning that they are in the top third of correlations found in the psychological assessment and treatment literature (cf. Hemphill, 2003).

This is the second large study to find a relationship between borderline personality traits and women's perpetration of psychological abuse in dating relationships (Hines, in press). Combined, these studies suggest that women who perpetrate intimate abuse in dating relationships are likely to experience "intense unstable interpersonal relationships, characterized by intermittent undermining of their significant other, manipulation and masked dependency" (Dutton, 1995a, p. 570). They are also likely to experience an intolerance of being alone, abandonment anxiety, intense anger, demandingness and impulsivity. Interestingly, the relationship between BPO and women's self-reports of intimate violence perpetration was weak. It is not clear why the

relationship between BPO and intimate violence perpetration was weaker than the

relationship between BPO and psychological abuse perpetration. However, it may be that

this relationship was obscured by restricted range (i.e. a floor effect). Less than 30% of

the sample reported that they had perpetrated a violent act and less than 20% reported

that they had perpetrated more than one violent act. The relationship between BPO and

intimate violence perpetration may be more evident in clinical samples of women in

dating relationships (cf. Goldenson et al., 2007; Henning, Jones & Holdford, 2003).

Given the traits of women with BPO, it is not surprising that a strong relationship

was also found between anger and psychological abuse perpetration. This finding is

consistent with the limited research that has been conducted on anger and psychological

abusiveness in college women (e.g., Davis et al., 2000). A moderate relationship was also

found between women's anger and their self-reports of violence perpetration. This

finding is consistent with Follingstad et al.'s (1991) study of college women's

motivations for dating violence perpetration. In that study, the majority of women who

had used dating violence said that their motivation was to express anger. If women's

primary motive for dating violence perpetration is to express anger, then we would expect

to see a strong relationship between anger and intimate violence perpetration. However, it

should be noted that at least one previous study failed to find a relationship between trait

anger and women's use of dating violence (Dye & Eckhardt, 2000).

The final component of the Abusive Personality that demonstrated a strong

relationship with psychological abusiveness was trauma symptoms. There is very little

previous research on the relationship between trauma symptoms and perpetration of

intimate abuse in dating relationships. The bulk of the available information comes from

Wekerle, Wolfe and their colleagues who have worked with girls in high school. Wolfe et al. (2004) found a relationship between trauma symptoms and dating violence perpetration in girls. They also found that trauma symptoms at time one predicted male students' use of psychological abuse at time two (i.e. one year later), and trauma symptoms and trauma-related anger predicted female students' use of dating violence at time two. Wekerle et al. (2001) found a relationship between trauma symptoms and dating violence in a similar sample. Additionally, they found that trauma symptoms mediated the relationship between childhood maltreatment and dating violence perpetration in two separate samples. Taken as a whole, these studies suggest that we would expect to see high levels of trauma symptoms in women who perpetrate intimate abuse in dating relationships. These trauma symptoms may include anxiety, depression, dissociation, sleep disturbances, and post-sexual abuse trauma (Dutton, 1995b). However, it should be noted this component of the Abusive Personality demonstrated a weak relationship with dating violence perpetration in the current sample.

Although several studies have found a relationship between trauma symptoms and intimate abusiveness, this relationship may be mediated by anger. As noted above, in Wolfe et al.'s (2004) study of high school students, the authors found a significant relationship between high school girls' trauma-related anger and dating violence perpetration. This finding is consistent with Dutton's (1998, 2007) theory of the Abusive Personality. Dutton (1995b) argued that the irritability and dysphoria associated with trauma symptoms could lead individuals to perpetrate intimate violence. According to this hypothesis, individuals suffering from trauma direct abuse towards their intimate partner for a number of reasons, including their intimate partner's general availability and

expectations that their intimate partner will alleviate their suffering. The SEM results from the current study support this hypothesis, although the direct path from trauma symptoms to anger was relatively weak.

Consistent with previous studies, fearful attachment demonstrated a weak to moderate relationship with women's psychological abuse perpetration (e.g., Davis et al., 2000). This would suggest that women who perpetrate psychological abuse in dating relationships have a fear of both autonomy and intimacy (Bartholomew, 1990). Individuals with a fearful attachment style "desire social contact and intimacy, but experience pervasive interpersonal distrust and fear of rejection" (Bartholomew, 1990, p. 164). These individuals are hypersensitive to social approval and may avoid close relationships where they see themselves as vulnerable to rejection.

As with trauma symptoms, it may be that the relationship between fearful attachment and intimate abuse is mediated by anger. Dutton et al. (1994b) referred to this form of anger as "intimacy anger". In other words, frustrated attachment needs may lead to anger, which may in turn lead individuals to perpetrate intimate abuse. We may expect to see intimacy anger in individuals with a fearful attachment style *and* individuals with a preoccupied attachment style, as both of these groups are chronically anxious about rejection and abandonment in intimate relationships. Follingstad et al (2002) directly tested this hypothesis in a sample of male and female college students. Using structural equation modeling the authors found that anxious attachment (a label which subsumes both fearfully attached individuals and preoccupied individuals) leads to angry temperament, which in turn leads to attempts to control one's partner through dating violence. Therefore, there is some evidence to support the hypothesis that the relationship

between fearful attachment and intimate abuse perpetration is mediated by anger. However, the SEM results from the current study do not support this hypothesis. Fearful attachment was unrelated to anger in the SEM analysis (see below for further discussion).

Interestingly, there was no relationship between women's self-reports of fearful attachment and intimate violence perpetration in the current study. This replicates findings from a study of college males, and a study of adult men and women from a community sample. In his study of college males, Wheeler (2002) found a relationship between preoccupied attachment and dating violence perpetration, but there was no relationship between fearful attachment and dating violence. Similarly, in a community sample of adult men and women, Henderson, Bartholomew, Trinke and Kwong (2005) found a relationship between preoccupied attachment and psychological and physical abuse perpetration, but no relationship between fearful attachment and abusiveness. Henderson et al. (2005) suggest that they failed to find a relationship between fearful attachment and abusiveness in their sample because the levels of fearful attachment were not as extreme as those found in clinical samples. In fact, the authors described their fearfully attached participants as "shy and compliant" (Henderson et al., 2005, p. 228). Based on these findings, and findings from the current study, it may be that the relationship between fearful attachment and intimate abusiveness is not as strong in community or dating samples as it is in clinical populations.

In the current study there was a moderate relationship between self-reported parental rejection and psychological abuse perpetration. There was also a weak but significant relationship between self-reported parental rejection and dating violence. These findings suggest that women who perpetrate psychological abuse, and to a lesser

extent dating violence, have memories of being rejected as children. In Dutton's initial study maritally violent men, he found a stronger relationship for paternal rejection than maternal rejection. In the current study these variables had a similar relationship with abusiveness. This would suggest that maternal rejection has a stronger relationship to intimate abuse perpetration in women than it does in men. However, further research will need to be conducted to confirm this.

The centrality of BPO

Dutton (1994b) argued that BPO is the central component of the Abusive Personality in intimately violent men. Results from the current study are consistent with this hypothesis: the correlations between BPO and the other components of the Abusive Personality were strong, as were the correlations between BPO and psychological abuse perpetration. These findings are also consistent with previous research and theory. For example, consistent with the finding that parental rejection is associated with BPO, Gunderson (1984) noted that "it is commonplace for borderline patients to see themselves as having been repeatedly victimized and mistreated in a long series of previous relationships beginning with their parents" (p. 5). Gunderson sees this as a distortion of reality rather than being characteristic of genuine abuse. However, there is some evidence to suggest that borderlines have experienced more childhood victimization than non-borderlines (e.g., Battle et al., 2004; Grover et al., 2007; Minzenberg, Poole & Vinogradov, 2008). Regardless of whether borderlines have experienced childhood abuse or merely recall experiencing childhood abuse, we would expect them to report feelings of parental rejection. This was the case in Dutton's (2007) research with men, as well as the current study with college women.

Hypothesizing that borderlines *have* experienced childhood abuse, van der Kolk (1987) noted that this could lead to the development of trauma symptoms. In fact, van der Kolk suggested that borderline personality disorder is so similar to PTSD that they are virtually synonymous. For example, both borderlines and individuals with PTSD have "disturbances in affect regulation, impulse control, reality testing, interpersonal relationships, and self-integration" (p. 115). According to van der Kolk, the most significant descriptive difference between borderline personality disorder and chronic PTSD is the absence of an identified stressor in the diagnosis of borderline personality disorder. Van der Kolk hypothesized that the reason for a lack of identified stressors in borderline patients' histories is not because they do not exist, but simply because no one asks borderline patients if they experienced childhood abuse (i.e. questions about childhood experiences of abuse are not part of a standard clinical assessment of patients). Consistent with van der Kolk's hypothesis, the correlations between BPO and trauma symptoms were so strong in the current study that they would appear to be measuring similar symptoms. Therefore, it seems possible that many individuals with BPO have experienced childhood abuse and that this abuse lead to the existence of chronic trauma symptoms.

It is not surprising that anger demonstrated a strong relationship with BPO. As described above, anger is symptomatic of BPO. Individuals with BPO have been described as displaying intense anger, demandingness, and impulsivity often tied to substance abuse and promiscuity. Gunderson (1984) views this anger as largely reactive and defensive in nature. Borderlines are said to exist in a "dysphoric stalemate" which is periodically broken by their regressive attempts to "provoke reassurance" from their

significant other. When a borderline is frustrated by their intimate partner, or when they view their relationship as potentially lost, they react with anger, devaluation of their significant other, manipulation, or open rage. Given this pattern of behavior, borderlines would be expected to experience high rates of anger, which would then lead to psychological and physical abusiveness.

The final element of the Abusive Personality is fearful attachment. Consistent with previous research with abusive males (e.g., Dutton et al., 1996), fearful attachment demonstrated a strong correlation with BPO in the current study. This finding would be expected based on descriptions of the two psychological conditions. For example, borderlines have been described as having an unstable sense of self, with an intolerance for being alone and abandonment anxiety (Gunderson, 1984). Similarly, individuals with fearful attachment style have been described as desiring social contact and intimacy, but being unable to obtain it due to pervasive interpersonal distrust and fear of rejection (Bartholomew, 1990). In Dutton et al.'s (1996) study, BPO and fearful attachment were so highly correlated that the authors argued that BPO may be a personality representation of fearful attachment style. Based on the SEM results in the current (described below), it could also be argued that BPO adds to the presentation of adult fearful attachment style. The pathway leading from BPO to fearful attachment style was moderately strong.

The Abusive Personality and fearful attachment

After examining the relationship between BPO and the other elements of the Abusive Personality, I examined the relationships between the four prototypical attachment styles (e.g., Bartholomew & Horowitz, 1991) and the elements of the Abusive Personality. As would be expected, the strongest relationships were found between

fearful attachment style and the other components of the Abusive Personality (cf. Dutton et al., 1996). It is not surprising that fearfully attached individuals would score highly on memories of parental rejection, as fearfully attached individuals have been described as having a history of rejecting or psychologically unavailable caregivers (Bartholomew, 1990). In fact, negative parental treatment is thought to form the basis of fearful attachment style. The parental rejection that these individuals faced as children leads them to develop a negative model of themselves and others. That is, fearfully attached individuals have come to believe that they are unlovable and that others are uncaring and unavailable. This attachment style results in disturbed social relations and a hypersensitivity to approval. Despite these traits, individuals with fearful attachment style are said to value acceptance, which leaves them vulnerable to loneliness and depression. In addition to the moderate correlations between parental rejection and fearful attachment style found in the current study, the relationship between parental rejection and fearful attachment was supported by the SEM analysis (although that pathway was comparatively weak).

In the current study, as with previous research (e.g., Dutton et al., 1996), there was a strong correlation between fearful attachment style and anger. This relationship has been explained by fearfully attached individuals' hypersensitivity to rejection and separation. When individuals perceive their partner's behavior as rejecting or unsupportive they are likely to experience anxiety and interpersonal anger. In Bowlby's (1982) work with children, this anger – resulting from frustrated attachment needs – was viewed as a form of protest behavior intended to maintain or regain contact with the caregiver. In adults, the same protest behaviors are thought to be evident in what Dutton

et al. (1994) referred to as "intimacy anger". However, this anger is now directed towards the individual's intimate partner who is viewed as failing to meet the individual's attachment needs. Although the correlation between fearful attachment and anger was strong in the current study, the SEM results call this relationship into question. The structural path between fearful attachment and anger was not significant, suggesting that individuals with a fearful attachment style do not always experience high levels of anger. This relationship will be discussed further below.

In addition to being associated with parental rejection, BPO and anger, fearful attachment style demonstrated a strong correlation with trauma symptoms in the current study. These findings are consistent with attachment and trauma theory (Bowlby, 1973). As noted by van der Kolk (1987), "the essence of psychological trauma is the loss of faith that there is order and continuity in life" (p. 31). In other words, psychological trauma occurs when an individual loses the sense of having a safe place to retreat to – whether that is internal or external – in order to deal with frightening emotions or experiences. Van der Kolk asserts that the earliest and possibly most damaging trauma that one can endure is the loss of a "safe base" (e.g., due to an unavailable, rejecting or abusive parent). According to van der Kolk (1987), this loss of a safe base causes children to "maneuver psychologically to reestablish some sense of safety, often becoming fearfully or hungrily attached, unwilling or anxiously obedient, and apprehensive lest the caregiver be unavailable when needed" (p. 32). In other words, van der Kolk views fearful attachment as a psychological defense mechanism designed to overcome trauma associated with separation, abuse and neglect. Based on this hypothesis, we would expect to see relationships between negative parental treatment, trauma and fearful attachment.

This theory is supported by Dutton's (1995b) research on the origins of the Abusive Personality, as well as the findings from the current study.

Attachment styles and abusiveness

As mentioned above, fearful attachment style demonstrated a weak to moderate relationship with women's self-reported emotional abusiveness in the current study. In addition to the findings with fearful attachment style, there were moderate to strong relationships between preoccupied attachment style and BPO, anger and trauma symptoms in the current study. Like individuals with a fearful attachment style, individuals with a preoccupied attachment style have a negative model of themselves and are chronically anxious about rejection and abandonment. However, these individuals have a positive view of potential attachment objects, and this leaves them with an "insatiable desire to gain others approval" (Bartholomew, 1990, p. 164). Due to preoccupied individuals' excessive need for support, they develop a confrontational and controlling interpersonal style (Henderson et al., 2005). Therefore, it is not surprising that preoccupied attachment is associated with abusiveness. In the current study, the relationship between preoccupied attachment and psychological abusiveness was comparable in strength to the relationship between fearful attachment and psychological abusiveness. However, emotional-verbal abuse was more strongly related to fearful attachment style, and as may be expected, preoccupied attachment was more strongly related to dominance-isolation tactics.

Secure attachment style demonstrated moderate to strong negative relationships with the elements of the Abusive Personality. This finding was anticipated as securely

attached individuals are described as having "positive models of both the self and other, resulting in secure and fulfilling adult relationships" (Bartholomew, 1990, p. 164). These individuals have high self-esteem and lack serious interpersonal problems. Therefore, securely attached individuals would not be expected to perpetrate psychological or physical abuse. Consistent with this description of securely attached individuals, secure attachment was negatively correlated with women's self-reported abusiveness in the current study.

Finally, dismissing attachment style demonstrated weak to statistically insignificant relationships with the other elements of the Abusive Personality. This would also be anticipated based on attachment theory. Like individuals with a fearful attachment style, dismissing individuals experienced parental rejection as children. However, unlike fearfully attached individuals, they reacted to this experience by distancing themselves from attachment figures and developing a model of themselves "as fully adequate and hence invulnerable to negative feelings that may activate the attachment system" (Bartholomew, 1990, p. 164). These individuals avoid close relationships, state that relationships are unimportant, and value independence. As such, individuals with a dismissing attachment would be expected to leave an unsatisfying relationship rather than act out with anger or abusiveness (Henderson et al., 2005). Consistent with this hypothesis, dismissing attachment style was unrelated to women's self-reports of intimate abusiveness in the current study.

Proposed model of the Abusive Personality

The SEM of the Abusive Personality was intentionally presented last in the current study. Structural equation modeling is a relatively new statistical technique and

there is a tendency for researchers to give a lot of weight to the findings (Tomarken &

Waller, 2005). Structural equation modeling does have advantages over more traditional

statistical techniques. Notably, researchers can use SEM to assess the psychometric

properties of measures and "estimate relations among constructs that are corrected for

biases attributable to random error and construct-irrelevant variance" (Tomarken &

Waller, 2005, p. 34). Structural equation modeling allows researchers to test several

relationships simultaneously and it allows for stronger conclusions about causation than

techniques such as correlational analysis. However, SEM retains many of the same

limitations of other statistical techniques. For example, SEM is limited by the constructs

chosen by the researcher and the measures chosen to examine those constructs. In

addition, SEM is used to test "causal models" and these models are defined by the

researcher. In other words, the relationships between the variables are predetermined by

the researcher, and other relationships are possible. Structural equation models should

always be based on accepted theory and research, as the proposed model of the Abusive

Personality was (i.e. SEM is not an exploratory technique). However, it is possible that

other models may potentially produce adequate "fit to the data".

That said, in the current study the SEM findings supported the other results. The

findings are particularly remarkable for the centrality of BPO. The relationship between

parental rejection and BPO was moderately strong, suggesting that parental rejection

leads to the development of BPO. The relationships between BPO and fearful attachment,

anger and trauma symptoms were also moderately strong to strong. This suggests that

BPO adds to the adult presentation of fearful attachment, anger and trauma symptoms.

These findings support Dutton's (1994b) argument that BPO is the central organizing

feature of the Abusive Personality. They are also consistent with the descriptions that have been given of individuals with BPO. As discussed above, individuals with BPO are said to experience an intolerance of being alone, abandonment anxiety, intense anger, demandingness and impulsivity (e.g., Gunderson, 1984; Dutton et al., 1996; Dutton, 1994b; Dutton, Saunders, Starzomski & Bartholomew, 1994; Dutton & Starzomski, 1993). They have also been found to experience high levels of trauma symptoms (e.g., Dutton, 1995b; van der Kolk, 1987).

In addition to supporting the centrality of BPO, the SEM analysis supported the connection between anger and intimate abuse perpetration. Consistent with previous theory and research (e.g., Follingstad et al., 2002; Follingstad et al., 1991; Norlander and Eckhardt, 2005), the relationship between anger and intimate abuse perpetration was strong, suggesting that anger is a direct cause of psychological and physical abuse perpetration in college women. The relationships between parental rejection and fearful attachment, and parental rejection and trauma symptoms were also supported by the SEM analysis, although these relationships were comparatively weak. Similarly, there was a weak relationship between trauma symptoms and anger.

The only structural path that did not reach significance was the direct path between fearful attachment and anger. This would suggest that the strong correlation found between fearful attachment and anger was spurious, possibly due to the strong relationship between fearful attachment and BPO (i.e. BPO may be the cause of both anger and fearful attachment). This is a surprising finding, as individuals with a fearful attachment style have been said to experience high levels of intimacy anger (e.g., Dutton et al., 1996). It may be that the fearfully attached women in this sample were similar to

the fearfully attached women in Henderson et al.'s (2005) study of attachment styles and intimate abuse perpetration. Henderson et al. described the fearfully attached men and women in their community sample as "shy and compliant" (2005, p. 228). Therefore, it may be that fearful attachment presents differently in community samples than it does in clinical samples of abusive individuals.

Based on findings from the current study, it would appear that fearful attachment is not a strong factor in college women's perpetration of intimate abuse in dating relationships. In addition to the non-significant relationship between fearful attachment and anger found in the SEM analysis, there was a relatively weak correlation between fearful attachment and psychological abuse perpetration, and a non-significant correlation between fearful attachment and intimate violence perpetration. These findings are consistent with previous findings by Wheeler (2002) and Henderson et al. (2005). As described above, Wheeler (2002) found a relationship between preoccupied attachment and intimate abuse perpetration, but no relationship between fearful attachment and intimate abuse perpetration in college males. Henderson et al. (2005) found similar results in a community sample of men and women.

Summary

The rates of female abusiveness reported in the current study were comparable to those reported in other studies of college women (e.g., DeKeseredy & Schwartz, 1998; White & Koss, 1991). As anticipated, all elements of the Abusive Personality were correlated with psychological abusiveness in this sample. Most elements of the Abusive Personality were correlated with dating violence perpetration; however, these relationships were generally weak. These findings would suggest that the relationship

between the Abusive Personality and intimate violence perpetration is not as strong in college women as it is in clinical samples (cf. Goldenson et al., 2007; Stuart et al., 2006).

Consistent with findings from samples of married men (e.g., Dutton, 1995a), the findings related to BPO suggest that BPO is the central feature of the Abusive Personality in college women. Both the correlational analysis and the SEM analysis revealed strong relationships between BPO and the other elements of the Abusive Personality. In fact, the correlations between BPO and trauma symptoms, fearful attachment and anger were so strong that they appear to be measuring different parts of a single construct. Dutton (1995a) has suggested that BPO may be the "personality representation" of fearful attachment style (p. 215). Based on results from the current study, it could equally be argued that fearful attachment style is the attachment style indicative of BPO. Given the strength of the relationships between BPO and anger and trauma symptoms, it could also be argued that anger and trauma symptoms are the affective representation of BPO. The Abusive Personality is an appropriate label for this complex of traits, given the strong relationships between BPO, trauma symptoms, anger and psychological abusiveness in the current sample, and the strong relationship between all elements of the Abusive Personality and physical abusiveness in clinical samples of men and women (e.g., Dutton, 2007; Goldenson et al., 2007; Stuart et al., 2006).

Future considerations and limitations

Given the low rate of agreement between women and their male partners in terms of intimate abuse perpetration, future studies may benefit from collecting data from all male and female partners. However, as noted above, this method of assessment would involve a trade off between possible confirmation of abusive relationships and reduced

sample size. Reduced sample size may be the result of limited time and finances, or it may be the result of individual members of a dyad being unwilling or unable to participate. In the latter case, it would be difficult to determine if there are historical or psychological factors that differ between couples that chose to participate and couples that are unwilling or unable to participate.

Future studies may also benefit from conducting face-to-face interviews with subjects to collect information about historical factors, psychological factors and intimate abusiveness. Face-to-face interviews can have the benefit of assisting individuals in recall of events (e.g., Wright & Holliday, 2007). Trained researchers can also probe respondents for further information if categorization or diagnoses are unclear. Although there are obvious advantages to face-to-face interviews, there are also some disadvantages. As with potential studies that include couples, studies that are conducted using face-to-face interviews require an increased amount of time and money (e.g., Griffin & Bartholomew, 1994). Face-to-face interviews require trained interviewers, and they also have the potential of affecting disclosure through demand characteristics. In other words, some respondents may be uncomfortable discussing private issues such as psychological difficulties, trauma symptoms or intimate abuse with researchers. Demand characteristics may be reduced thorough procedures such as asking participants to write down information rather than responding out loud (e.g., Moffitt et al., 1997); however, it would be difficult to fully eliminate the effects of socially desirable responding.

Given the non-significant structural path between fearful attachment and anger in the SEM analysis, the relatively weak correlation between fearful attachment and psychological abuse perpetration, and the non-significant correlation between fearful

attachment and intimate violence perpetration in the current study, future studies may benefit from examining different forms of attachment in college women. For example, Wheeler (2002) and Henderson et al. (2005) found a relationship between preoccupied attachment and intimate abuse perpetration in non-clinical samples. Follingstad et al. (2002) found a relationship between anxious attachment and anger in college men and women (anxious attachment is a label that would apply to individuals with a fearful attachment style and individuals with a preoccupied attachment style). Additionally, Davis et al. (2000) found a direct relationship between anxious attachment and psychological abuse perpetration in college men and women.

A limitation of the current study was the method that was used to classify women as abusive or non-abusive. In the current study, women who perpetrated any acts of psychological or physical intimate abuse were labeled as abusive. However, some women may have used psychological or physical abuse in retaliation or self-defense (e.g., DeKeseredy & Schwartz, 1998). It is clear from previous research (e.g., DeKeseredy & Schwartz, 1998; White & Koss, 1991) that most men and women in dating relationships have used some form of psychological abuse. Additionally, several large studies have found that the majority of violent relationships are mutually-violent (e.g., Magdol et al., 1997; Morse, 1995; Stets & Straus, 1990). Therefore, future research on intimate abuse would benefit from a measure that addresses individuals' motivations for using psychological and physical abuse. Only those individuals who initiate psychologically or physically abusive acts would be expected to demonstrate the Abusive Personality. Due to the fact that the current study combined female-violent couples with mutually-violent couples, the strength of the relationships that were found between the components of the

Abusive Personality and violence perpetration are likely underestimates of the true strength of these relationships. The same may be true for the relationships between the elements of the Abusive Personality and psychological abuse perpetration.

Table 1   Means, standard deviations (SD) and ranges for women's scores on all

scales and subscales used in the current study

	Mean	SD	Range
BIDR – Self-deception	3.4	2.2	0-11
BIDR – Impression Management	4.4	2.4	0-11
BPO Scale	62.3	17.1	30-121
Identity Diffusion	23.9	7.1	10-46
Primitive Defenses	21.4	6.6	10-41
Reality Testing	16.9	5.1	10-41
EMBU - Rejection (mother)	36.7	10.8	25-95
EMBU - Rejection (father)	35.2	10.4	25-98
EMBU - Warmth (mother)	56.7	12.5	19-72
EMBU - Warmth (father)	52.9	15.0	18-72
RSQ – Dismissing	3.0	0.7	1.0-5.0
RSQ – Fearful	2.6	0.9	1.0-5.0
RSQ – Preoccupied	2.9	0.7	1.0-5.0
RSQ – Secure	3.4	0.6	1.4-5.0

Note. N = 913 for the measurement of mother warmth and rejection, as one female

participant was raised by a single father. N = 897 for the measurement of father warmth

and rejection, as 17 female participants were raised by single mothers.

	Mean	SD	Range
MAI	105.2	17.1	61-171
Anger-arousal	17.5	5.3	9-38
Range of Anger	22.6	5.2	8-35
Hostile Outlook	11.2	3.9	4-20
Anger-in	13.5	3.3	6-24
Anger-out	6.6	2.0	2-10
TSC-33	21.1	11.7	0-69
Anxiety	4.7	3.6	0-21
Depression	6.4	3.9	0-23
Dissociation	3.9	3.1	0-18
PSAT-hypothesized	3.0	2.6	0-18
Sleep Disturbance	3.7	2.4	0-12
Perpetration			
PMI – Emotional-verbal	35.2	10.3	22-86
PMI – Dominance-isolation	31.9	7.3	26-93
CTS – Violence	1.5	4.6	0-42
CTS – Severe Violence	0.6	2.5	0-24

	Mean	SD	Range
Victimization			
PMI – Emotional-verbal	33.9	12.1	22-101
PMI – Dominance-isolation	31.0	7.6	26-110
CTS – Violence	1.0	3.8	0-33
CTS – Severe Violence	0.4	2.1	0-20

Table 2   Rates of psychological and physical abuse perpetration and victimization

reported by women and men

	Emotional-Verbal	Dominance-Isolation	Violence	Severe Violence
Female reported				
Perpetration	95.4%	84.9%	28.3%	14.4%
Multiple perpetration			19.3%	9.1%
Victimization	87.9%	71.4%	19.3%	8.0%
Multiple victimization			12.0%	5.1%
Female reported – subsample with partners in study				
Perpetration	97.0%	89.9%	26.3%	13.1%
Multiple perpetration			14.1%	6.1%
Victimization	98.0%	80.8%	16.1%	6.1%
Multiple victimization			7.1%	3.0%
Male reported				
Perpetration	86.9%	75.8%	14.1%	6.1%
Multiple perpetration			11.1%	4.0%
Victimization	97.0%	80.8%	28.3%	11.1%
Multiple victimization			20.2%	10.1%

Table 3   Percentage of women who reported perpetrating and being victimized
by each item on the violence subscale of the CTS

Item	Perpetration	Victimization
Threw something at the other one	12.3%	7.3%
Pushed, grabbed, or shoved the other one	17.5%	13.5%
Slapped the other one	11.4%	5.3%
Kicked, bit, or hit with a fist	10.6%	4.2%
Hit or tried to hit with something	8.8%	6.2%
Beat up the other one	3.4%	2.1%
Threatened with a knife or gun	2.0%	1.6%
Used a knife or gun	1.8%	2.0%

Table 4   Agreement between women and men on whether psychological and physical

abuse had occurred in their relationship (n = 99)

Scale	Kappa	*p*-value
Female perpetration		
Emotional-verbal	.312	.002
Dominance-isolation	.404	<.001
Violence	.389	<.001
Severe violence	.337	.001
Female victimization		
Emotional-verbal	-.036	.579
Dominance-isolation	.378	<.001
Violence	.372	<.001
Severe violence	.290	.004

Table 5   Correlations between social desirability and measures of abuse perpetration and victimization (*p*-values are in parentheses)

Scale	Self-Deception	Impression Management
Female reported perpetration		
Emotional-verbal	-.014 (.668)	-.024 (.464)
Dominance-isolation	-.033 (.316)	-.070 (.034)
Violence	-.005 (.869)	-.093 (.005)
Female reported victimization		
Emotional-verbal	-.007 (.838)	.011 (.744)
Dominance-isolation	-.022 (.513)	-.036 (.278)
Violence	-.044 (.188)	-.105 (.002)
Male reported perpetration		
Emotional-verbal	-.105 (.301)	.086 (.395)
Dominance-isolation	-.187 (.064)	.016 (.873)
Violence	-.186 (.065)	-.183 (.070)
Male reported victimization		
Emotional-verbal	-.074 (.468)	.071 (.485)
Dominance-isolation	-.205 (.042)	.132 (.192)
Violence	-.214 (.034)	-.123 (.227)

Table 6   Correlations between components of the Abusive Personality and the PMI

subscales, and the violence subscale of the CTS (*p*-values are in parentheses)

Scale	Emotional-Verbal	Dominance-Isolation	Violence
BPO	.322 (<.001)	.338 (<.001)	.137 (<.001)
Anger	.363 (<.001)	.319 (<.001)	.230 (<.001)
Trauma symptoms	.373 (<.001)	.328 (<.001)	.151 (<.001)
Rejection (mother)	.259 (<.001)	.242 (<.001)	.137 (<.001)
Rejection (father)	.287 (<.001)	.235 (<.001)	.145 (<.001)
Warmth (mother)	-.185 (<.001)	-.186 (<.001)	-.102 (.003)
Warmth (father)	-.182 (<.001)	-.169 (<.001)	-.081 (.015)
Fearful attachment	.205 (<.001)	.165 (<.001)	.056 (.090)

Note. N = 913 for comparisons of mother warmth and rejection, as one female participant

was raised by a single father. N = 897 for comparisons of father warmth and rejection, as

17 female participants were raised by single mothers.

Table 7   Correlations between attachment styles and components of the Abusive

Personality and the PMI subscales, and the violence subscale of the CTS

(*p*-values are in parentheses)

Scale	Secure	Fearful	Preoccupied	Dismissing
BPO	-.444 (<.001)	.488 (<.001)	.346 (<.001)	.125 (<.001)
Anger	-.334 (<.001)	.324 (<.001)	.297(<.001)	.070 (.033)
Trauma symptoms	-.370 (<.001)	.395 (<.001)	.292(<.001)	.087 (.008)
Rejection (mother)	-.233 (<.001)	.268 (<.001)	.078 (.081)	.140 (<.001)
Rejection (father)	-.245 (<.001)	.264 (<.001)	.176 (<.001)	.096 (.004)
Warmth (mother)	.257 (<.001)	-.233 (<.001)	-.068 (.039)	-.028 (<.001)
Warmth (father)	.213 (<.001)	-.186 (<.001)	-.125 (.400)	.018 (.587)
Emotional-verbal	-.192 (<.001)	.205 (<.001)	.167 (<.001)	.035 (.290)
Dominance-isolation	-.178 (<.001)	.165 (<.001)	.207 (<.001)	-.046 (.169)
Violence	-.073 (.028)	.056 (.090)	.086 (.009)	-.013 (.693)

Note. N = 913 for comparisons of mother warmth and rejection, as one female participant

was raised by a single father. N = 897 for comparisons of father warmth and rejection, as

17 female participants were raised by single mothers.

Figure 1   Proposed model of the Abusive Personality
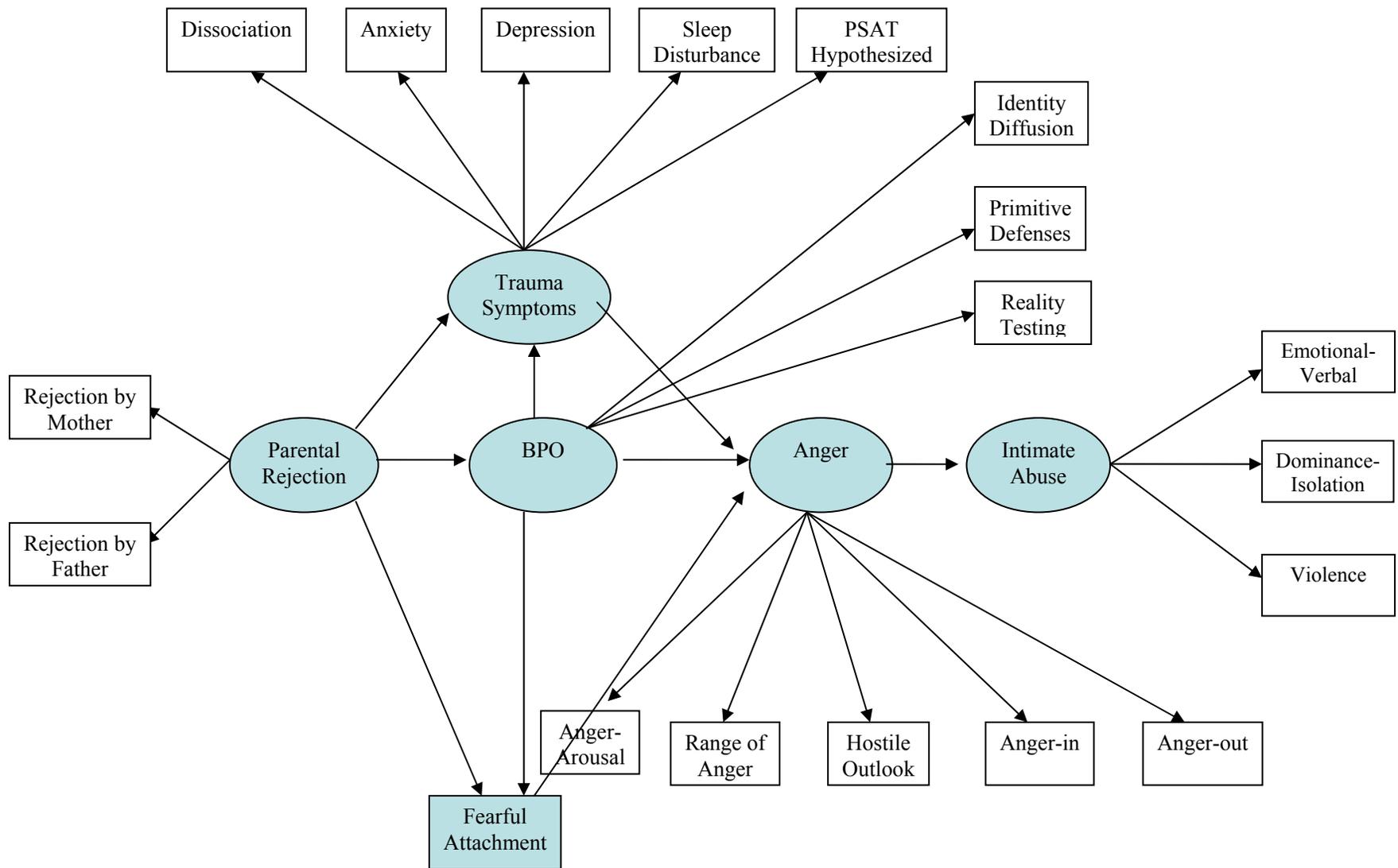
Figure 2 The centrality of BPO: Correlations between BPO and the other elements of the Abusive Personality

Rejection by Father (EMBU)

Rejection by Mother (EMBU)

.299

.362

BPO

Anger (MAI)

.495

Violence (CTS)

.137

Emotional-Verbal Abuse (PMWI)

.322

Domination-Isolation (PMWI)

.338

Trauma Symptoms (TSC)

.616

Fearful/Angry Attachment (RSQ)

.488

p < .001 for all comparisons
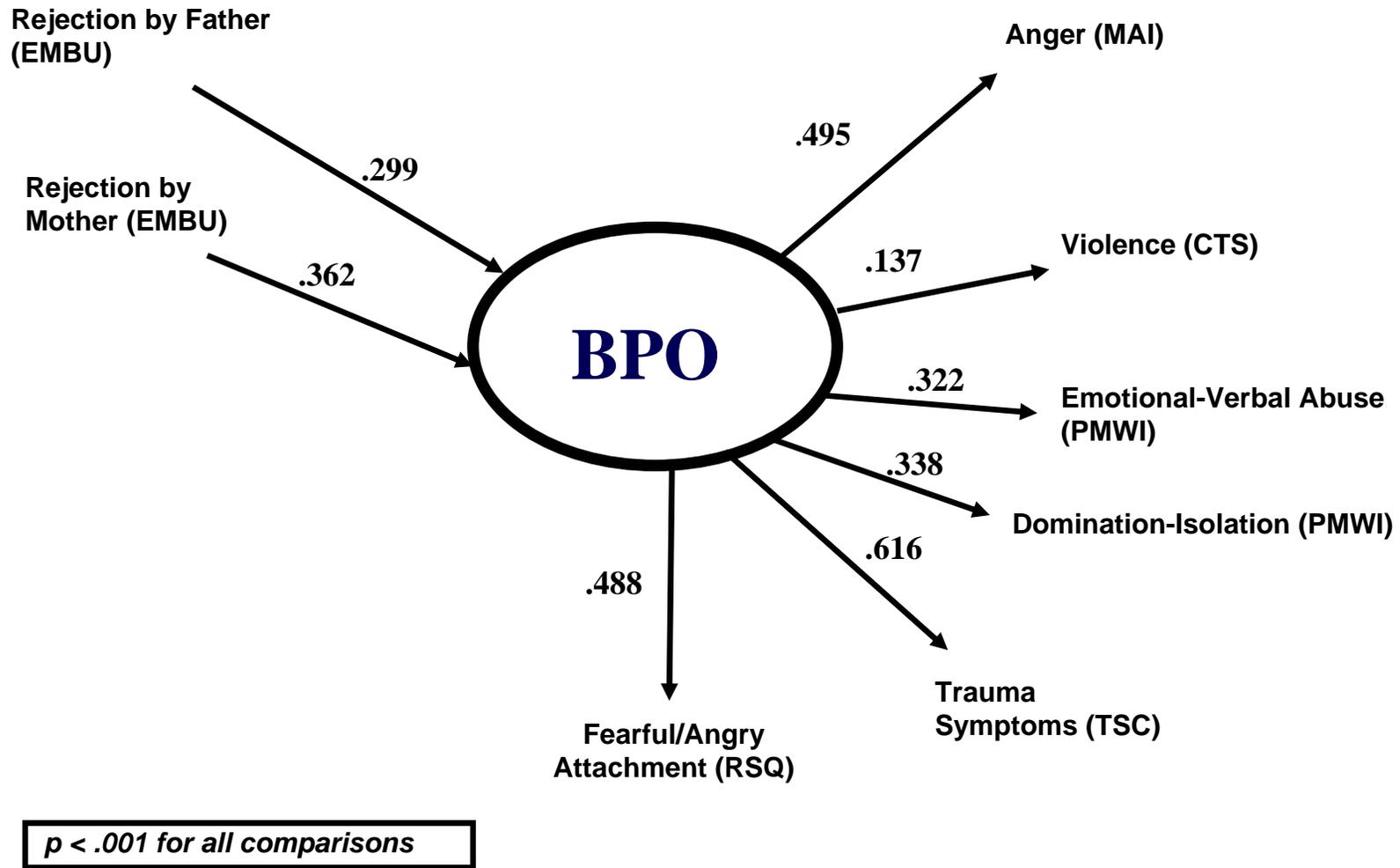
Figure 3   Standardized pattern coefficients and structural coefficients (in bold) for the SEM analysis of the proposed model of the Abusive Personality
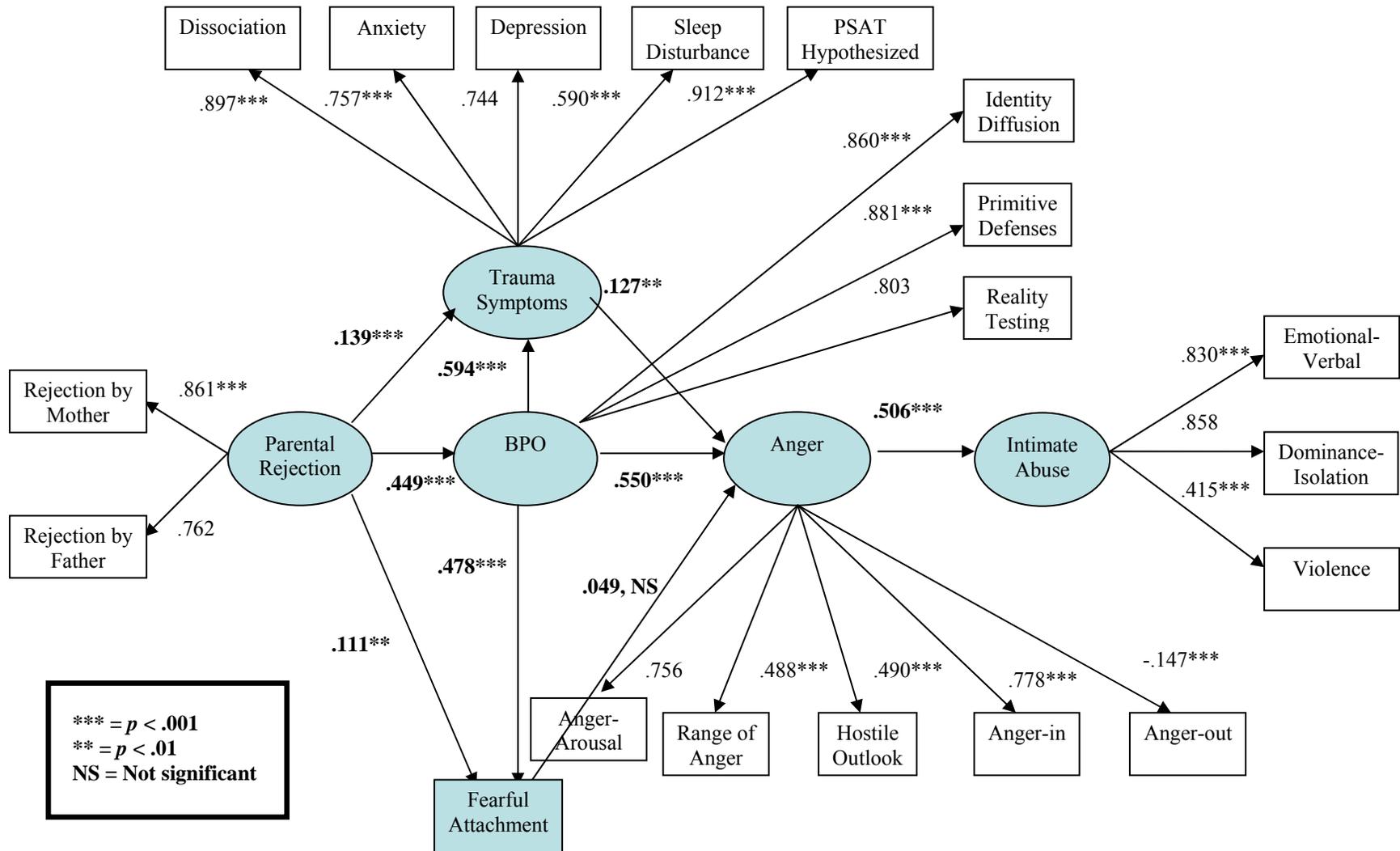
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APPENDIX A

Correlations between measures not examined in the current study

Construct	BPO	Anger	Trauma	Rejection (mother)
BPO	---	.495	.616	.362
Anger	.495	---	.457	.263
Trauma symptoms	.616	.457	---	.351
Rejection (mother)	.362	.263	.351	---
Rejection (father)	.299	.262	.321	.656
Warmth (mother)	-.295	-.164	-.175	-.621
Warmth (father)	-.240	-.147	-.182	-.377

Construct	Rejection (father)	Warmth (mother)	Warmth (father)
BPO	.299	-.295	-.240
Anger	.262	-.164	-.147
Trauma symptoms	.321	-.175	-.182
Rejection (mother)	.656	-.621	-.377
Rejection (father)	---	-.446	-.498
Warmth (mother)	-.446	---	.630
Warmth (father)	-.498	.630	---

APPENDIX B

Scales used in the current study

Balanced Inventory of Desirable Responding

INSTRUCTIONS: Using the scale below as a guide, please circle the number beside each statement to indicate how true it is.

Not True		Somewhat True			Very True	
1	2	3	4	5	6	7

1. **My first impressions of people usually turn out to be right.**   1   2   3   4   5   6   7

2. **It would be hard for me to break any of my bad habits.**   1   2   3   4   5   6   7

3. **I don't care to know what other people really think of me.**   1   2   3   4   5   6   7

4. **I have not always been honest with myself.**   1   2   3   4   5   6   7

5. **I always know why I like things.**   1   2   3   4   5   6   7

6. **When my emotions are aroused, it biases my thinking.**   1   2   3   4   5   6   7

7. **Once I've made up my mind, other people can seldom change my opinion.**   1   2   3   4   5   6   7

8. **I am not a safe driver when I exceed the speed limit.**   1   2   3   4   5   6   7

9. **I am fully in control of my own fate.**   1   2   3   4   5   6   7

10. **It's hard for me to shut off a disturbing thought.**   1   2   3   4   5   6   7

11. **I never regret my decisions.**   1   2   3   4   5   6   7

12. **I sometimes lose out on things because I can't make up my mind soon enough.**   1   2   3   4   5   6   7

13. **The reason I vote is because my vote can make a difference.**   1   2   3   4   5   6   7

14. **My parents were not always fair when they punished me.**   1   2   3   4   5   6   7

	Not True		Somewhat True			Very True	
1	2	3	4	5		6	7

15. **I am a completely rational person.**　1　2　3　4　5　6　7

16. **I rarely appreciate criticism.**　1　2　3　4　5　6　7

17. **I am very confident of my judgments.**　1　2　3　4　5　6　7

18. **I have sometimes doubted my ability as a lover.**　1　2　3　4　5　6　7

19. **It's all right with me if some people happen to dislike me.**　1　2　3　4　5　6　7

20. **I don't always know the reasons why I do the things I do.**　1　2　3　4　5　6　7

21. **I sometimes tell lies if I have to.**　1　2　3　4　5　6　7

22. **I never cover up my mistakes.**　1　2　3　4　5　6　7

23. **There have been occasions when I have taken advantage of someone.**　1　2　3　4　5　6　7

24. **I never swear.**　1　2　3　4　5　6　7

25. **I sometimes try to get even rather than forgive and forget.**　1　2　3　4　5　6　7

26. **I always obey laws, even if I'm unlikely to get caught.**　1　2　3　4　5　6　7

27. **I have said something bad about a friend behind his/her back.**　1　2　3　4　5　6　7

28. **When I hear people talking privately, I avoid listening.**　1　2　3　4　5　6　7

29. **I have received too much change from a salesperson without telling him or her.**　1　2　3　4　5　6　7

30. **I always declare everything at customs.**　1　2　3　4　5　6　7

31. **When I was young I sometimes stole things.**　1　2　3　4　5　6　7

	Not True		Somewhat True		Very True	
1	2	3	4	5	6	7

32. **I have never dropped litter on the streets.**   1   2   3   4   5   6   7

33. **I sometimes drive faster than the speed limit.**   1   2   3   4   5   6   7

34. **I never read sexy books or magazines.**   1   2   3   4   5   6   7

35. **I have done things that I don't tell other people about.**   1   2   3   4   5   6   7

36. **I have never taken things that don't belong to me.**   1   2   3   4   5   6   7

37. **I have taken sick-leave from work or school even though I wasn't really sick.**   1   2   3   4   5   6   7

38. **I have never damaged a library book or store merchandise without reporting it.**   1   2   3   4   5   6   7

39. **I have some pretty awful habits.**   1   2   3   4   5   6   7

40. **I don't gossip about other people's business.**   1   2   3   4   5   6   7

Borderline Personality Organization (BPO) Scale

For each of the statements below, please indicate how true it is about you by **circling** the most appropriate number beside each statement.

1	2	3	4	5
never true	seldom true	sometimes true	often true	always true

1.	I feel like a fake or an imposter, that others see me as quite different at times.	1 2 3 4 5
2.	I feel almost as if I'm someone else like a friend or relative or even someone I don't know.	1 2 3 4 5
3.	It is hard for me to trust people because they so often turn against me or betray me.	1 2 3 4 5
4.	People tend to respond to me by either overwhelming me with love or abandoning me.	1 2 3 4 5
5.	I see myself in totally different ways at different times.	1 2 3 4 5
6.	I act in ways that strike others as unpredictable and erratic.	1 2 3 4 5
7.	I find I do things which get other people upset and I don't know why such things upset them.	1 2 3 4 5
8.	Uncontrollable events are the cause of my difficulties.	1 2 3 4 5
9.	I hear things that other people claim are not really there.	1 2 3 4 5
10.	I feel empty inside.	1 2 3 4 5
11.	I tend to feel things in a somewhat extreme way, experiencing either great joy or intense despair.	1 2 3 4 5
12.	It is hard for me to be sure about what others think of me, even people who have known me very well.	1 2 3 4 5
13.	I'm afraid of losing myself when I get sexually involved.	1 2 3 4 5
14.	I feel that certain episodes in my life do not count and are better erased from my mind.	1 2 3 4 5
15.	I find it hard to describe myself.	1 2 3 4 5
16.	I've had relationships in which I couldn't feel whether I or the other person was thinking or feeling something.	1 2 3 4 5

1	2	3	4	5
never true	seldom true	sometimes true	often true	always true

17.	I don't feel like myself unless exciting things are going on around me.	1 2 3 4 5
18.	I feel people don't give me the respect I deserve unless I put pressure on them.	1 2 3 4 5
19.	People see me as being rude or inconsiderate and I don't know why.	1 2 3 4 5
20.	I can't tell whether certain physical sensations I'm having are real, or whether I am imagining them.	1 2 3 4 5
21.	Some of my friends would be surprised if they knew how differently I behave in different situations.	1 2 3 4 5
22.	I find myself doing things which feel okay while I am doing them but which I later find hard to believe I did.	1 2 3 4 5
23.	I believe that things will happen simply by thinking about them.	1 2 3 4 5
24.	When I want something from someone else, I can't ask for it directly.	1 2 3 4 5
25.	I feel I'm a different person at home as compared to how I am at work or at school.	1 2 3 4 5
26.	I am not sure whether a voice I have heard, or something that I have seen, is my imagination or not.	1 2 3 4 5
27.	I have heard or seen things when there is no apparent reason for it.	1 2 3 4 5
28.	I feel I don't get what I want.	1 2 3 4 5
29.	I need to admire people in order to feel secure.	1 2 3 4 5
30.	Somehow, I never know quite how to conduct myself with people.	1 2 3 4 5

Conflict Tactics Scale (CTS)

No matter how well two people get along, there are times when they disagree on major decisions, get annoyed about something the other person does, or just have spats or fights because they are in a bad mood or tired, or for some other reason. They also use different ways of trying to settle their differences. Below are listed a number of behaviours that people use to settle their differences. Please read each one and circle the number that best represents how often in the past year you and your partner have used these behaviors when dealing with each other.

0	1	2	3	4	5	6
Never	Once	Twice	3-5 Times	6-10 Times	11- 20 Times	More than 20 Times

		You - In Past Year	Partner - In Past Year
a.	Discussed the issue calmly.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
b.	Got information to back up (your/his/her) side of things.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
c.	Brought in or tried to bring in someone to help settle things.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
d.	Argued heatedly but short of yelling.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
e.	Insulted, yelled or swore at the other one.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
f.	Sulked and/or refused to talk about it.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
g.	Stomped out of the room or house (or yard).	0 1 2 3 4 5 6	0 1 2 3 4 5 6
h.	Cried.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
I.	Did or said something to spite the other one.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
j.	Threatened to hit or throw something at the other one.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
k.	Threw or smashed or hit or kicked something.	0 1 2 3 4 5 6	0 1 2 3 4 5 6

l.	Threw something at the other one.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
m	Pushed, grabbed, or shoved the other one.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
n.	Slapped the other one.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
o.	Kicked, bit, or hit with a fist.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
p.	Hit or tried to hit with something.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
q.	Beat up the other one.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
r.	Threatened with a knife or gun.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
s.	Used a knife or gun.	0 1 2 3 4 5 6	0 1 2 3 4 5 6
t.	Other: _____ _____	0 1 2 3 4 5 6	0 1 2 3 4 5 6

Multidimensional Anger Inventory (MAI)

Everybody gets angry from time to time. A number of statements that people have used to describe the times that they get angry are included below. Read each statement and circle the number to the right of the statement that best describes how it applies to you, from 1 (completely <u>undescriptive</u> of you) to 5 (completely <u>descriptive</u> of you). There are no right or wrong answers.

1	2	3	4	5
completely undescriptive of you	mostly undescriptive of you	partly descriptive and partly undescriptive	mostly descriptive of you	completely descriptive of you

1.   I tend to get angry more frequently than most people.   1 2 3 4 5

2.   Other people seem to get angrier than I do in similar circumstances.   1 2 3 4 5

3.   I harbour grudges that I don't tell anyone about.   1 2 3 4 5

4.   I try to get even when I'm angry with someone.   1 2 3 4 5

5.   I am secretly quite critical of others.   1 2 3 4 5

6.   It is easy to make me angry.   1 2 3 4 5

7.   When I am angry with someone, I let that person know.   1 2 3 4 5

8.   I have met many people who are supposed to be experts who are no better than I.   1 2 3 4 5

9.   Something makes me angry almost every day.   1 2 3 4 5

10.   I often feel angrier than I think I should.   1 2 3 4 5

11.   I feel guilty about expressing my anger.   1 2 3 4 5

12.   When I am angry with someone, I take it out on whoever is around.   1 2 3 4 5

13.   Some of my friends have habits that annoy and bother me very much.   1 2 3 4 5

14.   I am surprised at how often I feel angry.   1 2 3 4 5

1	2	3	4	5
completely undescriptive_of you	mostly undescriptive of you	partly descriptive and partly undescriptive	mostly descriptive of you	completely descriptive of you

15. Once I let people know that I am angry, I can put it out of my mind.　　1 2 3 4 5

16. People talk about me behind my back.　　1 2 3 4 5

17. At times, I feel angry for no specific reason.　　1 2 3 4 5

18. I can make myself angry about something in the past just by thinking about it.　　1 2 3 4 5

19. Even after I have expressed my anger, I have trouble forgetting about it.　　1 2 3 4 5

20. When I hide my anger from others, I think about it for a long time.　　1 2 3 4 5

21. People can bother me just by being around.　　1 2 3 4 5

22. When I get angry, I stay angry for hours.　　1 2 3 4 5

23. When I hide my anger from others, I forget about it pretty quickly.　　1 2 3 4 5

24. I try to talk over problems with people without letting them know I'm angry.　　1 2 3 4 5

25. When I get angry, I calm down faster than most people.　　1 2 3 4 5

26. I get so angry, I feel that I might lose control.　　1 2 3 4 5

27. If I let people see the way I feel, I'd be considered a hard person to get along with.　　1 2 3 4 5

28. I am on my guard with people who are friendlier than I expected.　　1 2 3 4 5

29. It's difficult for me to let people know I'm angry.　　1 2 3 4 5

1	2	3	4	5
completely undescriptive_of you	mostly undescriptive of you	partly descriptive and partly undescriptive	mostly descriptive of you	completely descriptive of you

30.   I get angry when:

a   someone lets me down   1 2 3 4 5

b   people are unfair   1 2 3 4 5

c   something blocks my plans   1 2 3 4 5

d   I am delayed   1 2 3 4 5

e   someone embarrasses me   1 2 3 4 5

f   I have to take orders from someone less capable than I   1 2 3 4 5

g   I have to work with incompetent people   1 2 3 4 5

h   I do something stupid   1 2 3 4 5

i   I am not given credit for something I have done   1 2 3 4 5

Psychological Maltreatment Inventory (PMI)

For each of the following statements please indicate how frequently <u>your partner</u> you did this to you during the last year by circling the appropriate number.

0	1	2	3	4	5
not applicable	never	rarely	occasionally	frequently	very frequently

1.	Put down my physical appearance.	0 1 2 3 4 5
2.	Insulted me or shamed me in front of others.	0 1 2 3 4 5
3.	Treated me like I was stupid.	0 1 2 3 4 5
4.	Was insensitive to my feelings.	0 1 2 3 4 5
5.	Told me I couldn't manage or take care of myself without him/her.	0 1 2 3 4 5
6.	Put down my care of the children.	0 1 2 3 4 5
7.	Criticized the way I took care of the house.	0 1 2 3 4 5
8.	Said something to spite me.	0 1 2 3 4 5
9.	Brought up something from the past to hurt me.	0 1 2 3 4 5
10.	Called me names.	0 1 2 3 4 5
11.	Swore at me.	0 1 2 3 4 5
12.	Yelled and screamed at me.	0 1 2 3 4 5
13.	Treated me like an inferior.	0 1 2 3 4 5
14.	Sulked or refused to talk about a problem.	0 1 2 3 4 5
15.	Stomped out of the house or yard during a disagreement.	0 1 2 3 4 5
16.	Gave me the silent treatment, or acted as if I wasn't there.	0 1 2 3 4 5
17.	Withheld affection from me.	0 1 2 3 4 5

0	1	2	3	4	5
not applicable	never	rarely	occasionally	frequently	very frequently

18. Did not talk to me about his/her feelings.   0 1 2 3 4 5

19. Was insensitive to my sexual needs and desires.   0 1 2 3 4 5

20. Demanded obedience to his/her whims.   0 1 2 3 4 5

21. Became upset if household work was not done when he/she thought it should be.   0 1 2 3 4 5

22. Acted like I was his/her personal servant.   0 1 2 3 4 5

23. Did not do a fair share of household tasks.   0 1 2 3 4 5

24. Did not do a fair share of child care.   0 1 2 3 4 5

25. Ordered me around.   0 1 2 3 4 5

26. Monitored my time and made me account for where I was.   0 1 2 3 4 5

27. Was stingy in giving me money.   0 1 2 3 4 5

28. Acted irresponsibly with our financial resources.   0 1 2 3 4 5

29. Did not contribute enough to supporting our family.   0 1 2 3 4 5

30. Used our money or made important financial decisions without talking to me about it.   0 1 2 3 4 5

31. Kept me from getting medical care that I needed.   0 1 2 3 4 5

32. Was jealous or suspicious of my friends.   0 1 2 3 4 5

33. Was jealous of friends who were of his/her sex.   0 1 2 3 4 5

34. Did not want me to go to school or other self-improvement activities.   0 1 2 3 4 5

35. Did not want me to socialize with my same sex friends.   0 1 2 3 4 5

36. Accused me of having an affair with another man/woman.   0 1 2 3 4 5

0	1	2	3	4	5
not applicable	never	rarely	occasionally	frequently	very frequently

37. Demanded that I stay home and take care of the children.　　0 1 2 3 4 5

38. Tried to keep me from seeing or talking to my family.　　0 1 2 3 4 5

39. Interfered in my relationships with other family members.　　0 1 2 3 4 5

40. Tried to keep me from doing things to help myself.　　0 1 2 3 4 5

41. Restricted my use of the car.　　0 1 2 3 4 5

42. Restricted my use of the telephone.　　0 1 2 3 4 5

43. Did not allow me to go out of the house when I wanted to go.　　0 1 2 3 4 5

44. Refused to let me work outside the home.　　0 1 2 3 4 5

45. Told me my feelings were irrational or crazy.　　0 1 2 3 4 5

46. Blamed me for his/her problems.　　0 1 2 3 4 5

47. Tried to turn our family, friends, and/or children against me.　　0 1 2 3 4 5

48. Blamed me for causing his/her violent behavior.　　0 1 2 3 4 5

49. Tried to make me feel like I was crazy.　　0 1 2 3 4 5

50. My partner's moods changed radically, from very calm to very angry, or vice versa.　　0 1 2 3 4 5

51. Blamed me when he/she was upset about something, even when it had nothing to do with me.　　0 1 2 3 4 5

52. Tried to convince my friends, family or children that I was crazy.　　0 1 2 3 4 5

53. Threatened to hurt himself/herself if I left him/her.　　0 1 2 3 4 5

54. Threatened to hurt himself/herself if I didn't do what he/she wanted me to do.　　0 1 2 3 4 5

0	1	2	3	4	5
not applicable	never	rarely	occasionally	frequently	very frequently

55. Threatened to have an affair with someone else.   0 1 2 3 4 5

56. Threatened to leave the relationship.   0 1 2 3 4 5

57. Threatened to take the children away from me.   0 1 2 3 4 5

58. Threatened to have me committed to a mental institution.   0 1 2 3 4 5

Recollections of Early Childrearing (EMBU)

Did your parents remain together during your childhood? Yes___ No___.

If "no," please indicate your age at the time of separation: ___ years old. Who did you then live with? Mother___ Father___ Other (specify) _____.

Beside each statement, please write in the number of the response listed below (1 - 4) that best describes how often the experience happened to you with your mother (or female guardian) and father (or male guardian) when you were growing up. If you had more than one mother/father figure, please answer for the persons who you feel played the most important role in your upbringing.

1	2	3	4
never occurred	occasionally occurred	often occurred	always occurred

	Father or Guardian	Mother or Guardian
1. My parent showed with words and gestures that he/she liked me.	1 2 3 4	1 2 3 4
2. My parent refused to speak to me for a long time if I had done anything silly (stupid).	1 2 3 4	1 2 3 4
3. My parent punished me even for small offenses.	1 2 3 4	1 2 3 4
4. I think that my parent wished I had been different in some way.	1 2 3 4	1 2 3 4
5. If I had done something foolish, I could go to my parent and make everything right by asking for his/her forgiveness (apologize).	1 2 3 4	1 2 3 4
6. I felt that my parent liked my brother(s) and/or sister(s) more than he/she liked me.	1 2 3 4	1 2 3 4
7. My parent treated me unjustly (badly) compared with how he/she treated my sister(s) and/or brother(s).	1 2 3 4	1 2 3 4
8. As a child I was physically punished or scolded in the presence of others.	1 2 3 4	1 2 3 4
9. If things went badly for me, I felt my parent tried to comfort and encourage me.	1 2 3 4	1 2 3 4

1	2	3	4
never occurred	occasionally occurred	often occurred	always occurred

	Father or Guardian	Mother or Guardian
10. My parent gave me more corporal (physical) punishment than I deserved.	1 2 3 4	1 2 3 4
11. My parent would get angry if I didn't help at home when I was asked to.	1 2 3 4	1 2 3 4
12. I felt that it was difficult to approach my parent.	1 2 3 4	1 2 3 4
13. My parent would narrate or say something about what I had said or done in front of others so that I felt ashamed.	1 2 3 4	1 2 3 4
14. My parent showed he/she was interested in my getting good marks.	1 2 3 4	1 2 3 4
15. If I had a difficult task in front of me, I felt support from my parent.	1 2 3 4	1 2 3 4
16. I was treated as a the "black sheep" or "scapegoat" of the family.	1 2 3 4	1 2 3 4
17. My parent wished I had been like somebody else.	1 2 3 4	1 2 3 4
18. I felt my parent thought it was *my* fault when he/she was unhappy.	1 2 3 4	1 2 3 4
19. My parent showed me that he/she was fond of me.	1 2 3 4	1 2 3 4
20. I think my parent respected my opinions.	1 2 3 4	1 2 3 4
21. I felt that my parent wanted to be with me.	1 2 3 4	1 2 3 4
22. I think my parent was mean and grudging toward me.	1 2 3 4	1 2 3 4
23. I think my parent tried to make my adolescence stimulating, interesting, and instructive (for instance, by giving me good books, arranging for me to go to camp, taking me to clubs).	1 2 3 4	1 2 3 4
24. My parent praised me.	1 2 3 4	1 2 3 4

1 never occurred	2 occasionally occurred	3 often occurred	4 always occurred		

		Father or Guardian	Mother or Guardian
25.	I could seek comfort from my parent if I was sad.	1 2 3 4	1 2 3 4
26.	I was punished by my parent without having done anything.	1 2 3 4	1 2 3 4
27.	My parent allowed me to do the same things my friends did.	1 2 3 4	1 2 3 4
28.	My parent said he/she did not approve of my behaviour at home.	1 2 3 4	1 2 3 4
29.	My parent criticized me and told me how lazy and useless I was in front of others.	1 2 3 4	1 2 3 4
30.	Of my sister(s) and brother(s), I was the one my parent blamed if anything happened.	1 2 3 4	1 2 3 4
31.	My parent was abrupt with me.	1 2 3 4	1 2 3 4
32.	My parent would punish me hard, even for trifles (little things).	1 2 3 4	1 2 3 4
33.	My parent beat me for no reason.	1 2 3 4	1 2 3 4
34.	My parent showed an interest in my interests and hobbies.	1 2 3 4	1 2 3 4
35.	My parent treated me in such a way that I felt ashamed.	1 2 3 4	1 2 3 4
36.	My parent let my sister(s) and brother(s) have things that I was not allowed to have.	1 2 3 4	1 2 3 4
37.	I was beaten by my parent.	1 2 3 4	1 2 3 4
38.	I felt that warmth and tenderness existed between me and my parent.	1 2 3 4	1 2 3 4
39.	My parent respected the fact that I had other opinions than had he/she.	1 2 3 4	1 2 3 4

1 never occurred	2 occasionally occurred	3 often occurred	4 always occurred

	Father or Guardian	Mother or Guardian
40. My parent would be angry with me without letting me know why.	1 2 3 4	1 2 3 4
41. My parent let me go to bed without food.	1 2 3 4	1 2 3 4
42. I felt that my parent was proud when I succeeded in something I had undertaken.	1 2 3 4	1 2 3 4
43. My parent hugged me.	1 2 3 4	1 2 3 4

Relationship Scales Questionnaire (RSQ)

Please read each of the following statements and rate the extent to which it describes your feelings about <u>romantic relationships</u> by circling the appropriate number. Think about all of your romantic relationships, past and present, and respond in terms of how you generally feel in these relationships.

Not at all like me like me	Somewhat like me			Very much
1	2	3	4	5

1.	I find it difficult to depend on other people.	1	2	3	4	5
2.	It is very important to me to feel independent.	1	2	3	4	5
3.	I find it easy to get emotionally close to others.	1	2	3	4	5
4.	I want to merge completely with another person.	1	2	3	4	5
5.	I worry that I will be hurt if I allow myself to become too close to others.	1	2	3	4	5
6.	I am comfortable without close emotional relationships.	1	2	3	4	5
7.	I am not sure that I can always depend on others to be there when I need them.	1	2	3	4	5
8.	I want to be completely emotionally intimate with others.	1	2	3	4	5
9.	I worry about being alone.	1	2	3	4	5
10.	I am comfortable depending on other people.	1	2	3	4	5
11.	I often worry that romantic partners don't really love me.	1	2	3	4	5
12.	I find it difficult to trust others completely.	1	2	3	4	5
13.	I worry about others getting too close to me.	1	2	3	4	5
14.	I want emotionally close relationships.	1	2	3	4	5
15.	I am comfortable having other people depend on me.	1	2	3	4	5
16.	I worry that others don't value me as much as I value them.	1	2	3	4	5
17.	People are never there when you need them.	1	2	3	4	5

Not at all like me like me		Somewhat like me		Very much
1	2	3	4	5

18. My desire to merge completely sometimes scares people away.   1   2   3   4   5

19. It is very important to me to feel self-sufficient.   1   2   3   4   5

20. I am nervous when anyone gets too close to me.   1   2   3   4   5

21. I often worry that romantic partners won't want to stay with me.   1   2   3   4   5

22. I prefer not to have other people depend on me.   1   2   3   4   5

23. I worry about being abandoned.   1   2   3   4   5

24. I am somewhat uncomfortable being close to others.   1   2   3   4   5

25. I find that others are reluctant to get as close as I would like.   1   2   3   4   5

26. I prefer not to depend on others.   1   2   3   4   5

27. I know that others will be there when I need them.   1   2   3   4   5

28. I worry about having others not accept me.   1   2   3   4   5

29. Romantic partners often want me to be closer than I feel comfortable being.   1   2   3   4   5

30. I find it relatively easy to get close to others.   1   2   3   4   5

Trauma Symptoms Checklist (TSC-33)

How often have you experienced each of the following in the last two months? (Please circle the appropriate number.)

0	1	2	3	
never	occasionally	fairly often	very often	

		0	1	2	3
1.	Insomnia (trouble getting to sleep)	0	1	2	3
2.	Restless sleep.	0	1	2	3
3.	Nightmares	0	1	2	3
4.	Waking up early in the morning and can't get back to sleep.	0	1	2	3
5.	Weight loss (without dieting).	0	1	2	3
6.	Feeling isolated from others.	0	1	2	3
7.	Loneliness.	0	1	2	3
8.	Low sex drive.	0	1	2	3
9.	Sadness.	0	1	2	3
10.	"Flashbacks" (sudden, vivid, distracting memories)	0	1	2	3
11.	"Spacing out" (going away in your mind)	0	1	2	3
12.	Headaches	0	1	2	3
13.	Stomach problems	0	1	2	3
14.	Uncontrollable crying	0	1	2	3
15.	Anxiety attacks	0	1	2	3
16.	Trouble controlling temper	0	1	2	3
17.	Trouble getting along with others	0	1	2	3
18.	Dizziness	0	1	2	3
19.	Passing out	0	1	2	3
20.	Desire to physically hurt yourself	0	1	2	3

0	1	2	3	
never	occasionally	fairly often	very often	

21.	Desire to physically hurt others.	0	1	2	3
22.	Sexual problems	0	1	2	3
23.	Sexual overactivity	0	1	2	3
24.	Fear of men	0	1	2	3
25.	Fear of women	0	1	2	3
26.	Unnecessary or over-frequent washing	0	1	2	3
27.	Feelings of inferiority	0	1	2	3
28.	Feelings of guilt	0	1	2	3
29.	Feelings that things are "unreal"	0	1	2	3
30.	Memory problems	0	1	2	3
31.	Feelings that you are not always in your body	0	1	2	3
32.	Feeling tense all the time	0	1	2	3
33.	Having trouble breathing	0	1	2	3

APPENDIX C

Ethical approval from the University of British Columbia Behavioural Research Ethics Board

![UBC]
The University of British Columbia
Office of Research Services and Administration
Behavioural Research Ethics Board

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Certificate of Approval

PRINCIPAL INVESTIGATOR	DEPARTMENT	NUMBER
Dutton, D.G.	Psychology	**B03-0693**

INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT
UBC Campus ,

CO-INVESTIGATORS:
Clift, Robert, Psychology; Lipovsky, Lindsay, Psychology; Winters, Jason, Psychology

SPONSORING AGENCIES
Social Sciences & Humanities Research Council

TITLE :
Stalking and Intimate Abuse Perpetration in Young Adults

APPROVAL DATE	TERM (YEARS)	AMENDMENT:	AMENDMENT APPROVED:
05-08-24 (yr/mo/day)	1	Oct. 5 & 11, 2005, Consent forms / Nov. 1, 2005, Procedures	**NOV - 8 2005**

CERTIFICATION:
The protocol describing the above-named project has been reviewed by the Committee and the experimental procedures were found to be acceptable on ethical grounds for research involving human subjects.

Approved on behalf of the Behavioural Research Ethics Board
by one of the following:
Dr. Peter Suedfeld, Chair,
Dr. Susan Rowley, Associate Chair

This Certificate of Approval is valid for the above term provided there is no change in the experimental procedures