Narcissism and Intimate Partner Violence: 
An Establishment of the Link and Investigation of Multiple Potential Mediators

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Samantha K. Fields
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ABSTRACT
Narcissism and Intimate Partner Violence:
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Intimate partner violence (IPV) involves physical, psychological, and/or emotional violence within intimate (e.g., dating) relationships. In this thesis, I examined narcissism as a predictor of IPV. I used an offensive- and defensive-trait framework to come up with 10 potential mediator variables that often typify narcissism and underlie IPV. Correlation analyses confirmed the expected link between narcissism and IPV. Subsequent bootstrapping mediation analysis of IPV-frequency revealed significant indirect effects for 2 mediators - social dominance orientation and the hostile attribution bias-based tendency to retaliate in the face of ambiguous but potentially malevolent social interactions. Bootstrapping analysis of IPV-prevalence also revealed an additional significant indirect effect for hypercompetitiveness. In both bootstrapping analyses the mediator variables only provided partial mediation of the narcissism-to-IPV link. In the discussion I focus on the implications for IPV perpetration and research, including avenues for future research and potential interventions for IPV centered on mitigating narcissism.
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CHAPTER 1
INTRODUCTION

Unfortunately, all too many romantic relationships include physical, sexual, and/or psychological abuse, a pervasive problem labeled intimate partner violence (IPV). IPV’s negative effects extend beyond the individuals in these relationships, as caring friends and family members often are brought into the fray. Likewise, community personnel, including those in law enforcement, the greater criminal justice system, and the medical community, all expend great amounts of resources for prosecuting perpetrators, victim recovery, and curtailing IPV’s occurrence. Indeed, according to the Centers for Disease Control and Prevention (CDC, 2003), millions of injuries are treated each year from intimate partner rapes and physical assaults. Furthermore, though IPV is generally viewed as a male perpetrated crime, male and female perpetration rates are about equal (Straus, 2004). In light of the severity of IPV for victims and the costs to society, it is imperative to identify traits that may underlie the perpetration of IPV.

Many theories are suggested as to why IPV occurs. For example, some theories explore social and cultural influences (e.g., Bandura’s [1978] social learning theory and Markowitz’s [2001] intergenerational transmission theory) while others look toward an overarching model for aggression (e.g., Anderson & Bushman’s [2002] general aggression model). However, neither specific nor general models are able to fully explain IPV, and therefore, a need exists to investigate who perpetrates violence against an intimate partner. Personality disorder research (Costa & Babock, 2008; Ross & Babock, 2009) has attempted this, but because there is a discrepancy between the low prevalence of personality disorders and the high prevalence of IPV, there is a necessity for further investigation.

In this thesis, and in the tradition of linking personality predictors to IPV, I examined the trait of narcissism and the extent to which narcissism scores related to IPV. Note, however,
that I am not looking at narcissism from a clinical diagnostic perspective, but instead I am using the broader personality construct of narcissism (Raskin & Terry, 1988), which shares central features like antagonism with clinical narcissism (Miller & Campbell, 2008) but occurs as a continuous variable without categorical cutpoints (Foster & Campbell, 2007). Thus, I follow standard practice in using the term “narcissists” to denote individuals who score high in trait narcissism and not those who have received any formal clinical diagnosis of narcissistic personality disorder (Miller & Campbell, 2010). Also, I examined a number of variables that either theoretically or empirically relate to narcissism and IPV and that might explain why narcissists perpetrate acts of IPV. Before describing the study where I examined this problem, I will first provide a review of the literature on IPV, narcissism, and how I expected these variables to relate.
CHAPTER 2
INTIMATE PARTNER VIOLENCE

What is Intimate Partner Violence?

Intimate partner violence (IPV) is a term that many may presume to understand given its usage in the popular press and its ostensible self-explanatory meaning. However, within psychology and related fields, the phrase is still somewhat vague because of inconsistent operationalization among researchers (Lewis & Fremouw, 2001). For instance, some researchers interchange the term “intimate partner violence” with “dating violence” (Jackson, 1999; Lewis & Fremouw, 2001; Sugarman & Hotaling, 1989) or “courtship violence” (Laner, 1986, 1989; Makepeace, 1987). The lack of clear operationalization can be a problem. Sugarman and Hotaling (1989), for example, defined dating violence as “the use or threat of physical force or restraint carried out with the intent of causing pain or injury to another” (p.5). While concise, this definition only includes physical and possibly sexual assault, without regard for other manifestations of abuse that may be important to fully understand IPV. Other researchers, such as Saltzman, Fanslow, McMahon, and Shelley (2002) use the phrase IPV but define it as comprising four main components: 1) physical violence; 2) sexual violence; 3) threats; and 4) psychological violence. Most recently, the CDC (2010) took a somewhat different approach to defining IPV. Though they adhered to the IPV terminology, the CDC did not include “threats” as a unique component, instead couching it within psychological or emotional harm. They did, however, convey an appreciation for the victim’s perspective by defining IPV as “physical, sexual, or psychological harm by a current or former partner or spouse” (2010, para. 1). Straus and colleagues (e.g., 1973, 2007; Straus & Douglas, 2004; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) do not define IPV directly, instead using the manner in which people manage interpersonal conflicts as the window into IPV. The Revised Conflict Tactic Scales (CTS2) that
Straus devised with colleagues (Straus et al., 1996) is the most widely used measure of IPV (Straus, 2007). Straus et al. (1996) delineate perpetrators from victims, and like others (e.g., Saltzman et al., 2002), they include physical aggression, psychological harm, and sexual coercion as components of IPV (broadly defined). However, these authors measure “injury” as a distinct category of IPV (separate from physical aggression or sexual coercion) and also discuss other, non-IPV coping strategies to examine how people handle interpersonal conflict (“negotiation”). Inherent to all of these definitions is the theme of violence, where one relationship partner causes harm to the other partner, though harm can come in different forms. Most researchers (e.g., Saltzman et al., 2002) also agree that an “intimate partner” may be a current spouse, nonmarried partner, dating partner, boyfriend or girlfriend, or former partner (married or otherwise). However, IPV can occur outside of a “dating” relationship and without sexual activity (e.g., a close friend may commit an act of violence) (CDC, 2010).

**Manifestations of Violence and Harm**

Researchers generally consider physical violence to be violence that is nonsexual in nature, including (but not limited to) pushing, shoving, throwing, choking, slapping, punching, and causing harm via an external object or weapon. Sexual violence includes the use of physical force to make another person engage in any sexual act against his or her will. Of course, acts of IPV may include both physical and sexual violence. Threats involve the use of words or weapons to suggest the intent of causing death, harm, or injury. Finally, psychological or emotional violence manifests itself in two interrelated ways. As noted by Saltzman et al. (2002), one manifestation includes threats and verbal derogation, including attempts to cause humiliation, shame, or embarrassment, or in some other way diminish the victim (e.g., telling the victim he or she is “stupid” or “ugly”). The other form of psychological or emotional violence occurs by socially
isolating the victim from outside social contacts (e.g., friends and family). Not only is the limitation of positive contact with others psychologically harmful, it limits the likelihood that a social contact might personally report the violence, encourage the victim to do so, or leave the relationship all together (Saltzman et al., 2002).

In addition, there are different types of violence in terms of the direction it is perpetrated. “Common couple violence” or “situational couple violence” is considered mutual or bidirectional. That is, both parties commit acts of violence against one another. Researchers (Johnson, 1995; Johnson & Leone, 2005; Renner & Hitney, 2010) consider common violence to occur when a conflict between partners escalates and leads to “minor” forms of violence. This type of violence rarely results in more severe forms of violence. Johnson (1995) stated that common violence is motivated by the need to control a given situation more so than the desire to control the other person in the relationship. In this type of violence, one or both individuals may use violence either because both resort to violence or because one person in the relationship is using violence in an act of self-defense. Most reported cases of IPV represent acts of common violence (Johnson, 1995; Renner & Hitney, 2010).

In contrast, one-sided or unidirectional violence is called “intimate terrorism” or “patriarchal terrorism”. As the latter label suggests, this form of violence most often occurs by a male against a female. It usually involves dominance-based forms of aggression and carries the most severe physical and psychological outcomes for victims (Johnson, 1995; Renner & Hitney, 2010). Whereas common violence often represents an emotion driven response to immediate situations or interactions, intimate terrorism represents deliberate behaviors (e.g., isolation, threats, intimidation, etc.) used as a means of control over the victim. As Johnson (1995) notes, perpetrators gain control through the “systematic use of violence, economic subordination, threats, isolation, and other control tactics” (p. 284). Generally, acts of intimate
terrorism may be relatively minor early on, but they usually increase in seriousness over time and this escalation occurs until the perpetrator is satisfied that the partner is fully subdued.

Johnson and Leone (2005) stated that both intimate terrorism and common violence can range from pushing and shoving to life-threatening attacks or homicide. Both types vary with respect to frequency and regularity, though acts of common violence generally stem from conflicts that partners never resolve, and, therefore, one or both members of the relationship continually choose to resort to violence. Renner and Whitley (2010) found occurrence rates to be 54.3% for bidirectional violence and between 21% and 24% for those reporting unidirectional violence.

**Prevalence of Intimate Partner Violence**

Despite researchers’ best efforts, prevalence rates of IPV are uncertain and often erroneous for at least two reasons, one of which resides at the level of the victims and the other at the level of the researchers. One, while some statistics are fairly concrete (e.g., a 2007 Bureau of Justice Statistics report documented 329 male and 1,181 female intimate partner murder victims in 2005), many data are limited by IPV incidents that victims (or others) reported. Unfortunately, many IPV incidents simply go unreported, which Gracia (2004) metaphorically dubbed the “iceberg” of domestic violence. Gracia states that prevalence estimates only capture cases with extremely harmful and injurious forms of violence that generally send a victim of IPV to hospitals, law enforcement offices, and shelters. Thus, the public only “sees” the “tip of the iceberg”; the vast majority of events, sadly, are submerged and invisible to the public eye. Gracia estimates that about 25% of the population is a victim of IPV, but 15% to 22.5% do not report the violence. Some reasons for not reporting may include embarrassment, victim blaming, or fear of retaliation (Gracia, 2004). Other potential reasons could be that both parties committed acts
of IPV (see “common violence” above) or victims lacking knowledge about how and where to report incidents.

Two, as noted by Jackson (1999), inconsistencies across researchers contribute to the variance among IPV prevalence rates. Prevalence rates can vary quite drastically depending on the operational definition of IPV, the specific form(s) of violence included (i.e., physical, sexual, psychological, or emotional), the population from which the sample was drawn, as well as where and when the study occurred. In a review of dating violence, Lewis and Fremouw (2001) cited a wide range of prevalence rates from 9% (Roscoe & Callahan, 1985), to 35% and 38% in the middle range (Arias, Samios, & O’Leary, 1987; O’keefe, Brockopp, & Chew, 1986), and up to 65% at the highest end (Laner, 1983). Of course, as noted by Lewis and Fremouw (2001), each study differed in the way IPV was operationalized, from only including physical violence (e.g., Roscoe & Callahan, 1985; Samios & O’Leary, 1987) to including both physical and verbal threats (Laner, 1983). It should be noted that all prevalence rates cited by Lewis and Fremouw (2001) were at least 20 years old at the time of publication.

More recently, Coker, Smith, McKeown, and King (2002) examined IPV prevalence by surveying women who sought treatment at a family practice medical clinic in Columbia, SC, USA. Coker et al. (2002) examined only women with some sort of insurance (e.g., Medicaid, private), 18-65 years old, and currently involved in a sexually intimate, heterosexual relationship for at least three months. These researchers classified acts of IPV as physical, sexual, or perceived emotional abuse. Alarmingly, 55.1% of respondents experienced IPV. Only 9.8% listed physical assault as the only form of IPV experienced, while 77.3% of the women experienced both physical and sexual assault. Those experiencing psychological or emotional abuse made up 22.7%.
In light of this broad range of prevalence estimates, Breiding, Black, and Ryan (2008b) conducted a study of prevalence rates from 18 U.S. States and Territories using data collected from the CDC-sponsored Behavioral Risk Factor Surveillance System (BRFSS; 2005). Breiding and colleagues (2008b) found that IPV in the form of physical or sexual violence occurred in roughly one-in-four women (23.6%) and one-in-seven men (11.5%). Note that while these lifetime prevalence rates are significantly less than other reports (e.g., Laner, 1983), Breiding, Black, and Ryan’s (2008b) rates may have increased with the inclusion of ‘threats’ and ‘psychological/emotional violence’ as forms of IPV.

Even if only 9% of the population experiences IPV in some form (Coker et al., 2002), based on the US Census’s Bureau (August, 2011) population estimate of 312 million people, this would equate to approximately 28 million US citizens. In other words, 28 million will be the target of threats, physical or sexual assault, and/or psychological or emotional violence by a relationship partner, with death an all-too-frequent outcome. In short, finding means of curtailing IPV is a worthy area of study.

Who is Involved and Whom Does it Affect?

Gender differences. Rooted in feminist theory, many studies of IPV (Dobash & Dobash, 1977; Gidycz, Warkentin, & Orchowski, 2007; Tilley & Brackley, 2005; Walker, 1979) have focused on males as the perpetrators and women as the victims. Other studies have shown that both males and females report being the victim as well as the perpetrator (Breiding et al., 2008b; Straus, 2004). Sometimes the numbers reported can be somewhat confusing. Hite and Koss (1991), for instance, reported that 39% of males and only 32% of females indicated being the victim of IPV, whereas 37% of males and 35% of females indicate perpetrating acts of IPV. Is it really the case that the risk of being an IPV victim is 7% greater for males than females? Are females really only 2% less likely than males to commit acts of IPV?
One explanation to consider comes from Renner and Whitney (2010), who emphasize that most of the studies showing approximately equal rates of victimization and perpetration between males and females (like White & Koss, 1991) include only low-level physical violence (e.g. shoving or hitting) and do not consider relevant rates from crime data. They argue that if the crime data would be included, females’ IPV risk estimates increase greatly for all forms of IPV (i.e., physical, sexual, and psychological). In support, Saunders (2002) notes that among IPV victims, women’s injuries generally are more severe than men (see also Arias & Johnson, 1989). Furthermore, many acts of female IPV perpetration are instead acts of retaliation driven by immediate fear (Morse, 1995) and the necessity for self-defense (Cascardi & Vivian, 1995).

Another reason for some of the surprising rates of IPV may be due to expected gender roles, and the perceived social acceptance of victimization, on one hand, or the use of violence, on the other (McFarlane, Wilson, Malecha, & Lemmey, 2000). Due to factors such as average physical structure, it is not a deviation from traditional, gender-based expectancies for a female to become a victim, whereas traditional male gender roles equate victimhood with weakness. Indeed, males may not report victimization because of social stereotypes and fear of being ridiculed or embarrassed (McFarlane et al., 2000). Likewise, women who retaliate against their perpetrators often are lauded for their bravery and willingness to fight, whereas male violence against a female is generally not cast in a positive light, even if it is a means of self-defense (Bookwala, Frieze, Smith, & Ryan, 1992). Bethke and DeJoy (1993), for example, found that survey respondents rated a hypothetical male perpetrator who slapped a female victim significantly more negatively than a hypothetical female who committed the same act. Thus, because people associate less stigma with female IPV victimhood or female IPV perpetration, the rates of males’ IPV perpetration and victimization may be grossly underreported.
Finally, traditional male gender roles equate “manhood” with traits such as “strength” and tendencies towards aggression. Such a mindset leads many male perpetrators to decrease the likelihood of associating aggressive behavior with that of “violence” to minimize the severity of their aggression and in many cases to blame the victim for its occurrence (Scott & Straus, 2007).

**Other demographics.** In a review of IPV literature, Lewis and Fremouw (2001) point out that researchers have not consistently looked at victims and perpetrators separately when examining demographic differences, which makes it difficult to find consistent differences in demographic characteristics that pinpoint IPV perpetration. Evidence of their point can be seen by the various studies reporting demographic differences in ethnicity. Lane and Gwartney-Gibbs (1985), for example, reported that IPV rates are higher in Caucasians than among ethnic minority groups, whereas White and Koss (1991) found no differences between Caucasians and minorities. Still others have found that there is a higher incidence of reports of IPV from African Americans than Caucasians (Lewis & Fremouw, 2001; Makepeace, 1987; McFarlane et al., 2000; O’Keefe, 1997; Renner & Whitnyc, 2010).

Despite difficulties in finding consistent demographic predictors of IPV, two variables seem relevant across studies: socioeconomic status (SES) and educational level. The role of socioeconomic status (SES) has remained a fairly stable finding across all IPV research. IPV occurs significantly more frequently among those considered low SES to all other SES groups. As SES increases, rates of IPV generally decrease (Cunradi, Caetana, & Schafer, 2002).

On the surface, it may also seem like differences in SES would account for differences in education level. However, the role of education level for IPV is not a simple one but instead requires an understanding of sex differences with respect to absolute educational level. In a literature review of self-esteem and aggression, Baumeister et al. (1996) found that across a
majority of studies that had examined education level and IPV, violence was generally perpetrated by the male. To the extent that education level predicted IPV, it occurred when the female had a higher level of education than the male in the relationship.

**Where Does Intimate Partner Violence Occur?**

Rates of IPV prevalence are often cited as being markedly higher in rural areas than nonrural areas (Spencer & Bryant, 2002; Vézina & Hérbert, 2007). Breiding, Ziemboski, and Black (2009), however, reported statistics from rural areas and found no significant differences between rural and nonrural areas. Despite the mixed findings, little research on IPV has been conducted in strictly rural areas, and Breiding et al. (2009) provide three reasons for conflicting findings in their study on the prevalence rates of IPV in rural settings. One, the culture of rural communities emphasizes a tightly knit, but still independent lifestyle that places a value on privacy and self-efficacy. This sense of privacy and feelings of being able to handle things on one's own could prevent IPV victims from seeking help from outside sources. Two, members of rural communities often hold to traditional (or stereotypical) gender-roles, which provide a more socially accepting environment for IPV to take place than in places where gender roles have blurred. Three, the prevalence of poverty is greater in rural communities than other areas, which may place additional stress on relationships and limit victims’ options for leaving abusive settings (Breiding et al., 2009).

On the other hand, some studies (Lane & Gwartney-Gibbs, 1985; Makepeace, 1987) have reported higher prevalence rates of IPV in urban or nonrural areas than in rural areas. Makepeace (1987) suggested that the increased opportunities for medical treatment and access to law enforcement in urban areas may explain the difference in reporting rates. He notes that relative to rural areas, the access to medical and law personnel makes it easier to report incidents of IPV in urban areas and increases the likelihood that people will do so.
Effects of IPV

IPV affects the physical as well as psychological well-being of all who are involved. Most research, however, has examined these effects only from the perspective of the victim. Aside from the physical marks from IPV (e.g., cuts, bruises, and broken bones), physical violence can have other harmful health effects (Breiding, Black, & Ryan, 2008a). Low birth weights, circulatory conditions, gastrointestinal problems, and central nervous system disorders are just a few examples of other possible harmful physical outcomes (Crofford, 2007; Roberts, Auinger, & Klein, 2005; Roberts, Klein & Fisher, 2003). In addition, psychological effects may be longer lasting and more damaging than physical effects and they can occur from all types of IPV. Such effects include depression, anxiety, posttraumatic stress disorder, increases in the likelihood of committing self-harm, and suicide ideation (Chan, Straus, Brownridge, Tiwari, & Leung, 2008; Coker et al., 2002). Furthermore, IPV victims are prone to take part in a number of negative outcome health behaviors such as engaging in risky behaviors (e.g. binge drinking, substance abuse, multiple sex partners) and eating disorders (CDC, 2003; Roberts, Auinger, & Klein, 2005; Silverman, Raj, Mucci, & Hathaway, 2001).

IPV also affects those who are not immediately involved. The social and financial costs to the healthcare system alone are staggering. The CDC (2003), for instance, reported that the healthcare costs of IPV in 1995 exceeded $5.8 billion, including approximately $4.1 billion for medical and mental health care of victims. These reports are limited to costs associated with IPV acts committed against women, and they do not include the costs incurred within the criminal justice system; therefore, these figures likely grossly underestimate the total costs of IPV that would arise with a tally of legal (judicial) costs and the addition of male victims into the equation.
Rivara et al. (2007) found that compared to those with no exposure to IPV, individuals exposed to IPV in some form (as a victim, perpetrator, family member) paid 19% ($439) higher annual costs for health care. More recently, Fishman, Bonomi, Anderson, Reid, and Rivara (2010) tracked IPV victims for a period of 10 years following IPV exposure and compared their healthcare costs to non-IPV victims. In the first year, Fishman et al. found that people exposed to IPV paid $585 more in annual healthcare costs than those who had never experienced IPV. This significant difference in cost continued for 3 to 4 years following the end of IPV exposure, and it was not until the fifth year that the healthcare costs between the two groups began to equal out. Based on the financial costs alone, research to assess risk factors for IPV and prevent its perpetration is of extreme importance.

**Situational or Dispositional Factors That May Influence IPV**

A number of situational or dispositional factors have been identified as relevant for understanding IPV. Rejection, substance use, and general aggression, for instance, have all been linked to IPV perpetration. I discuss these below.

**Rejection.** People have a need to belong (Leary, 1999; Ryan & Deci, 2000), and should this need be thwarted, they may experience one of many physical and psychological problems. For instance, some people become physically sick, they may experience depression or other forms of mental illness, and they may engage in maladaptive behaviors to remedy the negative emotions associated with not feeling a sense of belongingness (Baumeister & Leary, 1995). Leary, Twenge, and Quinlivan (2006) observe that one type of maladaptive behavior resulting from rejection is aggression. A person asked out for a date, for instance, will feel relationally valued. If accepted, the person who asked is able to feel relationally valued, as well, because the positive reply affirms the importance of the relationship. On the other hand, being told ‘no’ (that is, being rejected) is relationally devaluing and as such, usually leads to negative emotions like
sadness and anger. Not all responses are inherently negative to the extent that the rejected party takes steps, like bathing perhaps, to increase the likelihood that he or she avoid rejection in the future. However, many anger-related responses often turn into aggressive outbursts in some form, including acts of IPV (Baumeister & Leary, 1995). In fact, Makepeace (1989) noted that in dating relationships, 15% of violence was a result of rejection, and for couples living together, rejection accounted for 11% of violent acts.

Leary, Twenge, and Quinlivan (2006) state that the sting of rejection occurs because it threatens people's perceptions of being in control. Thus, aggression as a response to rejection may be a means of regaining or reestablishing control. Aggressive behavior might intimidate the partner in the relationship into not leaving, "show" that the individual is, in fact, a person of worth and should not be rejected or ignored, or it might be a "warning" to others that rejection will bring about negative consequences. Aggression does not always occur against the person rejecting. Instead, some people exhibit displaced aggression in which they aggress toward a bystander or third party who is unassociated with the rejection. Martinez, Zeichner, Reidy, and Miller (2008), for example, found that narcissists, who because of their grandiose self-view are especially sensitive to rejection, were especially prone to engage in displaced aggression following rejection-relevant, negative feedback.

Therefore, IPV could occur due to rejection either as a means of direct assault on a rejecting partner or it could manifest as a form of displaced aggression, where the perpetrator may have experienced rejection-relevant information (e.g., being turned down for a job) but displaced the aggressive outburst on the innocent partner. These factors may be particularly relevant for those who are especially sensitive to being rejected.

Substance use. A great deal of research has investigated the link between alcohol and drug use and the perpetration of IPV (Brookoff, O'Brien, Cook, Thompson, & Williams; 1997;
Bushman, 1997; Feingold, Kerr, & Capaldi, 2008; Graham, Bernards, Wilsnack, & Gmel, 2011; Stuart et al., 2008). According to the U.S. Department of Health and Human Services (2001 as cited in Stuart et al., 2008) both IPV perpetrators and victims are more likely than people not exposed to IPV to abuse illegal drugs. Brookoff et al. (1997) examined police responses to IPV calls, and found that 92% involved the use of alcohol or drugs on the day of the incident.

Researchers have offered a number of different theories to explain why substance abuse links to IPV so strongly. For example, Collins and Messerschmidt (1993) described two different theories or hypotheses to explain why substance abuse may increase the perpetration of IPV. The first they called the acute effects hypothesis that suggests that using or abusing substances (e.g., alcohol) lowers individuals’ inhibitions and increases the likelihood that IPV may occur. Collins and Messerschmidt also described the problem syndrome hypothesis that suggests that a clustering of personal problems and issues, instead of one, single factor is what leads to IPV. For example, an individual who has a history of substance abuse-related problems (e.g., DUI’s, arrests, job and/or school issues) is more likely to be involved in violent relationships than someone with no history of substance abuse and who fully abstains from their use. In support of the problem syndrome theory, Collins and Messerschmidt note that men with alcohol problems are two-to-four times more likely than those who have no alcohol problems to perpetrate IPV; likewise, women with alcohol problems are two times more likely than women with no alcohol problems to commit acts of IPV.

Brookoff et al. (1997) suggest another theory for the link between substance abuse and IPV that stems from the acute effects hypothesis. Brookoff et al. write that substance abuse lowers inhibitions, but they offer a sociological twist by suggesting that substance-induced disinhibition is considered more socially acceptable than disinhibition without a substance, because a person can assign “blame” for poor judgment and inappropriate behavior to the
substance. In other words, the perpetration of IPV becomes more socially acceptable as the use of alcohol or drugs allows for a shift of responsibility from the individual to the substance itself.

Collectively, these theories resonate with the findings reported by Graham et al. (2011), who found that severity of violence was higher when one or both partners had been drinking, regardless of gender (where they found no differences). Incidents that involved only a female drinking were rare; cases in which males were the only partner drinking were more common. However, usually IPV occurred subsequent to situations in which both males and females were drinking. One explanation of violence occurring when both relationship partners drink alcohol is that it creates a situation in which both people’s emotions and thought processes are “uncontrollable” due to the substance, which fosters an environment for IPV and allows conflict to spiral out of control.

These theories do not address how the severity of substance abuse may relate to IPV or the possibility that substance abuse may relate to IPV differently based on the type of substance used. Feingold et al. (2008) examined these issues by looking at multi-substance usage (i.e., polydrug use) from data collected from a couples study associated with the Oregon Youth Study, which followed males and their romantic partners every 2 to 4 years from their late teens into their late twenties. Feingold et al. included nicotine, alcohol, cannabis, amphetamine, hallucinogen, cocaine, opiate, and sedative use as markers of substance abuse that could relate to IPV perpetration. IPV was associated with the abuse of all substances except sedatives, and each substance equally predicted acts of IPV-relevant aggression and injuries related to IPV. However, Feingold et al. found no difference in IPV perpetration between men who only abused alcohol and men who did not abuse any substance.

**Aggression and related factors.** To the extent that we can define IPV as a form of aggression, several models have examined the potential pathways that might account for the
perpetration of IPV. Psychopathy, for instance, is characterized by Cleckley (1941/1982) as a lack of guilt, callousness, egocentricity, and low anxiety proneness. Some researchers (Costa & Babock, 2008; Ross & Babock, 2009) have looked towards psychopathy as a characteristic that may lend itself to IPV perpetration, but few have found consistent evidence of a causal relationship. Furthermore, due to the low prevalence of diagnosed psychopathy or personality disorders within the general population (1-3%; APA, 2000) and the high prevalence of IPV, it seems that this model does not lend much explanatory power to the perpetration of IPV.

Another model holds to social learning or intergenerational transmission whereby IPV is a learned behavior. Bandura’s (1978) social learning theory (SLT) suggests that aggressive behavior is learned just as any other behavior, through direct experience or observational learning. Therefore, if a child grows up in an environment of violence (either as the observer or the victim) he or she, too, will perpetuate this behavior in his or her own relationships later in life. Intergenerational transmission theory (ITT or family of origin theory) takes the perspective of the family unit, and likewise holds that child abuse victimhood may be a risk factor for the perpetuation of IPV in later relationships (Lewis & Fremouw, 2001; Laner & Thompson, 1982). Despite the intuitive appeal of these theories, research to support them for IPV has been somewhat inconsistent. O’Keefe (1997, 1998) found no evidence linking child abuse victimhood to later IPV perpetration for either males or females in one study (1997) but found evidence for this link in a later study, but only for females (1998).

Instead of focusing on developmental aspects per se, another possibility is to examine IPV with respect to how people use aggression, that is, either reactively or proactively. According to reactive/proactive aggression theory (RPAT) (Dodge & Coie, 1987), reactive aggression is considered defensive, immediate, impulsive, and often associated with extreme emotions such as
anger (Hubbard et al., 2002). People often employ reactive aggression for reasons other than a physical, life-threatening assault; instead, people often use reactive aggression in defense of a threatened ego or self-system. On the other hand, proactive aggression is deliberate, goal driven, and often motivated by a desire for domination or control. Of the two, reactive aggression is more frequently associated with IPV (e.g., anger and subsequent dating violence), though both types may underlie IPV perpetration (Brendgen, Vitaro, Tremblay, & Lavoie, 2001).

A number of problems exist with these models of IPV. While SLT and ITT address learned behavior, neither accounts for individual differences, such as personality traits or self-esteem, that may affect whether or not being a childhood victim results in later IPV perpetration. RPAT accounts for different types of aggressive behavior, but it does not outline situational factors that may promote the use of one type of aggression over another. Therefore, a theory that includes these individual aspects must be considered. Anderson and Bushman’s (2002) general aggression model (GAM) considers personality differences, ways in which the use of aggression may be learned, as well as other factors that may contribute to the use of reactive or proactive aggression.

GAM proposes three main aspects that determine aggressive behavior: 1) inputs, 2) cognitive, affective, and arousal routes reflecting the inputs, and finally, 3) outcomes from a decision process. Inputs can be person or situational factors that alter a situation. Person factors include any that the individual brings to the situation, such as personality traits, beliefs, or attitudes. Situational factors include aggressive cues (i.e., things that may prime an aggressive concept from memory – guns, exposure to violent media), frustrations or a “blocking of goal attainment” (Bushman, 1998, p. 37), pain and discomfort, drugs, and incentives. Routes are the present internal states or factors that are influenced or altered by the inputs, including cognitive, attributional, or affective processes that determine how aroused a person becomes.
(e.g., someone in an anxious state may interpret a behavior as intentionally hostile or harmful and may become particularly angry in response). Outcomes integrate inputs with routes into a decision process in which there is an appraisal that may be lead to immediate (i.e., spontaneous, driven by affect, considering only the immediate circumstances before acting) or delayed reaction.

**GAM** seems to allow for a logical link for why IPV may occur, at least with respect to situational inputs. However, to fully understand how certain inputs are interpreted, and how these interpretations lead to IPV (whether it be in reactive or proactive forms), requires an understanding of the individual difference traits that color or alter the “routes” for some individuals. Below, I list and briefly review three potentially relevant categories of traits that may bias these “routes” and lead to IPV perpetration. I use the labels offensive traits, defensive traits, and impulsivity-related traits as a guiding framework.

**Offensive traits.** One type of violence GAM accounts is that of proactive aggression. By definition, proactive aggression is offensive in nature given that aggressive or violent acts occur despite being unprovoked. One theme consistent across many behaviors characterized as offensive is that they may reflect either the establishment of power or dominance over others or insensitivity to the consequences of hurting others. These tendencies often lead to certain negative outcomes like aggressive outbursts that are frequently associated with a number of relevant individual difference constructs including social dominance orientation (Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius & Pratto, 1999), hypercompetitiveness (Ryckman, Libby, van den Borne, Gold, & Lindner, 1997), entitlement (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004), charisma (S. Campbell, Ward, Sonnenfeld, & Agle, 2008; Klein & House, 1995; W eierter, 1997), and unrealistic optimism (W einstein, 1980).
Social dominance orientation. Social dominance orientation describes people who accept and endorse attitudes and behaviors leading to one person or group systematically controlling the behavior of another person or group through means including threat and force (Burgoon, Johnson, & Koch, 1998; Pratto et al., 1994; Sidanius & Pratto, 1999). Socially dominant behaviors include the use of interpersonal communication styles that may belittle or hurt the feeling of others. While socially dominant people may be described with some positive traits such as “assertive”, generally, others see them as “over-bearing”, “demanding”, and “egotistical” (Burgoon, Johnson, & Koch, 2009). With particular relevance to IPV, Burgoon and colleagues describe aggression as comprising three components: (1) threat; (2) strength; and (3) persuasiveness. They argue that most cases in which people display some degree of aggression are “benign” because they rely on the strength and persuasiveness components. Thus, most people convey aggression by being assertive and persuading others with argument. However, the authors note that the extreme cases of aggression like those seen in IPV include threats or actual acts of physical violence, verbal abuse, and hostility. Socially dominant people endorse the use of such behaviors as acceptable means of dealing with people and problems. They tend to convey hostility, verbal aggression, and destructive uses of anger (Ghaed & Gallo, 2006).

Hypercompetitiveness. Hypercompetitiveness reflects an extreme and indiscriminant desire to compete and win (and avoid losing) at all costs (Ryckman et al., 1997). Generally, because winning serves to increase and maintain feelings of self-worth, hypercompetitive people can become verbally and physically aggressive, they will exploit others for personal gain, and they will derogate others in the face of defeat (Ryckman et al., 1997). Within close relationships, hypercompetitive people are extremely jealous, possessive and controlling, and overall they have a great deal of problems in their relationships, at least partly attributable to their willingness to inflict pain on their partners (Ryckman, Thorton, Gold, & Burckle, 2002). Hypercompetitive
people care relatively little for others’ feelings, they are very hedonistic in nature, and they may even derive pleasure from others’ misery (Ryckman et al., 1997). This depiction suggests that hypercompetitive people often give forethought to their behaviors and use tact to bring about personally desired outcomes, which suggests that they may also use forms of proactive violence (i.e., goal oriented violence) to ensure that they “come out on top”.

Entitlement. According to Campbell et al. (2004), entitlement entails a “pervasive and stable sense that one deserves more and is entitled to more than others” (p. 31). This sense of entitlement includes an expectation of preferential treatment, whether it stems from a mindset of “I’ve never had anything, so I’m owed” or from a mindset of “I’m the best and I’m worthy”. This latter mindset reflects Exline, Baumeister, Bushman, Campbell, and Finkel’s (2004) depiction of narcissistic entitlement based on the idea that narcissists, whose self-proclaimed superiority entitles them to preferential treatment, become particularly invested in making certain that this positive treatment occurs. Walters (2007) notes that entitlement underlies proactive criminality in that the entitled individual gives him or herself “permission” to commit criminal acts by claiming ownership or rights. Thus, individuals high in feelings of entitlement are likely to engage in acts of IPV if a partner does not provide or meet demands or expectations of special treatment.

Charisma. On the surface the endorsement of being high in charisma, that is, being able to influence others so that their attitudes and behaviors align with one’s own wishes or desires, does not seem particularly harmful. In fact, most empirical evidence of what charisma entails has examined dyadic relationships between charismatic leaders and followers (e.g., S. Campbell et al., 2008; Klein & House, 1995) and looked at as a positive trait. W eierter (1997) even defined charisma as “emotional and behavioral expression associated with a leader” (p. 172). Further, S. Campbell et al., (2008) cite Weber (1947), who described charismatic leaders as people who
have exceptional powers that set them apart from others. However, a closer examination suggests that charisma may not be so especially positive. Charismatic people (including charismatic leaders) are described as interpersonally dominant, self-aggrandizing, self-interested, exploitative, and not surprisingly, narcissistic (House & Howell, 1992). These people are prone to take advantage of others, abuse the interpersonal power gained by willing followers, and belittle those who undermine their sense of influence (Judge, Piccolo, & Kosalka, 2009). They will bully others to get their way, apparently believing that they can treat others poorly and “get away with it” because of their charismatic nature (Fields & Lakey, 2011). Thus, charisma may be a marker reflecting a willingness to perpetrate acts of IPV.

Unrealistic optimism. Another attitudinal trait that may contribute to the other offensive behaviors and attitudes is unrealistic optimism. Unrealistic optimism is a perceptual bias regarding the better-than-average chance of a positive event occurring (e.g., finding a job with a $1 million per year salary) and a less-than-average chance of experiencing something negative (e.g., divorce; Weinstein, 1980). These errors in judgment intensify when the positive outcomes are highly desirable, or are extremely undesirable in the case of a potential negative outcome. Furthermore, Weinstein (1980) states that the more individuals feel a sense of personal control over the outcomes, the more optimistically unrealistic their judgments become; the effects can become cyclical, as increases in unrealistic optimism often increase perceptions of control (and so on). This cycle generally increases the likelihood of engaging in risky behaviors, particularly in the case of avoiding a negative outcome. Wiebe and Black (1997), for example, found that those who viewed themselves at lower risk of contracting a sexually transmitted disease or becoming pregnant relative to others ignored warnings and risk factors, and dismissed feedback about their risky behavior by deeming it as personally irrelevant even in the face of evidence to the contrary. Dillard, Midboe, and Klein (2009) looked at college students’ perceptions of their own
risk of experiencing negative outcomes associated with their alcohol use compared to other students their age. Consistent with other risk taking behaviors influenced by unrealistic optimism (e.g., risk of lung cancer in smokers, Dillard, McCaul, & Klein, 2006), the college students wrongly judged the chances of negative events occurring to them. This evidence suggests that individuals high in unrealistic optimism may engage in IPV significantly more frequently than those low in unrealistic optimism because they misjudge the likelihood of experiencing a negative outcome associated with their behavior. Thus, they may misperceive their chances of being caught and convicted even in the face of statistics about number of arrests, injuries, and other risk factors associated with the act of IPV.

**Defensive traits.** An understanding of defensiveness requires an understanding of the self-system, and the self-esteem (i.e., overall positive or negative feelings of self-worth; Rosenberg, 1965) that is being defended. Historically, many researchers considered high self-esteem as a desirable trait. In fact, most of the research on self-esteem has linked it to a number of positive benefits for happiness, life satisfaction, and overall psychological and physical health (Koch, 2006; Taylor, 1989; Wittliff, 1983). Some self-esteem theories (Anderson, 1994; Gondolf, 1985) even suggested that perpetrators of violence (including IPV) had low self-esteem; from this perspective, aggressive outbursts provide a temporary remedy for deep seated self-loathing.

More recently, some researchers have argued that the benefits of self-esteem are not so clear. For example, when confronted with negative self-relevant information or rejection, people often experience a sense of ego threat or as an attack to their self-worth. Baumeister, Smart, and Boden (1996) argued that people with low self-esteem desire to avoid any chance of physical conflict due to self-doubts about their ability to handle confrontation; thus, they argue that it is likely people with high self-esteem who commit acts of violence. Other research demonstrates that, in contrast to those with low self-esteem, people with high self-esteem are those who most
often demonstrate traits like pride, egotism, and arrogance, which generally are considered negative and maladaptive (Baumeister et al., 1996).

Most recently, Kernis (2003, 2005) tackled this issue by showing that there are different types of high self-esteem, which can be either fragile or secure. People with secure high self-esteem have positive self-esteem that is not vulnerable to ego threatening information because their self-esteem is genuine and well anchored, they know, like, and accept their strengths and weaknesses, and they feel no need to show superiority over others. On the other hand, those with fragile high self-esteem may possess self-esteem that is high overall, but it is fragile because they base their feelings of worth on successful outcomes and validations of worthiness. When they do not receive these required validations, they experience drops in their self-worth that lead to defensive efforts to boost it back up (Baumeister et al., 1996; Kernis, 2003; Kernis, Lakey, & Heppner, 2008). In other words, to avoid feelings of worthlessness, those with fragile self-esteem may react in an aggressive and violent manner in the face of a perceived threat (Kernis, Granneman, & Barclay, 1989). A related line of research demonstrates that narcissists also hold positive self-views (that is, they have high self-esteem), but they are grandiose, unbalanced, and often unwarranted (Baumeister, Smart, & Boden, 1996; Bushman & Baumeister, 1998; Campbell, Bosson, Goheen, Lakey, & Kernis, 2007; Campbell, Goodie, & Foster, 2004). Like those with fragile high self-esteem, when situations arise to threaten their positive self-perceptions, narcissists become aggressive as a means of self-protection (Bushman & Baumeister, 2002; Konrath, Bushman, & Campbell, 2006; Martinez et al., 2008). Thus, not all self-esteem is the same, as some people (e.g., narcissists) can be especially voracious in their attempts to defend or restore their self-worth.

Within the GAM framework, these defensive processes bias the interpretation of inputs and alter the decisions people make. At least three variables reflect defensive tendencies that,
when considered within the realm of ego threatening events, may explain reactive aggression in IPV: rejection sensitivity, hostile attribution bias, and jealousy.

Rejection sensitivity. Those considered high in rejection sensitivity are predisposed to perceive a lack of support and a sense of belonging within their interpersonal relationships (Baumeister & Leary, 1995). Thus, they exhibit a pattern of anxiously expecting rejection, they readily perceive events and feedback as signs of rejection, whether warranted or not, and they overreact when rejection is perceived (Downey & Feldman, 1996). In other words, this trait is based on the wrongly interpreted motives of other’s behaviors, such that their excessive concern of being abandoned creates suspicions that betrayal is taking place, which in turn creates feelings of uncontrolled jealously, the desire for revenge, and the desire to use violence to cause retaliatory harm (Gupta, 2008). Even ambiguous situations allow for the perception of deliberate rejection by those high in rejection sensitivity, leading to unhappiness and potential violent behavior (Downey & Feldman, 1996; Downey, Feldman, & Ayduk, 2000; Gupta, 2008; Smart- Richman & Leary, 2009).

Hostile attribution bias. A hostile attribution bias (Dodge & Coie, 1987; Wal ters, 2007) is comprised of three interrelated processes that, like rejection sensitivity, are rooted in how people interpret ambiguous social information. Unlike rejection sensitivity, perceptions of hostility underlie the cognitive bias of this construct. Specifically, hostile attribution bias entails a) a cognitive tendency to interpret often ambiguous and benign interpersonal event (e.g., walking past someone on a crowded sidewalk and bumping shoulders) as an intentional and hostile act of aggression that, b) leads to anger and other negative emotions that in turn, c) creates a desire to behaviorally retaliate in some way (Dill, Anderson, & Deuser, 1997; Dodge & Coie, 1987; Matthews & Norris, 2002). In fact, the mere perception of hostile intent, and not the
strength of an initial real attack, determines the likelihood and the severity of a retaliatory attack (Tremblay & Belchevski, 2004).

Jealousy. Ben-Ze’ev (2010) defines jealousy as a “negative evaluation of the possibility of losing something – typically a unique, human relationship – to someone else” (p. 40). Jealousy, then, may reflect some degree of rejection sensitivity, but these constructs are not synonymous. Jealousy is typically a three-party emotion (i.e., involving a potential relationship between a partner and another person), which creates a competitive environment with self-threatening implications (Ben-Ze’ev, 2010). Jealousy creates desires to establish control in a relationship as well as a willingness to use aggression towards the partner or the third person (Brainerd, Hunter, Moore, & Thompson, 1996), although aggression is usually directed toward the partner rather than the perceived rival (Mathes & Verstraete, 1993).

Collectively, the theme among individuals who can be characterized as rejection sensitive, high in hostile attribution bias, or jealous, is that their cognitive, affective, and behavioral systems prime them to be “defensive” (and “quick to react”), especially because in each case, threats to the ego (and therefore self-esteem) are involved. Thus, these traits may be important for understanding IPV perpetration.

Impulsive traits. Because many acts of IPV reflect an immediate, reactive response to a situation, they hold some degree of relation to impulsivity. The previous traits discussed above are no exception, though impulsive behaviors could be either offensive or defensive in nature. Indeed, part of the problem with impulsivity is that the construct has been hard for researchers to operationalize with much precision and therefore, it has been used as a “catch all” term for numerous maladaptive behaviors. For example, impulsivity has been conceptualized as a sensitivity to reward (Gray, 1987), as the lack of the ability to inhibit a response regardless of the likelihood of forthcoming punishment (Stuart & Holtzworth-Munroe, 2005), or simply as the
trait that underlies self-defeating behaviors (Vazire & Funder, 2006). Other research couches impulsivity with other general personality traits by depicting it as reflecting low conscientiousness (Hoyle, Fejfar, & Miller, 2000) or some degree of low agreeableness (Hoyle, Fejfar, & Miller, 2000; Miller et al., 2009). In an attempt to unify and incorporate the varying definitions of impulsivity, Whiteside and Lynam (2001) and Lynman, Miller, Miller, Bornovalova & Lejuez (2011) found five distinct types of impulsivity. Negative Urgency suggests that individuals act in an impulsive manner when they are experience negative affect. Positive Urgency entails impulsive behavior in the face of positive affect. Lack of Perseverance looks at tendencies to give up when bored, frustrated, or tired. Lack of Premeditation assesses tendencies to act without consideration of possible outcomes and Sensation Seeking, which shares a good deal of overlap with Carver and White’s (1994) description of “approach motivation”, involves behaviors that are impulsive in the face of exciting or novel experiences.

Despite problems defining impulsivity, research suggests that it is particularly relevant for understanding aggression and IPV. For example, Stuart and Holtzworth-Munroe (2005) investigated the link between impulsivity (defined as poor impulse control and inability to delay gratification) and marital violence, finding a relationship between the two, as well as a correlational relationship with hostility and anger, substance abuse, and psychological abuse. Other research linking impulsivity to aggression is not so clear. For instance, Miller et al. (2009) demonstrated that narcissists are particularly approach motivated (sensation seeking and sensitive to potential reward), though their tendencies to become aggressive are not accounted for by issues of impulse control (Miller et al., 2009). Thus, impulsivity seems particularly relevant for understanding IPV, and particularly acts of IPV reflecting reactive aggression, but the precise nature of how impulsivity links to IPV is still unclear.
Summary

According to GAM violence involved in IPV may be proactive, reactive, or both. While situational factors may influence which type of violence occurs, individual traits (whether defensive, offensive, or impulsive) may influence the use of each type of violence. Taken together, GAM potentially provides a framework for IPV and why certain people may process inputs in such a way as to employ aggression and violence as a remedy for conflict. Narcissism represents one variable often linked to various offensive, defensive, and impulsive traits and behaviors, and particularly, to acts of aggression in the face of conflict. Thus, narcissism offers the potential to shed light on the perpetration of IPV. In the following section, I provide a more in-depth review of the construct of narcissism, what it entails, and the manner in which I expect it to relate to IPV.
CHAPTER 3
NARCISSISM

The term narcissism stems from the Greek fable of Narcissus who lay by a pool of water absorbed by his reflection that he deemed more beautiful than anything he had ever seen. In fact, one version of the fable hold that Narcissus found his own image so beautiful that he could not bring himself to leave the pool even unto death. In the process, he even disregarded advances of the beautiful Echo, which left her heartbroken. This fable depicts narcissism as a problematic form of self-love, characterized by personal grandiosity and extreme self-focus. Freud (1914/1957) suggested that such self-love was a normal part of development and a healthy means of self-protection for the psyche. He cast narcissism in a relatively positive light by describing narcissists as self-sufficient, independent, and energetic. However, Freud did acknowledge that a narcissist would not be able to invest him- or herself in another person, as the libido would be too preoccupied in the self. Later, Kernberg (1975) and Kohut (1966), both psychoanalysts, cast narcissism in a more negative light, speaking to the defensive and fragile nature of narcissism and suggesting that extreme narcissism represented a form of psychological pathology (Campbell et al., 2007).

Against this backdrop, Campbell and Green (2008) acknowledge that narcissism may be a somewhat abstract or confusing construct but explain that three main aspects reside at its core: “a positive and inflated self, a relative lack of intimacy or closeness, and an arsenal of self-regulatory strategies that maintain and enhance the self” (p. 77). Further, they maintain that these three core aspects are what really hit at the nine diagnostic criteria listed in the Diagnostic and Statistical Manual of Mental Disorders, Third Edition (APA, 1980), when narcissism as a personality disorder (i.e., Narcissistic Personality Disorder or NPD) was officially added as an Axis II disorder, and they align with the most recent, fourth edition as well (i.e., DSM-IV-TR;
APA, 2000) because the diagnostic criteria changed very little. NPD is defined by “a pervasive pattern of grandiosity (in fantasy or behavior), need for admiration and lack of empathy, beginning by early adulthood and present in a variety of contexts” (p. 717). The DSM-IV-TR (APA, 2000) lists nine criteria, with at least five required for a diagnosis, including: (1) a grandiose sense of self-importance, (2) a preoccupation with fantasies of unlimited success, power, or beauty, (3) a belief that he or she is “special” or “unique” and associates only with other who are also “special” or high-statused, (4) a required excessive amount of admiration, (5) a sense of entitlement with unreasonable expectations of favorable treatment, (6) interpersonally exploitative, taking advantage of others to meet his or her own means, (7) a lack of empathy, (8) envious of others, and (9) arrogant behaviors or attitudes (p. 717). The prevalence of NPD ranges from 2% to 16% in clinical settings and about 1% in the general population (APA, 2000).

Limiting examinations of narcissism to NPD would present a number of problems for researchers (cf. Miller & Campbell, 2010). For instance, the focus on particular personality disorders (NPD) rather than personality traits would minimize the number of people who could be examined given that NPD occurs in such a small proportion of the population. This issue could likewise be the reason for inconsistent evidence linking IPV to either antisocial personality disorder or borderline personality disorder (see Mauricio, Tein, & Lopez, 2007; Ross & Babcock, 2009) despite sharing overlap with the characteristics that should relate to IPV perpetration (e.g., impulsivity, interpersonal difficulties). Given that many traits described within the NPD diagnosis exist among the general population, and because the rates of NPD are so low that finding NPD-diagnosed “narcissists” is difficult and improbable, Raskin and Hall (1979) created the Narcissistic Personality Inventory (NPI) in order to assess narcissism in the general population and understand how narcissism affects individuals on a day-to-day basis.
The NPI does not rely on diagnostic criteria formally, but they were used as the basis for items. Also, scores on the NPI are not used as cut-points to create diagnostic categories (NPD versus non-NPD) but instead exist on a continuum from low to high (Foster & Campbell, 2007). As such, NPI-assessed narcissism captures narcissists’ positive and inflated self-system and sense of grandiosity, their perceptions of being special or unique, their sense of entitlement, their lack of intimacy and exploitative tendencies, and the self-regulatory strategies they use to uphold their self-system (need for admiration, arrogant behavior, envy toward others who may be considered as more beautiful, intelligent, or special in some way) (Bosson et al., 2008; Campbell & Green, 2008; Miller & Campbell, 2008, 2010). As noted earlier, researchers use the word narcissist to describe people who score relatively high on a measure of narcissism, like the NPI.

As noted by Bosson et al. (2008), many researchers and theorists depicted narcissism as a defensive processes whereby verbal (i.e., explicit) reports of self-love and high self-esteem mask deep seated, but nonconscious (i.e., implicit) low self-esteem or even self-hatred (e.g., Kohut, 1966; Zeigler-Hill, 2006). However, tests of narcissists‘ implicit self-esteem using the Implicit Association Test (Greenwald, McGhee, & Schwartz, 1998) and the Name-Letter Task (Nuttin, 1985) suggest that narcissists have implicit and explicit self-esteem that map onto one another closely. More specifically, narcissism correlates positively with both implicit and explicit self-esteem overall. The magnitude of the correlation increases when central and important aspects of narcissists’ self-systems (such as being powerful or dominant) are used to tap into their self-esteem at both implicit (Bosson et al., 2008; Campbell et al., 2007) and explicit (Brown & Zeigler-Hill, 2004) levels. Narcissism does not correlate with self-esteem reflecting nonessential components of narcissists’ self-systems (e.g., being kind or nurturing) at either an implicit (Gregg & Sedikides, 2010) or explicit (Zeigler-Hill, 2006; Zeigler-Hill, Clark, & Pickard, 2008) level.
This research supports theories of narcissism (e.g., Campbell & Green, 2008) that depict narcissists’ self-systems as entirely unbalanced, inordinately rooted in agency-relevant domains (e.g., traits that portray specialness, uniqueness, or superiority), with little regard for communal related aspects (e.g., friendliness, caring, and agreeableness) (Campbell, Rudich, & Sedikides, 2002; Campbell et al., 2007). Thus, despite certain aspects of narcissism being labeled as adaptive for their personal mental health (Brown, Budzek, & Tamborski, 2009; Rose & Campbell, 2004; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004), their unbalanced nature contributes to narcissism being considered a maladaptive trait typified by egotism, a sense of grandiosity, and perceptions of superiority (Bushman & Baumeister, 1998; Campbell et al., 2007; Emmons, 1984). The result is that narcissists employ various cognitive, affective, and behavioral self-regulatory processes to uphold their unbalanced self-systems. These self-regulatory processes map closely onto the IPV framework described earlier (i.e., they are inherently defensive, offensive, or impulsive), and thus, I use this same framework below to describe the self-regulatory traits and strategies employed by narcissists.

**Offensive Self-Regulation**

Narcissists can be highly skilled interpersonally. They are outgoing and extraverted (Miller et al., 2009), and they make positive first impressions (Paulhus, 1998). In early encounters their charisma shines as they engage the interest of others, come across as charming and confident, and stand out as the ‘life of the party’ (Paulhus, 1998). One might think that narcissists’ need to maintain their inflated self-views, which depends on the positive feedback and admiration of others, would make them concerned about the well-being of those around them. However, they seem to satisfy their craving for admiration by demonstrating their superiority instead of showing concern or empathy (Morf & Rhodewalt, 2001). Thus, the charm
people experience early in relationships with narcissists often fades quickly, prevents the establishment of lasting relationships, and erodes those that do exist (Paulhus, 1998).

The long-term relationships narcissists do maintain often occur either because they find individuals (e.g., sycophants) who feed their grandiosity with flattery, or because the relationship can be a means of increasing their social status, so they use relationship partners with this goal in mind (Campbell, Foster, & Finkel, 2002). Narcissists even use dating relationships in this manner, striving to have a beautiful, ‘trophy’ mate (Campbell, 1999). They show little concern for intimacy and a great deal of concern for superiority, so they tend to offend and exploit others for their own self-interests and dispose of a relationship flippantly (Campbell, Foster, & Finkel, 2002). They are also driven to self-promotion by taking credit for success and denying any responsibility for failure and they often “hog” the spotlight in an effort to increase their social status or maintain perceptions of being strong or powerful (Campbell & Green, 2008). They strive to find or create situations that provide a chance for glory (Wallace & Baumeister, 2002) such as going on reality television shows (Young & Pinsky, 2006) or posting numerous lewd (e.g., shirtless) pictures on Facebook and trying to become Facebook ‘friends’ with inordinate numbers of people to appear popular (Buffardi & Campbell, 2008).

When they attain positions of leadership, narcissists will use threats and violence in order to maintain their power and influence (Judge, Piccolo, & Kosalka, 2009). Indeed, their socially dominant (Paulhus & Williams, 2002), and often prejudicial attitudes (Hodson, Hogg, & MacInnes, 2009), overconfidence in their own abilities (Campbell, Goodie, & Foster, 2004; Lakey, Rose, Campbell, & Goodie, 2008), and hypercompetitive nature exacerbate these problems (Morf & Rhodewalt, 2001). They engage in activities, particularly competitive and risky ones, to elicit feedback expected to validate their sense of grandiosity and superiority (Baumeister, Smart, & Boden, 1996). Even in the face of unexpected or negative feedback (like
failure), they still perceive themselves as better and more likely to outperform others in future attempts (Campbell, Goodie, & Foster, 2004; Farwell &ohlwend-Lloyd, 1998; Raskin, Novacek, & Hogan, 1991). Narcissists constantly seek to affirm and maintain self-knowledge through the manipulation of their social environment (Morf & Rhodewalt, 2001).

Unfortunately, individuals associated with narcissists often suffer. Campbell, Bush, Brunell, and Shelton (2005) demonstrated that compared to nonnarcissists, narcissists unduly consume communal resources upon initial allocation and continue doing so until no resources remain. Collectively, this evidence suggests that narcissists can be particularly offensive. They use social relationships for personal gain, and like the use of proactive aggression, they will purposely harm others to reach a goal or desire. Likewise, people or information standing in their way who threatens their grandiose self-views or who provide negative feedback stand in danger of defensive retaliation (Reidy, Zeichner, Foster, & Martinez, 2008). I discuss narcissistic defensiveness below.

Defensive Self-Regulation

Narcissists generally are happy people so long as the strategies they use to maintain a positive self-view (e.g., self-promotion) are successful and they attain the admiration they “deserve” (Rose & Campbell, 2004; Sedikides et al., 2004). When they are unsuccessful, however, narcissists’ experience of ego-threat often leads them to defensive behavior. Engaging in competition, for instance, may fuel perceptions of strength when narcissists win. But, it also opens them up to the possibility of a loss, which is ego-threatening when it happens and which may incite negative or maladaptive behaviors in order to defend the self and reestablish superiority (Bushman & Baumeister, 1998). Often these negative reactions include the derogation of others (Campbell, Rudich, & Sedikides, 2002), relatively mild hostility and aggression (Bushman & Baumeister, 1998), and explosive tendencies towards extreme
aggression and violence (Reidy et al., 2008). Within the confines of relationships, narcissists strive for admiration and feelings of superiority. For this reason narcissists stay ‘on the lookout’ sensitive to signs of rejection from others (e.g., being told ‘no’).

Research suggests that because of narcissists’ unbalanced self-views and general lack of interpersonal concern (Morf & Rhodewalt, 2001), their rejection sensitivity can be fairly domain-specific (Foster, Shri ra, & Campbell, 2006). That is, narcissists are likely to be sensitive to any kind of negative feedback (rejection) that would threaten their beliefs of entitlement or inhibit their ability to maintain their status, power, or feelings of superiority. They would be quick to attribute hostile intention to ambiguous social cues that might be ego-threatening (e.g., laughter going on across the room), which they use as justification for aggressive behavior (Dill et al., 1997). The result is that narcissists may get ‘dumped’ in a dating relationship and show very little reactivity so long as ending the relationship does not affect their perceptions of social standing (Foster et al., 2006). However, narcissists may also get ‘dumped’ but perceive a potential loss in social standing, and therefore they will react very strongly by belittling a lost partner (Smalley & Stake, 1996), diminishing the value of a relationship as worthless (Kernis & Sun, 1994), derogating a partner to others (Campbell et al., 2000), or even becoming aggressive (Twenge & Campbell, 2003).

Their dominance- and competitive-related attitudes, and the threat posed by potential losses in social standing, lead narcissists to quick outbursts of reactive aggression (Fawcett, 2003). These same issues contribute to narcissists’ jealousy, which manifests itself as a mechanism to protect their perceptions of entitlement (Exline et al., 2004). Hannawa, Spitzberg, Wiering, and Teranishi (2006) found that when individuals feel entitled to their relationship partner, perceptions of losing control of the relationship (e.g., the partner was
threatening to leave) brings about extreme and violent reactions, including murder (e.g., “If I can’t have you, no one else will either!”).

**Impulsive Self-Regulation**

Many of narcissists’ behaviors may appear haphazard or purely reflective of their social environment. Some behavior, like their tendency to retaliate, may fit well within this framework. Other behaviors do not fit this model particularly well. For instance, narcissists tend to take risky gambles (Foster, Reidy, Misra, & Goff, 2011; Lakey et al., 2008), binge drink (Luhtanen & Crocker, 2005; Wood & Lakey, 2010), commit criminal acts (e.g., theft) (Fields & Lakey, 2010), be sexually promiscuous (Hoyle et al., 2000), and ‘mate poach’ (Foster et al., 2006). Rose and Campbell (2004) suggest that many behaviors evidenced by narcissists are motivated by their hedonic nature and the drive to feel good about themselves. Baumeister and Vohs (2001) go so far as to describe narcissists by their “addiction to self-esteem”.

Research suggests that to the extent that narcissists are impulsive, it is driven by their tendency to engage in what Foster and Trimm (2008) deem their “unmitigated approach motivation” or what Lakey et al. (2008) bill as their “myopic focus on reward” (cf. Gray, 1987). Foster, Misra, and Reidy (2009) note that the coupling of narcissists’ unbalanced self-systems with the tendency toward immediate fulfillment of their wants and desires leads them to engage in a number of problematic behaviors. Moreover, it is not that narcissists are insensitive to the consequences of risky choices per se, as they are cognitively aware of the risk associated with many choices; however, their immediate desires or perceptions of personal skill seem to override concerns of potential negative outcomes that would inhibit or deter behaviors for others (Foster & Trimm, 2008; Miller et al., 2009; Stuart & Holtzworth-Munroe, 2005). The research on narcissistic impulsivity is only beginning to gain a level of precision, so it may be the case that narcissists perpetrate acts of IPV because of a global impulsive nature (Vazire & Funder, 2006),
because of their reward sensitivity (i.e., approach motivation) (Foster & Trimm, 2008), or independent of their impulsive nature (Miller et al., 2009).

**Summary**

Narcissists’ unbalanced self-views underpin their sense of grandiosity, entitlement, and need for excessive admiration. To uphold these positive self-views, they strategically regulate their thoughts, emotions, and behaviors. Unfortunately, they evidence offensive (e.g., hypercompetitiveness), defensive (e.g., jealousy), and impulsive (e.g., reward sensitivity) traits that contribute to the use of aggression (either reactively or proactively) and possibly the perpetration of IPV. Table 1 summarizes these traits and provides evidence of their relations with IPV (or aggression, more broadly) and narcissism (or markers of fragile self-esteem).

**Table 1**

<table>
<thead>
<tr>
<th>Unbalanced Self-Views</th>
<th>Evidence on IPV (or Aggression)</th>
<th>Evidence on Narcissism (Fragile Self-Esteem)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrealistic Optimism</td>
<td>Fields &amp; Lakey, 2011</td>
<td>Campbell et al., 2004</td>
</tr>
<tr>
<td>Entitlement</td>
<td>Walters, 2007</td>
<td>Exline et al., 2004</td>
</tr>
<tr>
<td>Social Dominance</td>
<td>Burgoon et al., 2009</td>
<td>Paulhus &amp; Willimas, 2002</td>
</tr>
<tr>
<td>Charisma</td>
<td>Judge et al., 2009</td>
<td>Paulhus, 1998</td>
</tr>
<tr>
<td>Hypercompetitiveness</td>
<td>Reidy et al., 2010</td>
<td>Morf &amp; Rhodewalt, 2001</td>
</tr>
<tr>
<td>Jealousy</td>
<td>Brainerd et al., 1996</td>
<td>Hannawa et al., 2006</td>
</tr>
<tr>
<td>Hostile Attribution Bias</td>
<td>Dill et al., 1997</td>
<td>Heppner et al., 2008</td>
</tr>
<tr>
<td>Rejection Sensitivity</td>
<td>Gupta, 2008</td>
<td>Foster et al., 2006</td>
</tr>
<tr>
<td>Impulsivity</td>
<td>Stuart &amp; Holtzworth, 2005</td>
<td>Foster &amp; Trimm, 2008</td>
</tr>
</tbody>
</table>

In this research, participants completed questionnaires to assess levels of trait narcissism (Raskin & Hall, 1979), IPV perpetration (Straus et al., 1996), and based on the evidence linking them to both NPI and IPV, measures to assess levels of offensive and defensive self-regulation. I
used these latter measures in analyses to explore which, if any, account for (i.e., mediate) the relation between narcissism and IPV. Figure 1 shows the theoretical mediation model.

Unfortunately, the measure of impulsivity was accidentally omitted from the data collection set, which prevented analyses with impulsivity as a potential mediator. As self-esteem often suppresses the relations between narcissism and relevant variables (Campbell, Foster, & Finkel, 2002; Paulhus, Robins, Trzesniewski, & Tracy, 2004; Lakey et al., 2008), I included a measure of self-esteem, which served as a statistical covariate. Because of the relevance for childhood exposure to later IPV perpetration (Lewis & Fremouw, 2001; Laner & Thompson, 1982; O’Keefe, 1998), I also included a measure of childhood victimization to use as a statistical covariate.
CHAPTER 4

HYPOTHESES

My formal hypotheses follow:

H1: Based on the framework laid out in the previous section of individual differences that may influence IPV and that overlap with narcissism, I predicted that narcissism would relate directly to the perpetration of IPV.

H2: Based on previous research and theory, I hypothesized that narcissism would relate directly to markers of offensive (i.e., entitlement, charisma, unrealistic optimism, hypercompetitiveness, and social dominance) and defensive (i.e., rejection sensitivity, hostile attribution bias, and jealousy) self-regulation.

H3: Based on previous research and theory, I hypothesized that markers of offensive (i.e., entitlement, charisma, unrealistic optimism, hypercompetitiveness, and social dominance) and defensive (i.e., rejection sensitivity, hostile attribution bias, and jealousy) self-regulation would relate directly to IPV perpetration.

H4: Based on the evidence that most acts of IPV reflect reactive aggression (Brendgen et al., 2001), I hypothesized that variables reflecting defensive self-regulatory strategies would most strongly mediate the relation between narcissism and IPV perpetration.
Participants

Participants (N = 283) were recruited from East Tennessee State University's psychology department subject pool. In exchange for their participation, the students were awarded class research participation credit. The sample included 196 females (69%) and 86 males (31%). Their ages ranged from 18 – 53 years (M = 21.6; SD = 4.9). The sample was predominantly White/Caucasian Americans (n = 237; 83.7%), although 3 (1.1%) participants identified as Native American, 9 (3.2%) identified as Asian/Asian American, 18 (6.4%) identified as Black/African American, 2 (.7%) identified as Native Hawaiian/Pacific Islander, and 13 (4.6%) indicated a multi-ethnic heritage. The sample was also predominantly heterosexual (n = 262; 92.6%), although 21 (7.4%) participants identified as being a sexual minority (i.e., gay, lesbian, bisexual, or queer). Most participants indicated that their permanent residence reflected a suburban area (n = 133; 47%), although 116 (41%) hailed from a rural area, and 33 (11.7%) noted being from an urban area. All participants were native English speakers.

Procedure

Data were collected using SONA, the online research software employed by the ETSU Department of Psychology. Students logged into the appropriate website, conveyed their consent by proceeding, and completed questionnaires designed to assess relevant variables of interest. To minimize participant discomfort with disclosure and maximize their honesty, all data were anonymous and no identifying information was maintained. As I noted above, the impulsivity questionnaire was inadvertently excluded from the questionnaire set, so no impulsivity data were assessed.
Measures

Demographics. Per Lewis and Fremouw’s (2001) recommendation, I gathered demographic information, including participants’ age, gender, ethnicity, sexual orientation, and the population geographic setting of their permanent residence (coded such that 1 = urban, 2 = suburban, and 3 = rural) to understand further the nature of IPV perpetration. A copy of this questionnaire can be found in Appendix A.

IPV Perpetration. To assess for acts of IPV, participants responded to the Revised Conflict Tactics Scales (CTS2) (Straus et al., 1996). This measure consists of 39 item pairs (to reflect both perpetration and victimization) made up of four subscales to measure different tactics used by partners in the face of problems within their romantic relationships (i.e., negotiation, psychological aggression, physical assault, and sexual coercion) as well as a fifth scale to measure injury. Participants provided the frequency (or “chronicity”) of each event’s occurrence as both the perpetrator and victim. Participants used the specified period of the previous year using a 0 to 7 ranking (0 = has never happened, 1 = has happened, but not in the time period in question, 2 = happened 1 time, 3 = 2 times, 4 = 3–5 times, 5 = 6–10 times, 6 = 11–20 times, 7 = more than 20 times) (Vega & O’Leary, 2007). Because the focus of this research was to examine IPV perpetration, I only looked at responses to perpetrator items that reflected the use of physical, sexual, and psychological violence (and therefore not negotiation or injury items). Thirty-three items fit this framework.

I computed two IPV metrics. As the metric of IPV frequency (IPV-F), I averaged participants’ scores across the 33 items such that higher scores reflect greater IPV frequency (M = 21.39; SD = 32.108; α = .96). Straus (2004) also advocates for computing an IPV “prevalence score” (IPV-P) to capture whether or not an act has occurred, without regard for the frequency of its
occurrence. Thus, I recoded data, assigned a point for the presence of any IPV act for any psychological, physical, and sexual violence item (such that 0 = not present, 1 = present) and computed a sum across items where higher scores reflect higher lifetime prevalence ($M = 4.99; SD = 6.436; \alpha = .96$). The majority of participants endorsed never perpetrating or being a victim of violence (61%-91%). When violent behaviors were endorsed, bidirectionality was endorsed more (6%-66%) than perpetration (0%-9%) or victimization (0%-11%). Moreover, bidirectionality also included severe acts of violence (e.g., I used a knife or gun against my partner / My partner did this to me) and percentages were higher than the percentages for being only a perpetrator or a victim for the same questions. Reliability and validity of the CTS2 have been supported by many studies (e.g., Anderson & Leigh, 2010; Straus, 2004). A copy of this measure can be found in Appendix B.

**Narcissism.** Narcissism was measured using the Narcissistic Personality Inventory (NPI) (Raskin & Hall, 1979, 1981). The NPI is the most widely used measure of narcissism among general or nonclinical populations (Foster & Campbell, 2007; Raskin & Hall, 1979, 1981; Raskin & Terry, 1988; Twenge, Konrath, Foster, Campbell & Bushman, 2008). The NPI employs 40 forced-choice, two-item options where one item (e.g., People always seem to recognize my authority.) reflects a narcissistic response relative to the other item (e.g., Being in authority doesn’t mean much to me). Each narcissistic response received a point that contributed to a summed total, where higher scores reflect higher levels of narcissism ($M = 15.9; SD = 6.8; \alpha = .84$). A large number of studies support the reliability and validity of the NPI (Twenge et al., 2008). A copy of the measure can be found in Appendix C.
Covariates.

Self-esteem. Participants completed the Rosenberg (1965) Self-Esteem Scale (RSES) to measure their level of self-esteem. The scale consists of 10 items (e.g., I feel that I am a person of worth, at least on an equal plane with others.), which the participants answered using a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). Scores were summed so that higher scores reflect higher self-esteem (M = 37.9; SD = 7.9; α = .89). Research supports the reliability and validity of the RSES, and it is one of the most widely used measures of self-esteem (Blascovic & Tomaka, 1991). This measure can be found in Appendix D.

Childhood victimization. In order to assess for past exposure to family violence, participants completed a modified form of Juvenile Victimization Questionnaire (JVQ) (Finkelhor, Hamby, Ormrod, & Turner, 2005). The revised questionnaire consists of eight items that measure participants’ childhood exposure to physical violence (e.g., Did you ever witness your father (or male parental figure) hit/slap/punch, push/shove, choke, beat, kick, use a weapon against, or otherwise physically try to hurt your mother (or another person with whom he was in a romantic relationship)?) or psychological/emotional violence (e.g., Did you ever witness your father (or male parental figure) insult (or use offensive names), threaten, or swear/shout/yell at, or otherwise verbally try to hurt your mother (or another person with whom he was in a romantic relationship)?)? Two relevant items each refer to the mother (or female parental figure), the father (or male parental figure), and sibling(s), and two items inquire about personal experience. Participants responded using a six-point scale (0 = No / Never, 5 = Five or more times). Responses were averaged so that higher scores reflect higher levels of family violence history (M = .95; SD = 1.22; α = .88). This measure can be found in Appendix E.

Offensive Trait Variables.

Entitlement. Campbell et al.’s (2004) Psychological Entitlement (PE) scale was used
to assess levels of entitlement. This scale contains nine questions (e.g., I honestly feel I'm just more deserving than others.) that participants answered using a seven-point Likert scale (1 = strong disagreement, 7 = strong agreement). Scores were averaged so that higher scores represent higher levels of psychological entitlement ($M = 3.3; SD = 1.2; \alpha = .87$). Research supports the reliability and validity of this scale (e.g., Pryor, Miller, & Gaughan, 2008). A copy of this measure can be found in Appendix F.

**Unrealistic optimism.** Unrealistic optimism (URO) was measured using Bosson, Brown, Zeigler-Hill, and Swann's (2003) adapted version of Weinstein's (1980) Unrealistic Optimism Scale. This scale asked participants to rate the likelihood of positive (e.g., having an intellectually gifted child) and negative (e.g., having a heart attack by age 40) events occurring to them using a scale of 1 (extremely below average) to 9 (extremely above average). Negative-event items were reverse scored and items were summed so that higher scores reflect higher unrealistic optimism ($M = 6.3; SD = 1.3; \alpha = .80$). Empirical evidence supports the reliability and validity of this measure (e.g., Bosson et al., 2003; Davidson & Prkachin, 1997). A copy of this measure can be found in Appendix G.

**Charisma.** Charisma was assessed with the use of S. Campbell et al.'s (2004) Charisma Scale (CHARM). The scale is made of seven items. Using a scale of 1 (strongly disagree) to 7 (strongly agree), participants were asked to rate their level of charisma (e.g., “When I am communicating, I motivate them with every word, story, and inflection”). Items were averaged so that higher scores reflect higher perceptions of charisma ($M = 4.5; SD = 1.3; \alpha = .94$). Research supports the reliability and validity of the scale (e.g., S. Campbell et al., 2004). A copy of this measure can be found in Appendix H.
Hypercompetitiveness. To measure participants’ level of hypercompetitiveness I used the Hypercompetitive Attitudes Scale (HCA) (Ryckman, Hammer, Kaczor, & Gold, 1990). This scale consists of 26 items (e.g., “Winning in competition makes me feel more powerful as a person.”) that assess individuals’ hypercompetitive attitudes. Participants answered questions using a scale of 1 (seldom true of me) to 5 (always true of me). Responses were averaged such that higher scores reflect higher levels of hypercompetitiveness (M =2.9; SD =.42; α =.74). Research supports the reliability and validity of this scale (Ryckman et al., 1990). A copy of this measure can be found in Appendix I.

Social dominance. The Social Dominance Orientation (SDO) (Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius & Pratto, 1999) questionnaire consists of 16 questions (e.g., “To get ahead in life, it is necessary to step on other groups.”) answered on a scale of 1 (disagree completely) to 7 (completely agree). Scores were averaged so that higher scores reflect higher levels of social dominance (M =2.9; SD =1.14; α =.96). Research supports the reliability and validity of this measure (e.g., Pratto et al., 1994; Van Hiel & Mervielde, 2002). A copy of this measure can be found in Appendix J.

Defensive Trait Variables.

Rejection sensitivity. Rejection sensitivity was measured with Downy and Feldman’s (1996) Rejection Sensitivity Scale (RSS). The measure consists of 18 scenarios that ask participants to rate their degree of anxiety about the potential outcome of a situation (“You ask someone in one of your classes to coffee.”) on a scale of 1 (not anxious) to 6 (very anxious). Next, they are asked to rate on a scale of 1 (very unlikely) to 6 (very likely) the likelihood that the other person(s) will respond favorably. High likelihood, as rated by the respondents, represents higher levels of expected acceptance while lower likelihood represents expectations of rejection. I followed the
scoring procedure outlined by Downy and Feldman (1996). I reverse scored the expectation of likelihood for acceptance, multiplied these values by the degree of anxiety noted, and averaged across all items so that higher scores reflect higher levels of rejection sensitivity (M =9.3; SD =2.8; \( \alpha =.97 \)). Research supports the reliability and validity of this measure (Downy & Feldman, 1996). A copy of this measure can be found in Appendix K.

**Hostile attribution bias.** Hostile Attribution Bias was measured by the Hostile Attribution Bias Scale (HABS) (Lakey et al., 2005). The scale consists of seven vignettes describing ambiguous social situations (“Imagine you are going to a big party. Just as you walk in, you feel that there is a group of people staring at you and talking about you. Some of them even laugh.”) where one person or group engages in some behavior that another person (i.e., the respondent) could interpret as personally relevant and with hostile intent and could respond with varying degrees of anger. After reading each vignette, participants were asked to respond to three items using a scale of 1 (not at all) to 5 (very much). Responses were averaged such that higher scores reflect higher levels of hostile attribution bias. Item 1 asked about perceived intent (HABS-PI), that is, the certainty they felt regarding the intentional nature of the event (“How certain would you be that this person did this to you on purpose?”; M =2.2; SD =.8; \( \alpha =.82 \)). Item 2 assessed the level of anger they would experience in each situation (HABS-A; “How angry would you feel in this situation?”; M =2.7; SD =.92; \( \alpha =.89 \)). Item 3 questioned the desire to retaliate in response to each situation (HABS-R; “How much would you wish you could get back at this person?”; M =1.9; SD =.88; \( \alpha =.88 \)). Heppner et al. (2008) report adequate reliability for a previous iteration of this measure and significant correlations with other variables related to aggression, which support its validity. A copy of this measure can be found in Appendix L.
Jealousy. Jealousy was measured using Mathes and Severa's (1981) Interpersonal Jealousy Scale (IJS). The scale consists of 28 items intended to measure individual differences in jealousy. Participants were instructed to think of the name of their current or past intimate partner and to use this name for the blank in each question. They answered questions designed to capture various manifestations of jealousy ("I like to find fault with ___'s old dates.") using a scale of 1 (absolutely false; disagree completely) to 9 (absolutely true; agree completely). Scores were averaged so that higher scores represent higher levels of jealousy (M = 3.94; SD = .90; α = .89). Empirical studies support the scale's reliability and validity (e.g., Mathes, Phillips, Skowran, & Dick, 1982). A copy of this measure can be found in Appendix M.
CHAPTER 6
RESULTS

Analytic Overview

First, I examined preliminary correlational relations among IPV scores and demographic variables. Next, I examined correlations among narcissism, IPV scores, and proposed mediator variables. As noted earlier, I hypothesized that narcissism and IPV would correlate positively. Based on previous research and theory, I also expected both IPV and narcissism to correlate positively with the offensive (i.e., entitlement, unrealistic optimism, hypercompetitiveness, charisma, social dominance) and defensive (rejection sensitivity, hostile attribution bias, jealousy) traits. Finally, I examined whether the proposed mediators accounted for the relation between narcissism and the perpetration of IPV. I included RSES as a covariate, as previous research with narcissism supports that self-esteem often acts as a suppressor variable (e.g., Lakey et al., 2008). I also included as a covariate JVQ in light of empirical links between childhood exposure to violence and later IPV (Lewis & Fremouw, 2001).

For the sake of presentation, I computed two traditional hierarchical regression analyses (one for each IPV metric) to attain standardized regression coefficients ($\beta$) that allow for a comparison of the strength of the predictive power of included variables against one another. In Step 1, I regressed the dependent variable (i.e., IPV-F or IPV-P) onto the independent variable (i.e., NPI scores) and the covariates (i.e., RSES and JVQ scores), and in Step 2 I entered all potential mediators. However, I did not use these values for examining the statistical significance of the mediation model, as traditional mediation analysis techniques (e.g., Baron & Kenny, 1986; Sobel, 1982) only allow for a single mediator to be examined at a time. Because of this limitation, I used the bootstrapping mediation technique as outlined by Preacher and Hayes (2008) that allows for the examination of multiple mediators (and covariates) within the same
model. According to Preacher and Hayes, this technique decreases concerns over Type I error aggregation associated with multiple regression analyses using individual mediators, and it has greater power than other mediation techniques to detect statistically significant effects.

Using this method, I regressed the dependent variable (i.e., IPV-F or IPV-P) onto the independent variable (i.e., NPI scores), the covariates (i.e., RSES and JVQ scores), and all potential mediators, but instead of computing a single regression analysis, this method repeatedly sampled from the data set (i.e., bootstraps) for a set number of times (i.e., iterations) to produce estimates (i.e., point estimates or PtEst) of direct effects (narcissism-to-IPV) and indirect effects (narcissism-to-IPV through the mediator variables). Preacher and Hayes’s (2008) method tests the statistical significance of point estimates using bias corrected and accelerated (BCA) confidence intervals (CI), where nonzero confidence intervals for indirect effects support statistically significant mediation for individual variables. Statistically nonsignificant direct effects for the independent variable indicate full mediation from the set of variables. A statistically significant direct effect for the independent variable (narcissism) on the dependent variable (IPV) in the presence of a statistically significant indirect effect indicates partial mediation for an individual variable.

Preliminary Bivariate Correlation Analyses

Table 2 shows a correlation matrix for the IPV scores and demographic variables. One statistically significant correlation was found between IPV-F and population/geographic community of residence ($r = .12, p < .05$), where the likelihood of IPV-F is higher among those from urban areas than nonurban areas (i.e., suburban or rural). IPV-P did not correlate significantly with community residence ($r = .10, p > .09$). Neither IPV-F nor IPV-P correlated significantly with any other demographic variable (all $r_s < |.06|, p_s > .39$). Thus, these data do not provide evidence that IPV prevalence or frequency systematically relates to age, gender,
ethnicity, or sexual orientation. However, both IPV-F (r = .14, p < .05) and IPV-P (r = .15, p < .05) correlated positively and significantly with the measure of childhood victimization, JVQ, providing further evidence that childhood exposure to violence relates to later perpetration of IPV.

Table 2
Correlation Coefficients among IPV, Demographic Variables, and JVQ

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Note: IPV-F = IPV Frequency; IPV-P = IPV Prevalence; JVQ = Juvenile Victimization Questionnaire.
*p < .05; ** p < .01

Primary Bivariate Correlation Analyses

NPI and IPV correlations. Table 3 displays a correlation matrix of predictor and outcome scores. NPI correlated positively and significantly with IPV-P (r = .19; p < .01) and IPV-F (r = .20; p < .01), such that higher levels of narcissism are related to higher IPV prevalence and frequency. Importantly, these data establish that narcissists are significantly more likely than nonnarcissists to commit acts of IPV and do so with relatively high frequency. To my knowledge, this is the first evidence linking narcissism to violence committed within romantic relationships.

Table 3
Correlation Coefficients for Predictor and Outcome Variables

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Note: NPI = Narcissistic Personality Inventory; IPV-P = IPV Prevalence; IPV-F = IPV Frequency.
*p < .05; ** p < .01
**NPI and mediator variable correlations.** Table 4 shows a correlation matrix for the predictor variable with the mediator variables. In line with previous research, NPI correlated positively and significantly with RSES ($r = .19; p < .01$) as well as the offensive traits of CHARM ($r = .35; p < .01$), PE ($r = .42; p < .01$), HCA ($r = .34; p < .01$), and SDO ($r = .16; p < .01$). Of the defensive traits, NPI positively and significantly correlated with HABS-R ($r = .12; p = .05$). NPI did not significantly correlate to the other HABS subscales (i.e., HABS-PI or HABS-A), IJS or URO ($r_s < |.014|$, $p_s > .30$). NPI did, however, correlate significantly with RSS scores ($r = -.21; p < .01$), but this correlation was inverse, suggesting that as narcissism scores increase, the level of rejection sensitivity actually decreases. Moreover, based on these data, narcissists are no more likely than non-narcissists to experience high levels of jealousy, unrealistic optimism, or certainty about and anger in response to ambiguous but potentially malicious social interactions. These latter findings are somewhat surprising, as they do not align with previous research and theory. Nonetheless, these data do support that high levels of narcissism come with high levels of self-esteem, charisma, entitlement, hypercompetitiveness, socially dominant attitudes, and desires to retaliate to ambiguous but potentially malicious social interactions.

**IPV and mediator variable correlations.** Correlational analyses between the IPV variables and mediator variables revealed that IPV-P correlated positively and significantly with HABS-R ($r = .24; p < .01$), PE ($r = .17; p < .01$), and SDO ($r = .25; p < .01$). IPV-P also correlated negatively and significantly with RSES ($r = -.23; p < .01$), URO ($r = -.27; p < .01$), and CHARM ($r = -.15; p < .05$). IPV-P did not correlate significantly with IJS, HABS-PI, HABS-A, HCA, or RSS (all rs $< |.10|$, $p > .13$).

Similar to IPV-P, IPV-F correlated positively and significantly with HABS-R ($r = .27; p < .01$), PE ($r = .23; p < .01$), and SDO ($r = .26; p < .01$). IPV-F also correlated significantly and inversely
Table 4
Correlation Coefficients for Predictor and Mediator Variables

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Note: NPI = Narcissistic Personality Inventory; RSES = Rosenberg Self-Esteem Scale; CHARM = Charisma; HABS-R = Hostile Attribution Bias Retaliate; HABS-PI = Hostile Attribution Bias Perceived Intent; HABS-A = Hostile Attribution Bias Anger; HCA = Hypercompetitive Attitudes Scale; IJS = Interpersonal Jealous Scale; PE = Psychological Entitlement; SDO = Social Dominance Orientation; URO = Unrealistic Optimism; RSS = Rejection Sensitivity Scale.

* p < .05; ** p < .01.
with RSES ($r = -.19, p < .05$) and URO ($r = -.19, p < .05$), and it did not correlate significantly with HABS-A or RSS ($rs < .09, ps > .18$). Unlike IPV-P, however, IPV-F correlated positively and significantly with IJS ($r = .13; p < .05$), HABS-PI ($r = .14; p < .05$), and HCA ($r = .13; p < .05$), and it did not correlate significantly with CHAR (r = .08, p > .19).

Based on these data, IPV perpetrators are no more likely than those who do not commit acts of IPV to be particularly sensitive to rejection or to endorse becoming angry in response to ambiguous but potentially malicious social interactions. IPV perpetrators are particularly likely, however, to feel entitled, hold socially dominant attitudes, have low self-esteem, and endorse a strong desire to retaliate when faced with ambiguous but potentially malicious social interactions, though it is unlikely that they are unrealistically optimistic.

Interestingly, IPV frequency scores, but not IPV prevalence scores, also coincide with increases in jealousy, hypercompetitiveness, and the perceived certainty that ambiguous but potentially malicious social interactions happened with purposeful intent. Thus, these variables may be relevant for the escalation from relatively to isolated IPV events to frequent IPV perpetration. Please see Table 5 below, which displays the correlation matrix for the mediator and outcome variables.
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Note: NPI = Narcissistic Personality Inventory; RSES = Rosenberg Self-Esteem Scale; CHARM = Charisma; HABS-R = Hostile Attribution Bias Retaliate; HABS-PI = Hostile Attribution Bias Perceived Intent; HABS-A = Hostile Attribution Bias Anger; HCA = Hypercompetitive Attitudes Scale; IJS = Interpersonal Jealous Scale; PE = Psychological Entitlement; SDO = Social Dominance Orientation; URO = Unrealistic Optimism; RSS = Rejection Sensitivity Scale.

* p < .05; ** p < .01
**Mediation Model Regression Analyses**

**NPI-to-IPV-Prevalence analyses.** As noted earlier, I first ran a traditional hierarchical regression analysis to attain standardized regression coefficients (β) that allow for a comparison of the strength of the predictive power of included variables against one another. As seen in Table 6, I regressed IPV-P onto NPI, RSES, and JVQ scores in Step 1, and entered all potential mediators in Step 2. NPI significantly predicted IPV-P (β = .24; p < .01) in Step 1, and remained significant in Step 2, with the strength of the standardized regression coefficient dropping only slightly (β = .22, p < .01). Of the potential mediator variables, only HABS-R (β = .21, p < .05), HCA (β = .15, p < .05), and SDO (β = .16, p < .05) significantly predicted IPV-P.

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<td>2.32*</td>
</tr>
<tr>
<td>URO</td>
<td>-.65</td>
<td>.34</td>
<td>-.13</td>
<td>-1.93</td>
</tr>
<tr>
<td>RSS</td>
<td>-.16</td>
<td>.15</td>
<td>-.07</td>
<td>-1.05</td>
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**Note:** NPI = Narcissistic Personality Inventory; RSES = Rosenberg Self-Esteem Scale; JVQ = Juvenile Victimization Questionnaire; CHAR M = Charisma; HABS-R = Hostile Attribution Bias Retaliate; HABS-PI = Hostile Attribution Bias Perceived Intent; HABS-A = Hostile Attribution Bias Anger; HCA = Hypercompetitive Attitudes Scale; IJS = Interpersonal Jealous Scale; PE = Psychological Entitlement; SDO = Social Dominance Orientation; URO = Unrealistic Optimism; RSS = Rejection Sensitivity Scale. * p < .05; ** p < .01.
In order to potentially explain the relation between NPI and IPV-P, I used the bootstrapping method for multiple mediator models proposed by Preacher and Hayes (2008) that I outlined above. In this IPV-P analysis the total effect of NPI on IPV-P was statistically significant ($B = .2231, SE = .0539, t = 4.14, p < .01$). The relations between NPI and the mediator variables were statistically significant for six of the proposed mediators, including HABS-R ($B = .0177, SE = .0077, t = 2.29, p < .05$), RSS ($B = .0643, SE = .0229, t = 2.81, p < .01$), CHAR M ($B = .0560, SE = .0104, t = 5.38, p < .01$), PE ($B = .0740, SE = .0096, t = 7.70, p < .01$), HCA ($B = .0221, SE = .0036, t = 6.19, p < .01$), and SDO ($B = .0335, SE = .0099, t = 3.39, p < .01$).

The relations between the mediator variables and IPV-P were statistically significant for three of the proposed mediators, including HABS-R ($B = 1.4760, SE = .6994, t = 2.11; p < .05$), HCA ($B = 2.2765, SE = 1.0536, t = 2.16, p < .05$), and SDO ($B = .8967, SE = .3845, t = 2.33, p < .05$). The partial effects for the covariates RSES ($B = .1156, SE = .0539, t = 2.14, p < .05$) and JVQ ($B = .7302, SE = .3007, t = 2.42, p < .05$) were statistically significant. Most importantly, an examination of the point estimates and BCA confidence intervals reveals that three mediator variables provided statistically significant indirect effects, including HABS-R (PtEst = .0277; BCA-CI = .0014 - .0849), HCA (PtEst = .0503; BCA-CI = .0178 - .1047), and SDO (PtEst = .0300; BCA-CI = .0066 - .0920). However, the direct effect of NPI on IPV-P remained statistically significant ($B = .2060, SE = .0628, t = 3.28, p < .01$), indicating partial mediation. Figure 2 shows the mediation model for IPV-P.
Figure 2. Multiple Mediator Model of the Relation between Narcissism and Intimate Partner Violence Prevalence.

Note: Bold paths indicate statistically significant indirect effects in the narcissism-to-IPV relation.

IPV = Intimate Partner Violence.

* p < .05; ** p < .01

**NPI-to-IPV-Frequency analyses.** For IPV-F analyses, I followed the same method as above. As seen in Table 7, I regressed IPV-F onto NPI, RSES, and JVQ scores in Step 1, and entered all potential mediators in Step 2. NPI significantly predicted IPV-F (β = .25, p < .01) in Step 1, and it remained statistically significant predictor (β = .19, p < .01) in Step 2. Of the potential mediators, only HABS-R (β = .20, p < .05) and SDO (β = .16; p < .01) were statistically significant.
Table 7
Regression Coefficients Using Hierarchical Regression Analyses with IPV-F

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPI</td>
<td>1.15</td>
<td>.27</td>
<td>.24</td>
<td>4.23*</td>
</tr>
<tr>
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<td>-.23</td>
<td>-3.95**</td>
</tr>
<tr>
<td>JVQ</td>
<td>3.26</td>
<td>1.49</td>
<td>.12</td>
<td>2.19*</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPI</td>
<td>.89</td>
<td>.32</td>
<td>.19</td>
<td>2.81**</td>
</tr>
<tr>
<td>RSES</td>
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<td>2.75</td>
<td>-.12</td>
<td>-1.76</td>
</tr>
<tr>
<td>JVQ</td>
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<td>1.51</td>
<td>.12</td>
<td>2.12*</td>
</tr>
<tr>
<td>CHARM</td>
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<td>1.64</td>
<td>-.06</td>
<td>-.85</td>
</tr>
<tr>
<td>HABS-R</td>
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<td>3.51</td>
<td>.19</td>
<td>1.99*</td>
</tr>
<tr>
<td>HABS-PI</td>
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<td>-.08</td>
<td>-.85</td>
</tr>
<tr>
<td>HABS-A</td>
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<td>.52</td>
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<td>HCA</td>
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<td>IJS</td>
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<td>.07</td>
<td>1.03</td>
</tr>
<tr>
<td>PE</td>
<td>2.73</td>
<td>1.90</td>
<td>.10</td>
<td>1.45</td>
</tr>
<tr>
<td>SDO</td>
<td>4.85</td>
<td>1.93</td>
<td>.17</td>
<td>2.51**</td>
</tr>
<tr>
<td>URO</td>
<td>-3.16</td>
<td>1.70</td>
<td>-.13</td>
<td>-1.86</td>
</tr>
<tr>
<td>RSS</td>
<td>-.72</td>
<td>.75</td>
<td>-.06</td>
<td>-.95</td>
</tr>
</tbody>
</table>

Note: NPI = Narcissistic Personality Inventory; RSES = Rosenberg Self-Esteem Scale; JVQ = Juvenile Victimization Questionnaire; CHARM = Charisma; HABS-R = Hostile Attribution Bias Retaliate; HABS-PI = Hostile Attribution Bias Perceived Intent; HABS-A = Hostile Attribution Bias Anger; HCA = Hypercompetitive Attitudes Scale; IJS = Interpersonal Jealousy Scale; PE = Psychological Entitlement; SDO = Social Dominance Orientation; URO = Unrealistic Optimism; RSS = Rejection Sensitivity Scale.

* p < .05; ** p < .01.

In the IPV-F bootstrapping for multiple mediator models analysis, the total effect of NPI on IPV-F was statistically significant ($B = 1.1452$, SE = .2714, $t = 4.22$, $p < .01$). As before, the relations between NPI and the mediator variables were statistically significant for six of the proposed mediators, including HABS-R ($B = 0.177$, SE = .0077, $t = 2.29$, $p < .05$), RSS ($B = -.0643$, SE = .0229, $t = 2.81$, $p < .01$), CHARM ($B = 0.0560$, SE = .0104, $t = 5.38$, $p < .01$), PE ($B = 0.0740$, SE = .0096, $t = 7.70$, $p < .01$), HCA ($B = 0.221$, SE = .0036, $t = 6.19$, $p < .01$), and SDO ($B = 0.335$, SE = .0099, $t = 3.39$, $p < .01$). The relations between the mediator variables and IPV-F were statistically significant for two of the proposed mediators, including HABS-R ($B = 6.9002$, SE = .35236, $t = 1.96$, $p < .05$) and
SDO ($B = 4.8609$, $SE = 1.9318$, $t = 2.52$, $p < .05$) was statistically significant, whereas the effect of the covariate RSES was not ($p > .07$). Most importantly, two mediator variables provided statistically significant indirect effects, including HABS-R ($PtEst = 1239$; BCA-CI: $.0036 - .3709$) and SDO ($PtEst = .1627$; BCA-CI: $.0217 - .4659$). However, the direct effect of NPI on IPV-F remained statistically significant with the inclusion of the mediator variables ($B = .8865$, $SE = .3154$, $t = 2.81$, $p < .01$), indicating only partial mediation. Figure 3 shows the mediation model for IPV-F.

**Figure 3. Multiple Mediator Model of the Relation between Narcissism and Intimate Partner Violence Frequency.**

Note: Bold paths indicate statistically significant indirect effects in the narcissism-to-IPV relation.

IPV = Intimate Partner Violence.

* $p < .05$; ** $p < .01$
CHAPTER 7
DISCUSSION

IPV poses serious problems, especially to its victims. For instance, IPV increases the likelihood of clinical depression, posttraumatic stress and other anxiety disorders, suicide ideation, and the likelihood of committing self-harm (Chan et al., 2008; Coker et al., 2002). Not only do victims suffer physical pain and emotional scars, but they often experience long-term medical issues including circulatory, gastrointestinal, and central nervous system disorders and many of the children of female victims are born with low birth weights (Crofford, 2007; Roberts et al., 2005; Roberts et al., 2003). Community structures and broader social systems also incur great costs due to IPV perpetration, with yearly costs to the U.S. healthcare system exceeding $5.8 billion, for example (CDC, 2003). Thus, understanding IPV perpetration represents an important avenue of research. In this research I used Anderson and Bushman’s (2002) GAM framework that describes how personality, situational, and social variables represent “inputs” that help to understand aggressive behavior, and focused on the individual difference variable of narcissism as a potential trait that might capture those who perpetrate acts of IPV. I sought not only to investigate whether narcissists were more likely than those low in narcissism to perpetrate acts of IPV, but also to examine whether they do so as a function of various offensive (i.e., social dominance, entitlement, charisma, unrealistic optimism, and hypercompetitiveness) and defensive (i.e., jealousy, rejection sensitivity, and manifestations of hostile attribution bias) self-regulatory traits that underpin their unbalanced self-views and contribute to their tendency to engage in aggressive behavior. Some interesting, and in some cases, surprising findings emerged.

Most fundamentally, I found evidence linking narcissism to IPV. I employed the most widely used measure of IPV (i.e., Straus’ [2004] Conflict Tactics Scale) and distinguished
between IPV prevalence and IPV frequency. IPV prevalence simply provides evidence of whether or not acts of IPV have occurred with no respect to its frequency (or chronicity) (Straus, 2004). IPV frequency considers the frequency of IPV’s occurrence, and as such, it seems to provide greater precision regarding the severity of IPV across time. Consistently, across both IPV metrics, narcissism related significantly and directly to IPV scores even controlling for relevant covariates. Therefore, these results reveal that narcissists are not only more likely than those low in narcissism to commit acts of IPV (i.e., IPV-P) but that they do so with particular frequency (IPV-F) relative to those lower in narcissism.

At a broad level these results add to previous research documenting narcissists’ aggressive tendencies, including those that link narcissism to aversive and offensive interpersonal behavior like bullying (e.g., Fields & Lakey, 2010) and to defensive and aggressive behaviors like retaliating in the face of self-esteem threat or provocation (Bushman & Baumeister, 1998; Miller et al., 2008; Reidy et al., 2008). To the extent that narcissists engage in behaviors that diminish their partners and degrade their intimate relationships, these results also provide further evidence of the relative paucity of the self-system that they invest in their intimate relationships (Foster et al., 2006).

Despite these links between narcissism and IPV, the current results evidencing mediation of the link between narcissism and IPV were much less clear. For instance, the results of correlational analyses aligned with prior research and theory linking narcissism to the traits of charisma (Paulhus, 1998), entitlement (Exline et al., 2004), hypercompetitiveness (Morf & Rhodewalt, 2001), and social dominance orientation (Paulhus & Williams, 2002). However, narcissism only correlated significantly with the retaliate subscale of the HABS, suggesting that although narcissists are no more likely than nonnarcissists to be certain of the aggressive intent of ambiguous acts of aggression or to become angry in response, they are more likely to retaliate.
Surprisingly, narcissism correlated inversely with rejection sensitivity, suggesting that narcissists are less likely than nonnarcissists to be sensitive to rejection, a contrary finding to prior research (e.g., Foster et al., 2006). Additionally, though prior research supported a relationship between narcissism and unrealistic optimism (e.g., Campbell et al., 2004) and jealousy (Hannawa et al., 2006), current results were not statistically significant.

Because I distinguished between IPV frequency and IPV prevalence, I conducted separate correlation and regression analyses for each metric. To some extent the correlational results between the mediators and IPV metrics fit with those at least at the level of general aggression. IPV frequency and prevalence both related significantly and directly to entitlement, social dominance orientation, as well as the retaliation subscale of the HABS. Thus, these results confirm other reports linking tendencies towards retaliation (Dodge & Coie, 1987), personal feelings of deservingness (Walters, 2007), and the endorsement of hierarchical social structures (Burgoon et al., 2009; Ghaed & Gallo, 2006) as relevant variables for understanding aggression.

Both IPV metrics related inversely to unrealistic optimism, which was contrary to expectation. For instance, previous research has shown that at least part of the reason narcissists engage in various forms of criminal behavior, including acts of interpersonal aggression (like assault), is due to their unrealistic optimism and expectations that they will not be caught or punished (Fields & Lakey, 2010). From this perspective, I expected frequent IPV perpetrators to hold beliefs about getting away with IPV acts, which could stem from and also reinforce unrealistic optimism. Instead, the current data suggest that individuals who are not unrealistically optimistic are more likely than those high in unrealistic optimism to perpetrate acts if IPV. Perhaps this finding reflects the tendency for IPV perpetrators to experience greater difficulties in their lives overall, which contributes to relatively negative expectations about their lives, and perhaps jaded expectations about their intimate relationships and the world.
From this perspective, wearing “rose colored glasses”, which is metaphorically related (inversely) to unrealistic optimism, might help relationship partners by focusing their attention on the positives within their relationships, which might in turn keep acts of IPV from occurring. Future research should examine this more closely.

Only IPV prevalence, but not IPV frequency, inversely related to charisma. In contrast, only IPV frequency related significantly to the HABS certainty of intent, jealousy, and hypercompetitiveness scores. These findings are intriguing in what they suggest about relationship initiation versus maintenance. Charisma, for instance, may contribute to relationship development but not necessarily its maintenance per se, at least not in the face of IPV. Once victims’ infatuation brought forth from charisma lessens, relationship partners get to know perpetrators for who they “really are”. Because they cannot rely on (or do not use) charisma to fix their relationships, perpetrators may resort to the use of IPV as a means of dealing with relationship difficulties (cf. Paulhus, 1998). Such a process would explain why charisma might relate to IPV prevalence but not IPV frequency. In other words, once a relationship has begun and charisma cannot be used as means to smooth over a fight or argument, the use of IPV may take its place. Once it occurs, however, because charisma cannot be used to overcome the use of violence, the relationship may end accounting for the relationship between charisma and IPV prevalence but not IPV frequency. On the other hand, tendencies to feel jealousy and a sense of certainty regarding the malevolent intent in ambiguous encounters may not increase the likelihood of initially committing an act of IPV, but in cases where IPV occurs, these traits possibly serve as primed catalysts that lead to the use of IPV. Thus, these variables might relate to IPV frequency but not IPV prevalence. The current data do not speak to these possibilities directly, however, so future research should explore the validity of this conjecture.
Regression analyses not only helped determine whether or not narcissism was predictive of IPV, but it also helped to establish the explanatory value of the proposed mediators. For both outcome variables (i.e., IPV-F and IPV-P) narcissism positively and significantly predicted IPV and remained statistically significant subsequent to the inclusion of the mediator variables. In analyses of IPV perpetration I found support for partial mediation by three variables: hypercompetitiveness, socially dominant attitudes, and tendencies to retaliate in the face of potentially hostile but ambiguous social situations. The case of hypercompetitiveness is quite interesting, because unlike the other two variables (SDO and HABS-R), it was not significant in IPV frequency analyses. Ryckman et al. (1997) suggested that hypercompetitiveness contributes to aggression because it leads to the use of various tactics to keep a person “on top”. That hypercompetitiveness accounts for some of the narcissism-to-IPV-prevalence relation but not the IPV-frequency relation suggests that it may be important in the early stages of narcissists’ intimate relationships, when narcissistic perpetrators may engage in acts of IPV due to their hypercompetitive nature, but which in turn lead to relationship dissolution and keep hypercompetitiveness from relating systematically to IPV frequency.

Another possible interpretation of this finding could simply be that for narcissists hypercompetitiveness’ unique effects for IPV prevalence are subsumed when the more precise, IPV frequency variable is analyzed. Indeed, the tendency to become verbally or physically aggressive in order to exploit others for personal gain and to derogate others when faced with defeat, requires an underlying sense of structure and hierarchy that is reflected in social dominance orientation. These same processes require a willingness and desire to “strike back” in moments of perceived hostility, even in noncompetitive situations. To the extent that a narcissist’s relationship partner threatens the narcissist’s self-views or perceived “path to the top”, the partner may face derogation and potentially explosive or violent outbursts (e.g. Reidy
et al., 2008). The current data suggest that some of IPV’s baseline occurrence (or prevalence) by narcissists reflects their hypercompetitive nature; however, narcissists’ continued use of IPV (reflected in IPV frequency) seems to more strongly reflect some sort of perceived breach of relationship hierarchy (reflected in social dominance orientation) as well as the retaliatory use of aggression to reestablish it (reflected in their hostile attribution bias).

Other findings, such as seeing that narcissism scores more strongly predicted IPV perpetration than a history of family violence, add to the validity of examining narcissism as a predictor of IPV. Nonetheless, it is worth noting that only a small portion of the narcissism-to-IPV relation was accounted for by their hostile attribution bias, socially dominant attitudes, and in the case of IPV-P, their hypercompetitiveness. Why other variables did not account for a significant portion of the variance between narcissism and IPV is not entirely clear. Entitlement, for instance, have been studied extensively both in terms of predicting the occurrence of IPV (Brainerd et al., 1993) and as relevant for understanding narcissistic aggression in romantic relationships (Walters, 2007). Researchers and theorists (e.g., Exline et al., 2004; Walters, 2007) have billed entitlement to perceptions of deservingness and ownership rights over relationship partners, which may serve as the impetus for narcissists to give permission to the self for various types of criminal activity. Yet, entitlement did not uniquely predict IPV nor did it account for the link between narcissism and IPV. It is possible, though theoretically unlikely, that the variance accounted for by entitlement would be subsumed by socially dominant attitudes and hostile attributional biases. A better course of action than resting on this assumption would be to attempt to replicate the current results, ideally using longitudinal data structured hierarchically to examine how changes among these variables relate to each other and to IPV perpetration. In short, why entitlement (among other variables) did not significantly account for variance in IPV, while HABS-R and SDO did, remains a question for future research.
One last finding to note is the lack of correlation between demographic variables and IPV perpetration. The only demographic variable to show a correlation with IPV was the region or setting in which the participants were raised. Individuals raised in urban areas were more likely to report acts of IPV perpetration than those in rural areas. The other demographic variables (i.e., gender, age, ethnicity, or sexual orientation) showed no significant correlation with IPV perpetration. Perhaps these results should not be surprising given that inconsistent findings have emerged for each of these variables in other IPV research. Some researchers, for instance, find males perpetrating IPV significantly more frequently than females (Dobash & Dobash, 1977), while others argue that the rates are equal (Straus, 2004). Other researchers have found the highest rates of IPV among White/Caucasian Americans (Lane & Gwartney-Gibbs, 1985), for example, while Black/African Americans have been cited as having the most frequent rates of IPV in other studies (e.g., Lewis & Fremouw, 2001). Given that most participants in this study were White/Caucasian, female, heterosexual college students in their late teens to early 20s, any findings regarding demographic information must be interpreted with caution.

Other Implications for IPV Research and Prevention

To an extent, the current finding shed new light on existing research and theory, most particularly theories of personality that have been used as the guiding framework for understanding IPV (e.g., Costa & Babock, 2008; Ross & Babock, 2009). Previous theories of personality have relied on models or diagnoses of psychopathy or personality disorders, the prevalence of which in the general population falls somewhere between 1-3% (APA, 2000). The small base rates of these disorders limit the extent to which they will account for the perpetration of IPV. In contrast, the current findings offer the possibility that a broader approach is warranted. Examining narcissism at the trait rather than disorder level casts a broader net for IPV perpetration, and, as such, it offers the possibility of tailoring IPV interventions.
towards certain aspects that typify them and help explain why they commit IPV, such as their socially dominant attitudes and their tendencies to retaliate. Stated differently, in comparison to the magnitude of theories that address why IPV occurs, relatively few devote attention to strategies that may prevent its occurrence. The current results suggest that narcissism provides a viable and potentially strong variable to target in IPV prevention research, perhaps even more so than knowing a person’s history of family violence.

Disturbingly, narcissism is on the rise (e.g., Twenge & Campbell, 2008), which presents a somewhat bleak picture for IPV perpetration and its victims in the absence of some preventative efforts. Importantly, however, some recent research has demonstrated some initial success in attenuating some of the negative effects that so frequently occur among narcissists. For instance, Thomaes, Bushman, de Castro, Cohen, and Denissen (2009) theorized that using self-affirmation writing assignments would buttress the unstable, high self-esteem of narcissists, which might affect students’ interpersonal behavior with their peers. To explore this possibility, these authors simply had school-aged children write about personally important values and traits for a short period of time, and then they tracked their interpersonal behavior. Not only did narcissists’ grandiose but fragile self-esteem become less volatile, but their tendencies to bully decreased significantly, and the effects extended a full school week after the intervention.

In other research, Konrath et al. (2006) introduced an inconsequential similarity (e.g., fingerprint patterns) between narcissists and those who were to provide critical, negative feedback. They found that this simple similarity increased the sense of connection with the other participant, which completely attenuated the marked aggression that generally occurs when narcissists receive self-relevant, ego-threatening information. Similar results were reported by Heppner et al. (2008), who used a raisin eating task to heightened participants’ state of mindfulness (or increased attention and awareness to the present moment) (Brown &
Ryan, 2003). These authors had everyone complete a group task and then ostensibly rank those with whom they would want to work in a subsequent part of the study. Some participants were told that everyone in the first group listed them as desirable to work with (and therefore were accepted), while others were told that no one picked them (and therefore were rejected). In the later task, which is actually an game employed to assess aggression, rejected participants who underwent the mindfulness inducing procedure were no more aggressive than those who were accepted, and both of these groups were significantly less aggressive than those who were simply rejected and who did not undergo the mindfulness procedure.

Consistent among these studies is the theme that reducing the ego-threatening nature of events diminishes the use of reactive aggression. Becoming less ego-involved - whether via self-affirming writing, increasing the self-other overlap of relationship partners by noting similarities, or increasing mindfulness - all offer the possibility of lowering the rates of IPV perpetration. I am not suggesting that they would provide a means of preventing IPV from ever occurring - of course logistical factors would prevent these potential interventions from reaching all parties who enter into romantic relationships. I am suggesting, however, that in concert with the current data, these prevention studies suggest lowering individuals ego-involvement may provide a valid course of action in the prevention of continuing IPV behaviors among certain groups of perpetrators, like narcissists who enter the criminal justice system for IPV offenses.

Limitations and Future Directions

The current findings align with the GAM (Anderson & Bushman, 2002) at least to some extent. From the GAM perspective, narcissism acts as an input, whereas desires to retaliate for a perceived wrongdoing, hypercompetitive attitudes, and endorsement of social dominance all reflect cognitive, affective, and arousal routes by which narcissists engage in aggressive behavior.
On the other hand, partial mediation results suggest that narcissists’ aggression may not necessarily depend on a step-by-step or input-to-route layout or process. Partial mediation results also suggest that other potential mediators must be identified and examined. Impulsivity seems the most logical choice. Indeed, the most glaring limitation to the current results may be the inadvertent omission of the impulsivity measure. Not only would the inclusion of impulsivity have provided another avenue by which to examine the narcissism-to-IPV relation statistically, but, in light of evidence that narcissists’ impulsivity often accounts for why they engage in maladaptive, risky behaviors (e.g., Foster et al., 2008), it may be the variable with the strongest empirical support. Recently, Finkel and colleagues (2011) put forth a theory of aggressive behavior from the perspective of IPV, which also was guided by Anderson and Bushman’s (2002) GAM. In fact, this newly developed “I3” theory addresses how IPV may reflect a lack of self-control (or low inhibition) in the face of a provocation (instigation) among individuals with dispositional aggressiveness (impellance). Finkel et al. note that many aggression questionnaires, like Buss and Perry’s (1992) widely-used Aggression Questionnaire, include questions that tap into the overlap between the impulsivity and aggression, such as “I sometimes feel like a powder keg waiting to explode” and “Given enough provocation, I may hit another person”. Not only do these items reflect two different components of Finkel et al.’s I3 model, including dispositional aggressiveness (impellance) and the lack of self-control (inhibition), empirical evidence supports that they relate to both IPV (Finkel et al., 2012) and narcissism, as well (Baumeister et al., 1996).

As I noted earlier, another avenue for future research should be to incorporate participants outside of college student populations. For instance, prior research indicates that as education increases, IPV decreases (Baumeister et al., 1996). Therefore, it is possible that using a
college sample limits the scope of IPV perpetration assessed. Decreasing the range of scores would likely lessen the strength of the relation between narcissism and IPV and likewise limit the variance accounted for by the mediators in the model. Sampling among other populations would be a good course of future research, especially if one might compare the current results to those found among known perpetrators who have been prosecuted and found guilty of crimes due to IPV. While this may provide a point of comparison, it is important to note that such research would not be a minor extension, as there are likely to be large differences in frequency and severity of IPV between the current subclinical population and the proposed clinical population. Additionally, while narcissism as measured by the NPI and NPD share central features, data from those who have the diagnosed personality disorder may be worse if not more severe in nature. This, however, would not account for prevalence.

Though I examined the directionality and severity of the IPV acts, examining gender differences for the endorsement of victimization versus perpetration would provide greater insight to the types of acts males may perpetrate or be victims of more than females and vice versa.

Other research might also extend to assessments outside of self-report measures. Even though self-report data provide the simplest method to gather data on IPV, and despite the assurance of anonymity, it is possible that participants may have been reticent to provide accurate information due to the taboo nature of the topic in question and the stigma associated with abusing a partner within romantic relationships. Gathering data from additional sources such as partner or family members may provide further insight into the perpetration of IPV and may increase the validity and generalizability of these findings.
Conclusion

In this research I found empirical evidence of the link between narcissism and IPV. I also found that part of the reason narcissists engage in IPV is due to their tendencies to retaliate to ambiguous but potentially hostile interactions, their socially dominant attitudes, and in the case of IPV prevalence, their hypercompetitiveness. Knowing who and why individuals engage in IPV perpetration is a first step in preventing its occurrence (and reoccurrence). These results provide several important avenues for future research, including the identification of other explanatory variables, and in concert with other research (e.g., Thomaes et al., 2009), they speak to the possibility that attenuating narcissists’ ego-involvement may curtail the incidence of IPV perpetration. Though a future direction of research with clinical populations was suggested, research that continues within subclinical populations remains important for many reasons. Perhaps most important of the reasons is that regardless of the severity of violence that may be occurring, whether it be major violence or intimate terrorism associated with clinical populations or common couple/minor violence associated with subclinical populations, it is still violence and worthy of research. In addition, minor violence can easily evolve into major violence and therefore understanding subclinical population violence should remain a point of importance and should not be overshadowed. Given the individual and social implications and consequences associated with IPV, it is important for researchers to gain greater clarity into the subject.
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APPENDIXES

Appendix A
Demographics Questionnaire

1. Age: _____

2. Gender:   Male _____   Female _____ Transgender _____ No response _____

3. Please answer BOTH questions 3(a) and 3(b).
   3(a). How do you describe yourself (please place a check beside your ethnicity)?
        ______ Hispanic or Latino or of Spanish Origin
        ______ Not-Hispanic or Latino
   3(b). Please place a check beside your race. Mixed racial heritage should be indicated
        by checking more than one category.
        ______ American Indian or Alaska Native
        ______ Asian
        ______ Black or African American
        ______ Native Hawaiian or Other Pacific Islander
        ______ White

4. Are you a native English speaker?   ______ Yes   ______ No
   If “No,” at what age did you learn this language? ________________

5. What type of community were you raised in (please check one)?
   ______ Urban   ______ Suburban   ______ Rural
Appendix B

Revised Conflict Tactics Scale

No matter how well a couple gets along, there are times when they disagree, get annoyed with one another, or just have spats or fights. Couples also have many different ways of trying to settle their differences. This is a list of things that might happen when you have differences. Please circle how many times you did each of these things in the past year, and how many times a partner did them in the past year. How often did this happen?:

1 = Once in the past year
2 = Twice in the past year
3 = 3-5 times in the past year
4 = 6-10 times in the past year
5 = 11-20 times in the past year
6 = More than 20 times in the past year
7 = Not in the past year, but it did happen before
0 = This has never happened

1. I showed my partner I cared even though we disagreed.
2. My partner showed care for me even though we disagreed.
3. I explained my side of a disagreement to my partner.
4. My partner explained his or her side of a disagreement to me.
5. I insulted or swore at my partner.
6. My partner did this to me.
7. I threw something at my partner that could hurt.
8. My partner did this to me.
9. I twisted my partner's arm or hair.
10. My partner did this to me.
11. I had a sprain, bruise, or small cut because of a fight with my partner.
12. My partner had a sprain, bruise, or small cut because of a fight with me.
13. I showed respect for my partner's feelings about an issue.
14. My partner showed respect for my feelings about an issue.
15. I made my partner have sex without a condom.
16. My partner did this to me.
17. I pushed or shoved my partner.
18. My partner did this to me.
19. I used force (like hitting, holding down, or using a weapon) to make my partner have oral or anal sex.
20. My partner did this to me.
21. I used a knife or gun on my partner.
22. My partner did this to me.
23. I passed out from being hit on the head by my partner in a fight.
24. My partner passed out from being hit on the head in a fight with me.
25. I called my partner fat or ugly.
26. My partner called me fat or ugly.
27. I punched or hit my partner with something that could hurt.
28. My partner did this to me.
1 = Once in the past year
2 = Twice in the past year
3 = 3-5 times in the past year
4 = 6-10 times in the past year
5 = 11-20 times in the past year
6 = More than 20 times in the past year
7 = Not in the past year, but it did happen before
0 = This has never happened

29. I destroyed something belonging to my partner.
30. My partner did this to me.
31. I went to a doctor because of a fight with my partner.
32. My partner went to a doctor because of a fight with me.
33. I choked my partner.
34. My partner did this to me.
35. I shouted or yelled at my partner.
36. My partner did this to me.
37. I slammed my partner against a wall.
38. My partner did this to me.
39. I said I was sure we could work out a problem.
40. My partner was sure we could work it out.
41. I needed to see a doctor because of a fight with my partner, but I didn't.
42. My partner needed to see a doctor because of a fight with me, but didn't.
43. I beat up my partner.
44. My partner did this to me.
45. I grabbed my partner.
46. My partner did this to me.
47. I used force (like hitting, holding down, or using a weapon) to make my partner have sex.
48. My partner did this to me.
49. I stomped out of the room or house or yard during a disagreement.
50. My partner did this to me.
51. I insisted on sex when my partner did not want to (but did not use physical force).
52. My partner did this to me.
53. I slapped my partner.
54. My partner did this to me.
55. I had a broken bone from a fight with my partner.
56. My partner had a broken bone from a fight with me.
57. I used threats to make my partner have oral or anal sex.
58. My partner did this to me.
59. I suggested a compromise to a disagreement.
60. My partner did this to me.
61. I burned or scalded my partner on purpose.
62. My partner did this to me.
63. I insisted my partner have oral or anal sex (but did not use physical force).
64. My partner did this to me.
65. I accused my partner of being a lousy lover.
1 = Once in the past year
2 = Twice in the past year
3 = 3-5 times in the past year
4 = 6-10 times in the past year
5 = 11-20 times in the past year
6 = More than 20 times in the past year
7 = Not in the past year, but it did happen before
8 = This has never happened

66. My partner accused me of this.
67. I did something to spite my partner.
68. My partner did this to me.
69. I threatened to hit or throw something at my partner.
70. My partner did this to me.
71. I felt physical pain that still hurt the next day because of a fight with my partner.
72. My partner still felt physical pain the next day because of a fight we had.
73. I kicked my partner.
74. My partner did this to me.
75. I used threats to make my partner have sex.
76. My partner did this to me.
77. I agreed to try a solution to a disagreement my partner suggested.
78. My partner agreed to try a solution I suggested.
Appendix C

Narcissistic Personality Inventory

In each of the following pairs, choose the one that you most agree with. Mark either A or B in the space provided.

____ 1.  A I have a natural talent for influencing people.  
 B I am not good at influencing people.  
____ 2.  A Modesty doesn't become me.  
 B I am essentially a modest person.  
____ 3.  A I would do almost anything on a dare.  
 B I tend to be a fairly cautious person.  
____ 4.  A When people compliment me I get embarrassed.  
 B I know that I am a good person because everybody keeps telling me so.  
____ 5.  A The thought of ruling the world frightens the hell out of me.  
 B If I ruled the world it would be a better place.  
____ 6.  A I can usually talk my way out of anything.  
 B I try to accept the consequences of my behavior.  
____ 7.  A I prefer to blend in with the crowd.  
 B I like to be the center of attention.  
____ 8.  A I will be a success.  
 B I am not too concerned about success.  
____ 9.  A I am no better or no worse than most people.  
 B I think I am a special person.  
____ 10. A I am not sure if I would make a good leader.  
 B I see myself as a good leader.  
____ 11. A I am assertive.  
 B I wish I were more assertive.  
____ 12. A I like having authority over other people.  
 B I don't mind following orders.  
____ 13. A I find it easy to manipulate people.  
 B I don't like it when I find myself manipulating people.  
____ 14. A I insist upon getting the respect that is due me.  
 B I usually get the respect I deserve.  
____ 15. A I don't particularly like to show off my body.  
 B I like to show off my body.  
____ 16. A I can read people like a book.  
 B People are sometimes hard to understand.  
____ 17. A If I feel competent, I am willing to take responsibility for making decisions.  
 B I like to take responsibility for making decisions.  
____ 18. A I just want to be reasonably happy.  
 B I want to amount to something in the eyes of the world.  
____ 19. A My body is nothing special.  
 B I like to look at my body.  
____ 20. A I try not to be a show off.  
 B I will usually show off if I get the chance.
21. A I always know what I am doing.
   B Sometimes I am not sure what I am doing.

22. A I sometimes depend on people to get things done.
   B I rarely depend on anyone else to get things done.

23. A Sometimes I tell good stories.
   B Everybody likes to hear my stories.

24. A I expect a great deal from other people.
   B I like to do things for other people.

25. A I will never be satisfied until I get all that I deserve.
   B I will take my satisfactions as they come.

26. A Compliments embarrass me.
   B I like to be complimented.

27. A I have a strong will to power.
   B Power for its own sake doesn’t interest me.

28. A I don’t care about new fads and fashion.
   B I like to start new fads and fashion.

29. A I like to look at myself in the mirror.
   B I am not particularly interested in looking at myself in the mirror.

30. A I really like to be the center of attention.
   B It makes me uncomfortable to be the center of attention.

31. A I can live my life anyway I want to.
   B People can’t always live their lives in terms of what they want.

32. A Being in authority doesn’t mean much to me.
   B People always seem to recognize my authority.

33. A I would prefer to be a leader.
   B It makes little difference to me whether I am leader or not.

34. A I am going to be a great person.
   B I hope I am going to be successful.

35. A People sometimes believe what I tell them.
   B I can make anyone believe anything I want them to.

36. A I am a born leader.
   B Leadership is a quality that takes a long time to develop.

37. A I wish someone would someday write my biography.
   B I don’t like people to pry into my life for any reason.

38. A I get upset when people don’t notice how I look when I go out in public.
   B I don’t mind blending into the crowd when I go out in public.

39. A I am more capable than other people.
   B There is a lot I can learn from other people.

40. A I am much like everybody else.
   B I am an extraordinary person.
Appendix D

Rosenberg Self-Esteem Scale

Please read each statement and consider the extent to which you typically or generally agree or disagree with it.

<p>| | | | | |</p>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

1. I feel that I am a person of worth, at least on an equal plane with others.
2. I feel like a person who has a number of good qualities.
3. All in all, I am inclined to feel like a failure.
4. I feel as if I am able to do things as well as most other people.
5. I feel as if I do not have much to be proud of.
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. I wish that I could have more respect for myself.
9. I certainly feel useless at times.
10. At times I think that I am no good at all.
Appendix E

Juvenile Victimization Questionnaire - Revised

These are questions about some things that might have happened during your childhood in your experience different events, some good and some bad, so try your best to think about your entire childhood as you respond, and remember that all answers are anonymous, so please answer honestly.

0 1 2 3 4 5
No / Never One time Two times Three times Four times Five or more

Questions about your mother (or female parental figure)...

___1. Did you ever witness your mother (or female parental figure) hit/slap/punch, push/shove, choke, beat, kick, use a weapon against, or otherwise physically try to hurt your father (or another person with whom she was in a romantic relationship)?

___2. Did you ever witness your mother (or female parental figure) insult (or use offensive names), threaten, or swear/shout/yell at, or otherwise verbally try to hurt your father (or another person with whom she was in a romantic relationship)?

Questions about your father (or male parental figure)...

___1. Did you ever witness your father (or male parental figure) hit/slap/punch, push/shove, choke, beat, kick, use a weapon against, or otherwise physically try to hurt your mother (or another person with whom he was in a romantic relationship)?

___2. Did you ever witness your father (or male parental figure) insult (or use offensive names), threaten, or swear/shout/yell at, or otherwise verbally try to hurt your mother (or another person with whom he was in a romantic relationship)?

Questions about your sibling(s)...(*If you do not have siblings, please use the 'No/Never' response.)

___1. Not including a spanking on his/her bottom, did you ever witness either of your parents (or any male or female parental figure) hit/slap/punch, push/shove, choke, beat, kick, use a weapon against, or otherwise physically try to hurt a sibling (brother or sister)?

___2. Did you ever witness your either of your parents (or any male or female parental figure) insult (or use offensive names), threaten, or swear/shout/yell at, or otherwise verbally try to hurt a sibling (brother or sister)?

Questions about you...

___1. Not including a spanking on your bottom, did either of your parents (or any male or female parental figure) hit/slap/punch, push/shove, choke, beat, kick, use a weapon against, or otherwise physically try to hurt you?

___2. Did either of your parents (or any male or female parental figure) insult (or use offensive names), threaten, or swear/shout/yell at, or otherwise verbally try to hurt you?
Appendix F

Psychological Entitlement Scale

Please respond to the following items using the number that best reflects your own beliefs. Please use the following 7-point scale:

1 = strong disagreement
2 = moderate disagreement
3 = slight disagreement
4 = neither agreement nor disagreement
5 = slight agreement
6 = moderate agreement
7 = strong agreement

_____ 1. I honestly feel I'm just more deserving than others.
_____ 2. Great things should come to me.
_____ 3. If I were on the Titanic, I would deserve to be on the first lifeboat!
_____ 4. I demand the best because I'm worth it.
_____ 5. I do not necessarily deserve special treatment.
_____ 6. I deserve more things in my life.
_____ 7. People like me deserve an extra break now and then.
_____ 8. Things should go my way.
_____ 9. I feel entitled to more of everything.
Appendix G

Unrealistic Optimism Scale

We are interested in how likely you think it is that certain events will happen to you during your lifetime. Listed below are 10 possible life events. Please read each life event, and then make two judgments: First, compared to other East Tennessee State University students of your sex, decide how likely you think it is that each event will happen to you using the following scale:

1 2 3 4 5 6 7 8 9
extremely average extremely
below average above average

Next, rate how desirable you think each life event is using the following scale:

1 2 3 4 5 6 7 8 9
extremely extremely
undesirable desirable

Write the number that best represents your answer to each of these questions in the spaces provided for each event.

Event #1: Liking your future job
_____ a. Compared to other ETSU students of your sex, what do you think are the chances that this event will happen to you?
_____ b. How desirable is this event?

Event #2: Having a drinking problem
_____ a. Compared to other ETSU students of your sex, what do you think are the chances that this event will happen to you?
_____ b. How desirable is this event?

Event #3: Having a long, happy marriage
_____ a. Compared to other ETSU students of your sex, what do you think are the chances that this event will happen to you?
_____ b. How desirable is this event?

Event #4: Being fired from your job
_____ a. Compared to other ETSU students of your sex, what do you think are the chances that this event will happen to you?
_____ b. How desirable is this event?
How likely is it that each event will happen to you?

1 2 3 4 5 6 7 8 9

extremely below average average above average extremely

How desirable is this life event?

1 2 3 4 5 6 7 8 9

extremely undesirable average desirable extremely

Event #5: Graduating in the top half of your university class
_____ a. Compared to other ETSU students of your sex, what do you think are the chances that this event will happen to you?
_____ b. How desirable is this event?

Event #6: Buying a car that turns out to be a lemon
_____ a. Compared to other ETSU students of your sex, what do you think are the chances that this event will happen to you?
_____ b. How desirable is this event?

Event #7: Having an intellectually gifted child
_____ a. Compared to other ETSU students of your sex, what do you think are the chances that this event will happen to you?
_____ b. How desirable is this event?

Event #8: Getting divorced a few years after you get married
_____ a. Compared to other ETSU students of your sex, what do you think are the chances that this event will happen to you?
_____ b. How desirable is this event?

Event #9: Living past the age of 80
_____ a. Compared to other ETSU students of your sex, what do you think are the chances that this event will happen to you?
_____ b. How desirable is this event?

Event #10: Having a heart attack by age 40
_____ a. Compared to other ETSU students of your sex, what do you think are the chances that this event will happen to you?
_____ b. How desirable is this event?
Appendix H
Charisma Scale

Please respond to the following items using the number that best reflects your own beliefs. Please use the following 7-point scale:

1 = strong disagreement
2 = moderate disagreement
3 = slight disagreement
4 = neither agreement nor disagreement
5 = slight agreement
6 = moderate agreement
7 = strong agreement

1. I am dynamic.
2. When communicating with people, I motivate them with every word, story, and inflection.
3. I have the ability to excite a group of people.
4. When working in a group, I communicate an exciting vision of the future to the group.
5. I am charismatic.
6. When working with people, I paint an exciting picture of their future.
7. I have the ability to sway people's opinions.
Appendix I

Hypercompetitive Attitudes Scale

Read each question and rate the extent you agree with each using the following scale.

<table>
<thead>
<tr>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>Never true of me</td>
<td>Seldom true of me</td>
<td>Sometimes true of me</td>
<td>Often true of me</td>
<td>Always true of me</td>
</tr>
</tbody>
</table>

1. Winning in competition makes me feel more powerful as a person.
2. I find myself being competitive even in situations that do not call for competition.
3. I do not see my opponents in competition as my enemies.
4. I compete with others even if they are not competing with me.
5. Success in athletic competition does not make me feel superior to others.
6. Winning in competition does not give me a greater sense of worth.
7. When my competitors receive rewards for their accomplishments, I feel envy.
8. I find myself turning a friendly game or activity into a serious contest or conflict.
9. It's a dog-eat-dog world. If you don't get the better of others, they will surely get the better of you.
10. I do not mind giving credit to someone for doing something that I could have done just as well or better.
11. If I can disturb my opponent in some way in order to get the edge in competition, I will do so.
12. I really feel down when I lose in athletic competition.
13. Gaining praise from others is not an important reason why I enter competitive situations.
14. I like the challenge of getting someone to like me who is already going with someone else.
15. I do not view my relationships in competitive terms.
16. It does not bother me to be passed by someone while I am driving on the roads.
17. I can't stand to lose an argument.
18. In school, I do not feel superior whenever I do better on tests than other students.
19. I feel no need to get even with a person who criticizes or makes me look bad in front of others.
20. Losing in competition has little effect on me.
21. Failure or loss in competition makes me feel less worthy of a person.
22. People who quit during competition are weak.
23. Competition inspires me to excel.
24. I do not try to win arguments with members of my family.
25. I believe that you can be a nice guy and still win or be successful in competition.
26. I do not find it difficult to be fully satisfied with my performance in a competitive situation.
Appendix J

Social Dominance Orientation

Please read and respond to each of the following 16 statements and decide how much you agree or disagree with each according to your own attitude, beliefs, and experiences. There are no right or wrong answers. People are different, and we are interested in how you feel. Please write your response in the blank provided by each statement using the following scale:

1                2                3                4                5                6                7
disagree        disagree        disagree        neither          agree            agree            agree
completely      moderately      somewhat        agree nor         somewhat        moderately      completely
disagree

1. Some groups of people are simply inferior to other groups.
2. In getting what you want, it is sometimes necessary to use force against other groups.
3. It’s OK if some groups have more of a chance in life than others.
4. To get ahead in life, it is necessary to step on other groups.
5. If certain groups stayed in their place, we would have fewer problems.
6. It’s probably a good thing that certain groups are at the top and other groups are at the bottom.
7. Inferior groups should stay in their place.
8. Sometimes other groups must be kept in their place.
9. It would be good if groups could be equal.
10. Group equality should be our ideal.
11. All groups should be given an equal chance in life.
12. We should do what we can to equalize conditions for different groups.
13. It would be good to increase social equality.
14. We would have fewer problems if we treated people more equally.
15. We should strive to make incomes as equal as possible.
16. No one group should dominate society.
Appendix K

Rejection Sensitivity Scale

Each of the items below describes things college students sometimes ask of other people. Please imagine that you are in each situation. You will be asked to answer the following three questions: a) How anxious or concerned would you be about how the other person would respond?; b) How do you think the other person is most likely to respond?; and c) How upset would you be if the other person told you ‘no’? Use the following scale to answer:

1 -------------------- 2 -------------------- 3 -------------------- 4 -------------------- 5
Not at All           Very Much

1. You ask someone in class if you can borrow his/her notes.
   _____ a. How anxious would you be over whether or not the person would let you borrow them?
   _____ b. How likely is it that the person would willingly give me his/her notes?
   _____ c. How upset would you be if you were told ‘no’?

2. You ask your boyfriend/girlfriend to move in with you.
   _____ a. How anxious would you be over whether or not the person would want to move in with you?
   _____ b. How likely is it that he/she would want to move in with me?
   _____ c. How upset would you be if you were told ‘no’?

3. You ask your parents for help in deciding what jobs to apply to.
   _____ a. How anxious would you be over whether or not your parents would want to help you?
   _____ b. How likely is it that they would want to help me decide?
   _____ c. How upset would you be if you were told ‘no’?

4. You ask someone you don’t know well out on a date.
   _____ a. How anxious would you be over whether or not the person will go out with you?
   _____ b. How likely is it that he/she would want to go out with me?
   _____ c. How upset would you be if you were told no?

5. Your boyfriend/girlfriend has plans to go out with friends tonight, but you really want to spend the evening with him/her, and you tell him/her so.
   _____ a. How anxious would you be over whether or not he/she would stay in with me?
   _____ b. How likely is it that he/she would willingly choose to stay in?
   _____ c. How upset would you be if your boyfriend/girlfriend told you ‘no’, and did not stay in?

6. You ask your parents for extra money to cover living expenses.
   _____ a. How anxious or concerned would you be over whether or not they would help you?
   _____ b. How likely is it that they would want to help me?
   _____ c. How upset would you be if they told you ‘no’?
1. -------------------- 2. -------------------- 3. -------------------- 4. -------------------- 5. Very Much
Not at All

7. After class, you tell your professor that you have been having some trouble with a section of the course and ask if he/she can give you some extra help.
   ___ a. How anxious or concerned would you be over whether or not your professor would help you?
   ___ b. How likely is it that he/she would help me?
   ___ c. How upset would you be if he/she told you 'no'?

8. You approach a close friend to talk after doing or saying something that seriously upset him/her.
   ___ a. How anxious or concerned would you be over whether or not your friend would want to talk to you?
   ___ b. How likely is it that he/she would want to talk with me to try to work things out?
   ___ c. How upset would you be if he/she told you 'no'?

9. You ask someone in one of your classes to coffee.
   ___ a. How anxious or concerned would you be over whether or not the person will go?
   ___ b. How likely is it that he/she would want to go out with me?
   ___ c. How upset would you be if you were told no?

10. After graduation, you can't find a job and ask your parents if you can move in with them and live there for a while.
    ___ a. How anxious or concerned would you be over whether or not your parents would want you to come home?
    ___ b. How likely is it that they would welcome me home?
    ___ c. How upset would you be if they told you 'no'?

11. You ask your friend to go on a vacation with you over Spring Break.
    ___ a. How anxious or concerned would you be over whether or not the person will go?
    ___ b. How likely is it that he/she would go with me?
    ___ c. How upset would you be if you were told no?

12. You call your boyfriend/girlfriend after a bitter argument to say that you want to see him/her.
    ___ a. How anxious or concerned would you be over whether or not he/she would see you?
    ___ b. How likely is it that he/she would want to see me?
    ___ c. How upset would you be if your boyfriend/girlfriend told you 'no'?
13. You ask a friend if you can borrow something of his/hers.
   _____ a. How anxious or concerned would you be over whether or not your friend would lend it
to you?
   _____ b. How likely is it that he/she would lend it to me?
   _____ c. How upset would you be if he/she told you ‘no’?

14. You ask your parents to come to an occasion or event that is important to you.
   _____ a. How anxious or concerned would you be over whether or not they would come?
   _____ b. How likely is it that my parents would come?
   _____ c. How upset would you be if they told you ‘no’?

15. You ask a friend to do you a big favor.
   _____ a. How anxious or concerned would you be over whether or not your friend would do this
favor?
   _____ b. How likely is it that he/she would willingly do this favor for me?
   _____ c. How upset would you be if he/she told you ‘no’?

16. You ask your boyfriend/girlfriend if he/she really loves you.
   _____ a. How anxious or concerned would you be over whether or not her/she would say ‘yes’?
   _____ b. How likely is it that he/she would answer ‘yes’ sincerely?
   _____ c. How upset would you be if your boyfriend/girlfriend told you ‘no’?

17. You go to a party and notice someone on the other side of the room and then you ask him/her
to dance.
   _____ a. How anxious or concerned would you be over whether or not the person will dance with
you?
   _____ b. How likely is it that he/she would want to dance with me?
   _____ c. How upset would you be if you were told ‘no’?

18. You ask your boyfriend/girlfriend to come home to meet your parents.
   _____ a. How anxious or concerned would you be over whether or not he/she would say ‘yes’ to
meeting them?
   _____ b. How likely is it that he/she would want to meet them?
   _____ c. How upset would you be if your boyfriend/girlfriend told you ‘no’, and he/she would not
meet them?
Appendix L

Hostile Attribution Bias Scale

Please read each of the following short stories. Imagine that this event is occurring to you. Then respond to each of the three questions after each story using the following scale:

1 -------------------- 2 -------------------- 3 -------------------- 4 -------------------- 5
Not at All           Very Much

1. Imagine that you are out on the lawn talking with some of your friends. All of a sudden, out of nowhere, a football hits you in the head, almost knocking you to the ground.
   _____ A. How certain would you be that this person did this to you on purpose?
   _____ B. How angry would you feel in this situation?
   _____ C. How much would you wish you could get back at this person?

2. Imagine you arrive to your first class of the day. You enter the building as usual and then walk to the class room. From the corridor, you can hear your fellow classmates chat and laugh inside the classroom. When you open the door, you encounter a sudden silence.
   _____ A. How certain would you be that these people did this to you on purpose?
   _____ B. How angry would you feel in this situation?
   _____ C. How much would you wish you could get back at these people?

3. Imagine you are the first to arrive at a 4-way stop sign. Just as you begin to go through the intersection, the driver of another car that arrived immediately after you does not stop, and ends up hitting your car.
   _____ A. How certain would you be that this person did this to you on purpose?
   _____ B. How angry would you feel in this situation?
   _____ C. How much would you wish you could get back at this person?

4. Imagine you are boarding a crowded bus. Just as you start to sit down next to someone, they place their bag in what would have been your seat.
   _____ A. How certain would you be that this person did this to you on purpose?
   _____ B. How angry would you feel in this situation?
   _____ C. How much would you wish you could get back at this person?

5. Imagine you are in the library studying. You have your books and folders out on the table. Suddenly, another student runs past very close to your table and all your things are scattered on the ground.
   _____ A. How certain would you be that this person did this to you on purpose?
   _____ B. How angry would you feel in this situation?
   _____ C. How much would you wish you could get back at this person?
6. Imagine you are walking down the hallway of a dorm. As you walk towards the room of two people you know, one of them sees you and shuts the door.
   ___ A. How certain would you be that this person did this to you on purpose?
   ___ B. How angry would you feel in this situation?
   ___ C. How much would you wish you could get back at this person?

7. Imagine you have just finished getting ready to go out for the night. You are wearing a new shirt for a first date. On your way out, you notice some people playing around in the hallway. Suddenly, one of them gets pizza all over you.
   ___ A. How certain would you be that this person did this to you on purpose?
   ___ B. How angry would you feel in this situation?
   ___ C. How much would you wish you could get back at this person?

8. Imagine you are in a German class, where you sit at one of the front desks. When the lecture starts, the professor asks you to summarize the topics of the previous lesson, all in German. As you are trying to give an answer, your classmates behind you start whispering and giggling.
   ___ A. How certain would you be that these people did this to you on purpose?
   ___ B. How angry would you feel in this situation?
   ___ C. How much would you wish you could get back at these people?

9. Imagine that your swimming class is over and you have already changed clothes to get to your next class. On the way to the exit you walk past the pool. One of your classmates jumps into the pool just as you pass by, and you get wet all over.
   ___ A. How certain would you be that this person did this to you on purpose?
   ___ B. How angry would you feel in this situation?
   ___ C. How much would you wish you could get back at this person?

10. Imagine you are going to a big party. Just as you walk in, you feel that there is a group of people staring at you and talking about you. Some of them even laugh.
    ___ A. How certain would you be that these people did this to you on purpose?
    ___ B. How angry would you feel in this situation?
    ___ C. How much would you wish you could get back at these people?

11. Imagine you are outside hanging out with some of your friends during a break in a three hour lecture class. You have a drink in your hands. Just as you are about to take a sip, someone pushes you from behind.
    ___ A. How certain would you be that this person did this to you on purpose?
    ___ B. How angry would you feel in this situation?
    ___ C. How much would you wish you could get back at this person?
12. You arrive at a leasing office to get more information about the apartments in the complex. The leasing agent is currently talking on the phone. After you have been waiting for while, another person walks in. When the agent is available, the other customer is greeted and helped first.

_____ A. How certain would you be that the agent did this to you on purpose?
_____ B. How angry would you feel in this situation?
_____ C. How much would you wish you could get back at the agent?

13. Imagine you are at a bar. It’s somewhat crowded so you stand at the bar waiting for a drink for quite a while. Just as you pay for your drink and turn around to walk away, someone knocks the drink from your hand and it spills on you.

_____ A. How certain would you be that this person did this to you on purpose?
_____ B. How angry would you feel in this situation?
_____ C. How much would you wish you could get back at this person?

14. Imagine that it’s late on Friday afternoon and you have no plans for the night. You call three different friends, and it turns out that they are all going to the same party together. One of them mentions that they have had the plans for a couple of weeks; however, no one has mentioned anything to you about it.

_____ A. How certain would you be that these people did this to you on purpose?
_____ B. How angry would you feel in this situation?
_____ C. How much would you wish you could get back at these people?
Appendix M

Interpersonal Jealousy Scale

There are blanks in each one of the following items. As you respond, think about your current romantic partner or the person you desire to be your romantic partner each time you reach a blank. Then use the scale below to express your feelings concerning how much you agree or disagree with the item.

9 = absolutely true; agree completely
8 = definitely true
7 = true
6 = slightly true
5 = neither true nor false
4 = slightly false
3 = false
2 = definitely false
1 = absolutely false; disagree completely

__1. If ______ were to see an old friend of the opposite sex and respond with a great deal of happiness, I would be annoyed.

__2. If ______ went out with same sex friends, I would feel compelled to know what he/she did.

__3. If ___ admired someone of the opposite sex, I would feel irritated.

__4. If ___ were to help someone of the opposite sex with his/her homework, I would feel suspicious.

__5. When ___ likes one of my friends I am pleased.

__6. If ___ were to go away for the weekend without me, my only concern would be with whether he/she had a good time.

__7. If ___ were helpful to someone of the opposite sex, I would feel jealous.

__8. When ___ talks of happy experiences of his/her past, I feel sad that I wasn't part of it.

__9. If ___ were to become displeased about the time I spend with others, I would be flattered.

__10. If ___ and I went to a party and I lost sight of him/her, I would become uncomfortable.

__11. I want ___ to remain good friends with the people he/she used to date.

__12. If ___ were to date others I would feel unhappy.

__13. When I notice that ___ and a person of the opposite sex have something in common, I am envious.

__14. If ___ were to become very close to someone of the opposite sex, I would feel very unhappy and/or angry.

__15. I would like ___ to be faithful to me.

__16. If don't think it would bother me if ___ flirted with someone of the opposite sex.

__17. If someone of the opposite sex were to compliment ___, I would feel that the person was trying to take ___ away from me.
9 = absolutely true; agree completely
8 = definitely true
7 = true
6 = slightly true
5 = neither true nor false
4 = slightly false
3 = false
2 = definitely false
1 = absolutely false; disagree completely

18. I feel good when ____ makes a new friend.
19. If ____ were to spend the night comforting a friend of the opposite sex who had just had a tragic experience, ____'s compassion would please me.
20. If someone of the opposite sex were to pay attention to ____ I would become possessive of him/her.
21. If ____ were to become exuberant and hug someone of the opposite sex, it would make me feel good that he/she was expressing his/her feelings openly.
22. The thought of ____ kissing someone else drives me up the wall.
23. If someone of the opposite sex lit up at the sight of ____ I would become uneasy.
24. I like to find fault with ____'s old dates.
25. I feel possessive toward ____.
26. If ____ had previous been married, I would feel resentment towards the ex-wife/husband.
27. If I saw a picture of ____ and an old date I would feel unhappy.
28. If ____ were to accidentally call me by the wrong name, I would become furious.
VITA

SAMANTHA K. FIELDS

Personal Data: Date of Birth: September 30, 1984
Place of Birth: Fredericksburg, Virginia
Marital Status: Single

Education: Public Schools, Edenton, North Carolina
B.A. Communication, East Carolina University, Greenville, North Carolina 2006
B.S. Psychology, East Tennessee State University, Johnson City, Tennessee 2010
M.A. Psychology, East Tennessee State University, Johnson City, Tennessee 2012

Professional Experience: Graduate Assistant, East Tennessee State University,
Department of Psychology, 2010 - 2012
Teaching Assistant, East Tennessee State University,
Department of Psychology, 2011-2012


Honors and Awards: Dean’s List, East Tennessee State University
Cum Laude, East Tennessee State University
Chancellor’s List, East Carolina University