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Violence in intimate relationships: A conceptual and empirical examination of sexual and physical aggression

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Abstract

The present paper argues that the perpetration of *both* sexual and physical aggression by the same person in intimate relationships represents a unique form of intimate partner violence that warrants further theoretical and empirical examination. This paper also provides preliminary empirical evidence demonstrating that men who dual perpetrate represent a distinct group. Dual perpetration is defined as the commission of both sexual and physical aggression by the same person, although not necessarily on the same occasion nor directed toward the same target. The paper is divided into two parts. Part one reviews the correlates of sexual and physical partner aggression identified in past research. These include childhood experiences with family violence and abuse, as well as attitudinal, personality, behavioral and relationship characteristics. Part two reports on an empirical study that examines the similarities and differences between men who commit only physical aggression, only sexual aggression and both forms of aggression (dual perpetration). The paper concludes with a call to integrate research on sexual and physical partner aggression.

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1. Introduction

Intimate partner violence (IPV), in the form of sexual and physical aggression, occurs at an alarming rate and has devastating consequences for its victims. Research from the victim and perpetrator perspectives converges to document how frequently these forms of partner violence co-occur in adolescence and young adulthood. A longitudinal study examining the prevalence of IPV among women from high school through college found that 88% of women reported physical victimization and 79% reported sexual victimization, with 64% reporting both (Smith, White, & Holland, 2003). Women who experience IPV, whether physical or sexual, report more negative health behaviors, poorer health status, and lesser likelihood of seeking regular medical check-ups than non-victimized women (Smith, Thornton, DeVellis, Earp, & Coker, 2002). IPV has been associated with physical injury, fear, depression, post-traumatic stress disorder symptomatology, and suicide (Hines & Malley-Morrison, 2001; Schumacher, Feldbau-Kohn, Slep, &

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Heyman, 2001). From the perpetrator perspective, White and Smith (in press) reported a lifetime prevalence of 10.9% for commission of *both* sexual and physical aggression by the same men in a group of men followed from adolescence through the fourth year of college; 28.4% of the men reported committing at least one act of sexual aggression, and 26.5% reported committing at least one act of physical aggression by the end of the fourth year of college.

Historically, IPV researchers have been separated into two camps, those who study physical aggression and those who study sexual aggression, with little overlap. This has resulted in little communication between the two research areas, and even less transfer of knowledge. For example, the chasm between various groups of researchers has contributed to the gender symmetry debate (Marshall & Holtzworth-Munroe, 2002; White, Smith, Koss, & Figueredo, 2000). White et al. (2000) have suggested that when the commission of sexual aggression is considered in discussions of IPV, the gender gap becomes more apparent than when the focus is solely on physical aggression. Although many studies show that men and women report similar frequencies of physical aggression (e.g. Archer, 2000), sexual aggression is predominantly committed by men, and women are the most likely victims (Tjaden & Thoennes, 2006). If both physical and sexual aggression were considered in discussions of IPV, the focus of research might well shift from concern with sex differences to concern with why and when various patterns of aggressive behavior occur. This latter is the focus of the present paper. The present paper contributes to the growing call for a conceptual and empirical integration across various areas of interpersonal violence (Edleson, Daro, & Pinderhughes, 2004; Knickerbocker, Heyman, & Slep, 2007).

We argue that when sexual aggression and physical aggression are considered together the phenomenon of dual perpetration emerges. Sexual aggression includes behaviors ranging from unwanted sexual contact, verbally coerced sexual contact, alcohol- and drug-assisted sex, attempted and completed rape, and other forced sex acts (Koss et al., 2007). Physical aggression includes both minor assaults such as slapping or pushing, and severe assaults, such as punching and choking (Straus & Ramirez, 2007). Dual perpetration is defined as the commission of both sexual and physical aggression by the same person, although not necessarily on the same occasion nor directed toward the same target. Most importantly, a critical disadvantage of physical and sexual aggression being studied independently is that nothing is learned about those who perpetrate both types of violence—dual perpetrators. We therefore argue that dual perpetrators must be examined to see how they are similar to and different from those who commit only one type of aggression or who are not aggressive at all in intimate relationships.

Several studies have documented the commission of sexual and physical aggression by the same men (Chiffriller & Hennessy, 2007; Hannan & Burkhart, 1993; Hines & Saudino, 2003; Katz, Carino, & Hilton, 2002; Kuffel & Katz, 2002; Marshall & Holtzworth-Munroe, 2002; Monson & Langhinrichsen-Rohling, 2002; Ryan, 1998; White & Smith, in press). However, the majority of these studies did not report estimates of the prevalence of dual perpetration or provide a correlation between sexual and physical aggression. For example, Hannan and Burkhart (1993) found that in a sample of college men approximately 17% admitted to engaging in high levels of sexual aggression and high levels of courtship physical aggression. Unfortunately, men who committed low levels of either form of aggression were placed in the non-aggressive control group, thereby obscuring the total picture of dual perpetration. Ryan (1998) found that only 5% of men reported both sexual and physical aggression; however, unlike Hannan and Burkhart (1993), responses were limited to one's current or most recent relationship in the past year. Monson and Langhinrichsen-Rohling (2002) reported dual perpetration in 4% of men in a community sample. However, none of these studies have examined in depth psychological factors that differentiate individuals who engage in both types of aggression from those who do not. This is the case in spite of the fact that various forms of violence against women are interconnected (White & Kowalski, 1998).

Thus, the purpose of the present paper is to report data describing the similarities and differences between adolescent males who commit only physical aggression, only sexual aggression, both forms of aggression, or no aggression. The analyses focus on males because sexual aggression is a predominantly male behavior (Tjaden & Thoennes, 2006), and on adolescent males in particular, because of the developmental implications; that is, partner aggression is most likely to begin in adolescence and may serve as a precursor for continued partner violence into adulthood (White, Donat, & Bondurant, 2001; White & Smith, in press). However, the lack of theoretical accounts, as well as empirical studies, of dual perpetration creates challenges for developing hypotheses related to dual perpetration. To address this problem we adopted the tactic of reviewing predictors of physical aggression and sexual aggression, looking for similarities and differences, with the assumption that unique predictors of each would emerge. The review is organized around childhood experiences with family violence, abuse, and exposure to delinquent peers. We also review individual characteristics including attitudes, personality and behavior, as well as characteristics of relationships in which IPV occurs.

1.1. Childhood predictors of IPV

The childhood experiences of men who perpetrate physical aggression are remarkably similar to the childhood experiences of men who perpetrate sexual aggression. The histories of both types of aggressors are marked by experiencing and witnessing violence in the family of origin and negative parent—child interactions (Patterson, Reid, & Dishion, 1998). Children may learn a cluster of coercive behaviors from their familial interactions and in turn, use these behaviors when interacting with peers. Negative and violent family interactions provide a foundation for the formation of negative attitudes toward women, attitudes promoting violence, inadequate self-control and association with delinquent peer groups. It has been posited that childhood physical or sexual abuse and inadequate parental supervision and punishment may inhibit positive forms of socialization (Malamuth, Sockloskie, & Koss, 1991), resulting in low self-control (Gottfredson & Hirschi, 1990). Non-aggressive boys seem to develop self-control and positive alternatives for dealing with conflict and problems, whereas aggressive boys from coercive families lack self-control and learn a repertoire of aggressive and coercive problem-solving strategies. These aggressive and coercive strategies would be expected to extend into adolescent and adult dating relationships.

Young men who witness domestic violence are more likely to associate with delinquent peers outside of the home and thus engage in a range of antisocial behaviors, including aggression (Patterson, DeBaryshe, & Ramsey, 1989). Exposure to delinquent peer groups also has been related to dating violence and sexual assault (Ageton, 1983; Gwartney-Gibbs, Stockard, & Brohmer, 1983; White & Koss, 1993). Involvement with delinquent peers can lead to the development of unhealthy understandings of gender, relationships, and strategies for resolving conflicts (Wolfe & Feiring, 2000).

Although there is overwhelming evidence that both physically and sexually aggressive men share similar childhood characteristics, some differences have been noted. Prentky, Knight, and Sims-Knight (1989) found that the level of childhood sexual abuse one experienced was positively associated with the severity of one's later sexual aggression, whereas the level of childhood physical abuse one experienced was positively associated with the severity of one's later physical aggression. This finding suggests that the form of violence that one is exposed to in childhood may in part determine the form of violence that one will use as an adult, and suggests the hypothesis that dual perpetrators would have a history of both forms of childhood victimization.

Haapasalo and Kankkonen (1997) attempted to identify differences in childhood experiences between sexual offenders and violent, but non-sexual offenders. Sex offenders reported more childhood abuse overall, including psychological, verbal, sexual, and physical abuse. Sex offenders also reported more negativity toward their parents. However, the results of this study must be interpreted with great caution. The sex offender group consisted of men convicted of rape (which necessitates use of force for conviction in most states), assault and rape, aggravated assault and rape, and rape and manslaughter. Therefore, the sex offender group was not comprised of men who committed purely sexual offenses. Men in this group could be considered dual perpetrators in that they committed both sexually aggressive and physically aggressive crimes. The true value in the study may be in demonstrating that men who committed both sexual and physical aggression—those who would be considered dual perpetrators—had significantly more negative childhood experiences than men who committed only physical aggression.

The similarities that exist in the childhoods of both physically and sexually aggressive men suggest that chaotic family environments characterized by violence, poor parental supervision, lack of positive parent—child interactions, and exposure to delinquent peers set the stage for later partner aggression. What remains unclear is the degree of difference, if any, in the backgrounds of physically and sexually aggressive men. The review of the literature suggests that common factors underlie both physical and sexual aggression, with the possibility that type of childhood abuse, sexual or physical, may predict the form of partner aggression. However, it is difficult to determine the extent of differences based on research methods used in previous studies. In fact, it appears that some studies looking for differences in background characteristics may be misleading. It may very well be that groups of dual perpetrators have been overlooked, and that dual perpetrators are the ones that drive previously assumed background differences between physically and sexually aggressive men.

1.2. Individual correlates of IPV: Attitudes, personality, motivations, and behavioral characteristics

A developmental perspective suggests that early experiences with family violence and delinquent peers are precursors of attitudes that promote power, dominance, and competitiveness (White & Kowalski, 1998). These

characteristics become associated with "masculinity" thereby leading to hostility toward women and anything feminine (Burt, 1980; Malamuth et al., 1991). Studies have suggested that adherence to traditional gender norms is associated with attitudes supportive of date rape (Truman, Tokar, & Fischer, 1996) as well as rape myth acceptance (Davis & Liddell, 2002). A particularly pernicious manifestation of a traditional masculine gender script is hostile masculinity, which includes exerting power over women, acceptance of male violence, and negative attitudes toward homosexual men. Hostile masculinity in particular is predictive of sexual aggression (Malamuth, 1996). Attitudes are also associated with physical aggression. One study (Russell & Hulson, 1992) found that attitudes, specifically that marital violence is acceptable, were the most important determinants of physical violence, even beyond the predictive value of violence in the family of origin, social class, power in the relationship, and alcohol use.

Hostile attributions about women's intentions and negative attitudes may interfere with mastery of how to constructively deal with conflict and frustration (Kinsfogel & Grych, 2004; Malamuth et al., 1991). This directly ties into motivations for using aggression. Attitudes of power and dominance, competitiveness, and negative or hostile views of women can easily motivate men to seek means to control or degrade their partners (Furman & Simon, 2006). Aggression serves that end. Both physically and sexually aggressive men's motives for violence often involve a desire to intimidate their partner and control the relationship (Furman & Simon, 2006). Furthermore, this need for control may be driven by jealousy issues (Barnett, Martinez, & Bluestem, 1995) and may manifest itself in domineering behavior in sexually (Malamuth & Thornhill, 1994) and physically (Skuja & Halford, 2004) aggressive men. However, the roots of domineering behaviors may differ between sexually aggressive and physically aggressive men. Sexually aggressive men may use domineeringness as a test to identify vulnerable targets, especially early in a relationship. A woman who resists the domination may be seen as unavailable, but a subordinate response may indicate that she is a potential target (Malamuth & Thornhill, 1994). In contrast, domineeringness in physically aggressive men is likely a result of the development of poor conflict management styles over time in committed relationships (Skuja & Halford, 2004).

Several researchers have found attributes that are shared by both physically and sexually aggressive men: antisocial tendencies (Kosson, Kelly, & White, 1997; Malamuth, 1996; Monson & Langhinrichsen-Rohling, 2002; Porcerelli, Cogan, & Hibbard, 2004), non-conformity (Rapaport & Burkhart, 1984), poor social skills and lack of responsibility (Barnett & Hamberger, 1992; Rapaport & Burkhart, 1984), affective dysregulation (Hall & Hirschman, 1991; Murphy, Meyer, & O'Leary, 1993; Porcerelli et al., 2004), difficulty with anger management (Kinsfogel & Grych, 2004), self-centeredness (Dean & Malamuth, 1997), and impulsivity (Petty & Dawson, 1989; Stuart & Holtzworth-Munroe, 2005). Although physically and sexually aggressive men seem very similar intrapersonally, researchers have noted some important differences. For example, Hersh and Gray-Little (1998) found that men who reported extreme acts of sexual aggression reported higher levels of psychopathic traits than those who reported only moderate acts of sexual aggression or no sexually aggressive acts. Men who reported sexual assault also reported a lower than average sense of self-worth (White & Koss, 1993).

Alcohol abuse is a strong behavioral predictor of both physical and sexual aggression. More alcohol abuse problems have been found among men who perpetrate sexual and physical IPV than among those who do not (Leonard & Blane, 1992; McKenry, Julian, & Gavazzi, 1995; Rosenbaum & O'Leary, 1981; Van Hasselt, Morrison, & Bellack, 1985). Compared to age-matched non-violent controls, violent men who also abused alcohol have shown the highest levels of pathology (Hastings & Hamberger, 1988). Alcohol use may lead to more severe or prolonged forms of physical aggression in relationships (Saunders, 1995; Stuart & Holtzworth-Munroe, 2005) and has also been associated with sexual aggression toward women (Abbey, Zawacki, & Buck, 2001; Koss & Gaines, 1993). According to the U.S. Department of Justice (2001), 35.2% of perpetrators were under the influence of alcohol during reported sexual victimizations (including verbal threats of sexual aggression). Alcohol acts as a disinhibitor for the man, as an excuse for the rape after it has occurred, and as a means of reducing the victim's resistance (Hammock & Richardson, 1997). In cases of acquaintance rape, alcohol may enhance ambiguity by increasing the likelihood that men may misinterpret a woman's friendly behaviors as sexual (Abbey, 1991). It is possible that because alcohol releases inhibitions, sexual and aggressive, we could hypothesize that physically aggressive men might be particularly prone to become sexually aggressive as well under the influence of alcohol. Violence might be part of a broader failure of impulse control (Ouimette, 1997).

Other factors related to a history of sexual and physical aggressiveness include delinquent behavior (Brendgen, Vitaro, & Tremblay, 2002; Hall & Hirschman, 1991), hedonistic and dominance motives for sex, lower religiosity, and consorting with peers who condone and encourage sexual conquests (Abbey et al., 2001; White & Koss, 1993). Pornography exposure is also likely to increase the risk of sexual perpetration, at least among men already predisposed

to sexually offend (Seto, Maric, & Barbaree, 2001). According to Seto et al. (2001), several theoretical accounts have been used to explain the link between pornography exposure and sexual aggression. In particular, learning theories invoke the principals of classical and instrumental conditioning, as well as modeling, to explain how some men come to associate pornographic images with sexually aggressive behavior. Similarly, feminist theories propose that pornography teaches rape supportive attitudes, as well as negative attitudes and beliefs about women. Arousal theories suggest that the physiological arousal associated with pornography may be erroneously attributed to anger and result in violence against women.

Sexually aggressive men are also more likely to perceive a wider range of behaviors as indicative of sexual interest than do non-sexually aggressive men (Bondurant & Donat, 1999). Men who report increased levels of sexual aggression also report higher levels of manipulativeness (Hersh & Gray-Little, 1998). This includes coercing a victim by giving her alcohol or drugs, directing a victim into a place or situation where she is more vulnerable, or verbally misleading a victim (Craig, 1990).

In summary, sexually aggressive and physically aggressive men appear to be similar in a number of ways. Both appear to hold similar attitudes such as traditional attitudes about gender, negativity toward women, and attitudes of dominance. Also, there appear to be similar motivators behind the use of violence in that men use both physical and sexual aggression in relationships to maintain control. Finally, there appear to be similarities in personality and behavioral characteristics. Specifically, both physically and sexually aggressive men have antisocial tendencies, patterns of delinquent behavior, as well as patterns of excessive alcohol use. However, pornography exposure, sexual and rape supportive attitudes, and motives for sex may uniquely predict sexual aggression.

1.3. Characteristics of aggressive relationships

Physical aggression is more likely to occur in serious rather than casual relationships (Pedersen & Thomas, 1992). Physical aggression in more committed relationships may reflect the acceptance of violence as a legitimate mode of conflict resolution (Billingham, 1987). In a large percentage of committed, violent relationships, the violence occurs more than once, the couples stay together, and some even believe that the relationship improved as a result of the violence; they interpret violence as a sign of love (Cate, Henton, Koval, Christopher, & Lloyd, 1982). Many young adults believe dating violence is more acceptable in serious than casual relationships (Cauffman, Feldman, Arnett-Jensen, & Jensen-Arnett, 2000), and is not sufficient grounds for ending the relationship (Bethke & DeJoy, 1993). Violence is more likely in relationships plagued by problems, including jealousy, fighting, interference from friends, lack of time together, breakdown of the relationship, problems outside the relationship (Riggs, 1993), disagreements about drinking, and sexual denial (Roscoe & Kelsey, 1986).

Unlike IPV-related physical aggression, sexual aggression can be directed at strangers, casual acquaintances, first time dates or intimate partners. For example, Shotland (1992) has suggested that rape serves different functions at different stages in a relationship. In the early stages of a relationship, rape may be a strategy some men use to obtain sex. These men are more likely to have antisocial tendencies and hold misogynistic and rape supportive attitudes. During the later stages of the relationship, Shotland suggests that a couple's sexual ground rules have most likely been established; however, if they do not allow for the level of sexual intimacy desired by the male he may experience anger, which, combined with sexual arousal, may contribute to the likelihood of rape. Finally, Shotland suggests that some men may see sexual intimacy as a sign of a more intense relationship and resort to force if his partner does not share his view.

Non-verbal and verbal communication patterns between partners may set the stage for physically violent interactions (Riggs & O'Leary, 1996). Often times one's partner's use of verbal aggression is a strong impetus for physical aggression (White, Merrill, & Koss, 2001). Men may use anger expression as a means of reasserting control over a situation (Campbell, Muncer, Guy, & Banim, 1996). Partner aggression (insulting, swearing, stomping) and threats to use a weapon are likely in husband-dominant relationships (Tang, 1999). Misperceptions can also lead to sexual aggression. Some men interpret women's behavior in a more sexualized way than it was intended (Abbey, 1991; Bondurant & Donat, 1999; Kowalski, 1992, 1993), do not take a woman's verbal protestations seriously (Check & Malamuth, 1983), and perceive a woman's rejection of sexual advances as a threat to their manhood (Beneke, Kohrs, & Paulsen, 1982). According to Kowalski (1993), men who endorse adversarial sexual beliefs and accept violence as a legitimate strategy are more likely to misinterpret a woman's behavior as sexually connotative as compared to men who do not hold such beliefs. This is especially true of men with a history of sexual aggression (Bondurant & Donat, 1999).

In summary, physically and sexually aggressive relationships differ in several important ways. Physical aggression tends to occur in longstanding relationships, whereas sexual aggression occurs in many types of relationships, from strangers to intimate partners. Also, many people are more accepting of physical aggression than sexual aggression within relationships (Cauffman et al., 2000). However, common to both types of aggressive relationships is a man's misperception of female communication and behaviors.

2. An empirical examination of dual perpetration

This brief review of what is known about IPV-related physical and sexual aggression reveals remarkable similarities and differences in the predictors of each. For both forms of aggression, childhood experiences with witnessing domestic violence and experiencing parental physical punishment are often reported. Other common predictors include traditional gender role attitudes, hostility toward women, delinquent peers, alcohol use and abuse, and several intrapersonal factors. However, it is evident that sexual aggression occurs in a range of relationships, from no relationship (strangers) to a well-established relationship, whereas physical aggression is more likely to occur only in more established relationships. As is clear from the literature review, researchers who study one form of IVP tend to not study the other, so there are few opportunities for comparing results and considering to what extent there may be a similar underlying psychological model. This is a problem that plagues IPV research in general (Edleson et al., 2004; White & Kowalski, 1998). Given the mounting evidence that some men engage in one form of aggression toward intimate partners but not the other, whereas other men engage in both (Chiffriller & Hennessy, 2007; Hines & Saudino, 2003; Katz et al., 2002; Kuffel & Katz, 2002; Marshall & Holtzworth-Munroe, 2002; Monson & Langhinrichsen-Rohling, 2002; White & Smith, in press), it is timely to address the question of dual perpetration.

Of the few researchers who have examined the relationship between sexual and physical IPV and predictors of both forms of aggression, none have compared explicitly the various groups. For example, Chiffriller and Hennessy (2007), Marshall and Holtzworth-Munroe (2002), and Monson and Langhinrichsen-Rohling (2002) have been more focused on developing typologies of batterers, based on factors such as degree of psychopathology. In contrast, Malamuth, Linz, Heavey, Barnes, and Acker (1995) and Shotland (1992) have conceptually addressed sexual and physical partner aggression. However, Malamuth et al. did not examine differences between men who used only one versus both types of aggression. Rather, they focused on different pathways leading to different types of aggression. Whereas sexual promiscuity combined with hostile masculinity uniquely predicted sexual aggression, relationship conflict uniquely led to an increased use of verbal aggression that in turn increased the likelihood of physical aggression. Proneness to general hostility and impersonal sex were underlying factors common to both forms of aggression. Shotland's (1992) conceptualization also suggests different pathways and motives for men who batter (i.e., beat) and rape (i.e., dual perpetrators), and for men who only batter or only commit rape. However, his model focused specifically on only rape and battery (beating), not the range of behaviors typically included in IPV research. He suggests that men who rape and batter have a need to prove their manhood and battering is meant to control and demean their partners. He suggests that rape without beating is more likely in relationships in which the man believes he can control his partner without force, believes she might end the relationship if he physically abused her, or views his partner as more powerful than he is. Thus, rape with or without battering may in part depend on perceptions of control within a relationship. Shotland also suggests that a high prevalence of childhood sexual abuse combined with a low prevalence of childhood physical abuse should predict rape without battery.

Beyond the work reviewed here, to our knowledge no one has taken a serious look either conceptually or empirically at whether men who only physically aggress, only sexually aggress, or dual perpetrate constitute three meaningfully different groups. On the one hand, given the high incidence of physical and sexual assault, dual perpetration may be spurious; that is, high base rates of each would predict some dual perpetration. On the other hand, dual perpetration may be a unique form of dating violence perpetration. Importantly, there remains the possibility that the findings of studies of physical aggression have been confounded by the un-assessed presence of sexual aggression (as noted by Marshall & Holtzworth-Munroe, 2002). Conversely, it is possible that studies of sexual aggression have been confounded by the un-assessed presence of physical aggression. Unfortunately, studies reporting dual perpetration have not systematically compared men who only physically aggress, only sexually aggress or who dual perpetrate. Thus, the remainder of this paper describes a series of exploratory analyses designed to address this question. White and Smith (in press) have described the prevalence of dual perpetration as part of a larger longitudinal study of sexual and physical aggression. However, they did not provide analyses of any familial, psychological, or relationship

variables that might distinguish these groups. Thus, the present paper, based on the same data set as used by White and Smith, advances our understanding of dual perpetration by examining differences between these groups.

Data from the first wave of a longitudinal study were analyzed in order to empirically examine the extent to which men who commit only sexual aggression or only physical aggression are different from those men who commit both (White & Smith, in press). The data come from 833 men who were age 18–19 and entering college for the first time when they completed the first of five surveys administered over a four-year span. Of this group, approximately 69% were White; 26% were Black; and 5.8% belonged to other ethnic groups (see White & Smith, in press for details). Data include reports of the frequency of physical aggression directed toward a romantic partner during high school, using the Conflict Tactics Scale (CTS; Straus, 1979), and the frequency of sexual aggression directed toward any woman using the Sexual Experiences Survey (SES; Koss, Gidycz, & Wisniewski, 1987) during high school. In this sample, 32% of the men reported some form of partner aggression since the age of 14.

In our analyses below, *Only SA* refers to just those men who endorsed items on the SES, but not on the CTS (n=111; 13.3%). Conversely, *Only PA* refers to just those men who endorsed items on the CTS, but not on the SES (n=78; 9.4%). Men who endorsed items on both the SES and the CTS are referred to as *Dual perpetrators* (n=77; 9.2%; it is important to note that the acts of physical and sexual aggression did not necessarily occur on the same occasion nor were they necessarily directed toward the same female). Men who did not endorse any items on the SES nor on the physical aggression subscale of the CTS were labeled the *None group* (n=567; 68.1%). Fig. 1 shows the distribution of partner aggressive men across categories. According to this figure, of the 266 men who engaged in any form of partner aggression, 188 (70.6%) were sexually aggressive and 155 (58.2%) were physically aggressive, with there being 77 cases (28.9%) of dual perpetration.

2.1. Types of aggressive behavior reported

An examination of the individual items endorsed on the SES revealed that of those who reported only manipulative tactics (such as verbal coercion or taking advantage of an incapacitated woman), 84.7% were in the Only SA group. However, dual perpetrators reported a higher mean frequency of manipulation tactics (M=2.0) than did the Only SA group (M=1.6), p<.05. Dual perpetrators (M=1.4) and Only SA (M=1.2) did not differ in the mean number of force tactics, p=.08. Of those who endorsed the items involving use of force, 61.5% were dual perpetrators. A comparison of dual perpetrators with the Only PA group revealed no differences on CTS items indicative of threatening to hit or throw or throwing something. However, dual perpetrators reported significantly more pushing, grabbing, shoving, hitting, trying to hit, and hitting with something hard than did the Only PA men. These findings suggest that dual perpetrators tended to engage in more sexually coercive behaviors and more physically aggressive behaviors than did their counterparts who engaged in only one form of aggression but not the other.

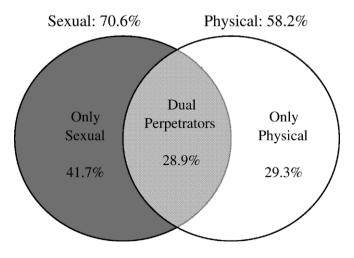


Fig. 1.

2.2. Correlates of IPV

For the current analyses, we selected as correlates variables that have been most often associated with either sexual aggression or physical aggression toward a dating partner. The correlates were divided into six groups: childhood experiences with violence (childhood sexual abuse, parental physical punishment, witnessed domestic violence), motives for sex (hedonism, conformity, dominance), attitudes (gender roles, acceptance of male violence against women, disapproval of women's initiative in relationships, level of intimacy acceptable for sexual intercourse), mental health (loss of control), personality (empathy, self-centeredness), and behaviors (number of dating partners, number of sexual partners, alcohol use, number of delinquent behaviors).

2.3. Comparisons of non-aggressive men to dual perpetrators, only sexually aggressive men, and only physically aggressive men

For these comparisons a series of six family-wise analyses of variance followed by Dunnett's tests for means comparisons were performed. The overall F-test was significant at p < .05 for all variables except number of dating partners. Examination of the pattern of means comparisons indicates that dual perpetrators consistently had the most extreme scores (see Table 1).

2.4. Dual perpetrators compared to None group

With the exception of the number of dating partners in high school, dual perpetrators were significantly more extreme than the None group on all measures. Dual perpetrators had more severe childhood experiences, more traditional gender attitudes, more hostile attitudes toward women, and were less empathetic, more self-centered and experienced less control in relationships. They were also more delinquent, had more sex partners and used more alcohol.

2.5. Only SA compared to None

Men who reported only sexual aggression differed from the None group on the measures of childhood experiences, motives for sex, and all behaviors, except number of dating partners. Although they held significantly more traditional gender role attitudes, they did not differ with regard to acceptance of male violence, disapproval of women taking the initiative in relationships, or level of intimacy necessary for sex. They also did not differ on the measure of empathy. Only SA men did report more alcohol use, delinquent behaviors, and had more sex partners than the None group.

2.6. Only PA compared to None

Of the three groups of partner aggressive men, the Only PA group was most similar to the None group. Differences were found for delinquent behaviors, alcohol use, number of sex partners, motives for sex (hedonism and dominance), traditional gender role attitudes, and loss of control.

In summary, all three aggressive groups were distinguished from the None group for hedonism and dominance as motives for sex, endorsement of traditional gender role attitudes, alcohol use, delinquency, and number of sex partners. In contrast, only dual perpetrators differed significantly from the None group by being more accepting of male

 $^{^{1}}$ We also conducted analyses that would parallel those typically found in the literature and the results are generally consistent with previous findings. Sexually aggressive men (ignoring scores on the CTS) were found to have significantly more childhood experiences with witnessing domestic violence, experiencing parental physical punishment and childhood sexual abuse than non-sexually aggressive men. Differences were also observed for hedonism and conformity as motives for sex (dominance as a motive approached significance at p=.075); the level of intimacy acceptable for sex; empathy; number of dates, number of sex partners, alcohol use, and total number of delinquent behaviors. Table 1 provides a summary of the findings. Comparisons between physically aggressive and non-physically aggressive men (ignoring scores on the SES) also yielded results consistent with previous findings. There were significant differences for childhood experiences with witnessing domestic violence, experiencing parental physical punishment and childhood sexual abuse. Differences were also found for hedonism, conformity, and dominance as motives for sex; traditional gender role attitudes, acceptance of male violence against women, and level of intimacy acceptable for sex; loss of control; empathy and self-centeredness; number of sex partners, alcohol use, and total number of delinquent behaviors.

Table 1
Means and pattern of significant results for each partner aggressive group compared to non-aggressive group

	Both	Only PA	Only SA	None	Omnibus F-test
Childhood experiences					
Witness domestic violence	2.33*	.18	.70*	.18	23.8, p < .001
Experience parental physical punishment	4.16*	1.62	2.23*	1.07	16.9, p < .001
Sexual abuse	4.31*	2.14	2.88*	1.96	9.4, p < .001
Motives					
Hedonism	3.13*	2.71*	3.16*	2.34	25.1, <i>p</i> <.001
Conformity	2.18*	1.80	1.91*	1.65	11.3, <i>p</i> <.001
Dominance	2.94*	2.44*	2.72*	2.04	33.8, <i>p</i> <.001
Attitudes					
Traditional gender roles	2.53*	2.76*	2.66*	2.86	5.42, p=.001
Acceptance of male violence	3.14*	3.62	3.56	3.79	11.77, <i>p</i> <.001
Disapprove of women's initiative	3.33*	3.51	3.35	3.53	2.88, p=.035
Level of intimacy	2.19*	2.49	2.35	2.84	8.82, <i>p</i> <.001
Mental health					
Loss of control	2.26*	2.04*	2.00	1.85	8.84, <i>p</i> <.001
Personality					
Empathy	3.62*	3.92	3.87	3.96	9.28, p < .001
Self-centeredness	2.19*	2.13	2.24*	1.97	8.26, <i>p</i> <.001
Behaviors					
Alcohol index	35.92*	31.13*	28.02*	16.77	16.03, p > .001
Number of dating partners in HS	4.25	4.70	3.94	4.45	.457, ns
Number of sexual partners in HS	4.01*	3.37*	3.76*	2.11	22.70, p > .001
Delinquent behaviors	33.19*	24.46*	26.42*	17.49	19.84, <i>p</i> >.001
Number of comparisons significantly different from None	16	7	11		

^{*=}Significantly different from the None Group, based on ANOVA with Dunnett's post hoc tests.

violence, disapproving more of women taking the initiative in relationships, accepting lower level of intimacy as acceptable for sex, and were less empathic. Along with the Only SA group, dual perpetrators witnessed more domestic violence, experienced more parental physical punishment and more sexual abuse as a child, and were more self-centered than the None group. Dual perpetrators and Only PA men reported greater loss of control than the None group. These patterns of results confirm our suspicion that many of the typically observed differences between sexually aggressive and non-sexually aggressive men and between physically aggressive and non-physically aggressive men were probably due to confounds associated with the presence of dual perpetrators in the samples studied. In other words, dual perpetrators appear to constitute a meaningful group of aggressive men who appear to be more extreme on most variables that distinguish men who commit IPV from those who do not.

2.7. Are dual perpetrators significantly different from Only SA men and Only PA men?

To pursue more fully the likelihood that dual perpetrators constitute a group distinct from those who commit only one form of IPV or the other, the above analyses were repeated omitting the None group. Dual perpetrators reported significantly more witnessing domestic violence, parental physical punishment, and childhood sexual abuse than men in the Only SA or Only PA groups. Dual perpetrators also had higher scores for conformity to peer norms as a motive for sex, were more accepting of male violence, reported a greater sense of loss of control, were lower in empathy, and engaged in more delinquent behaviors. The Only PA group, but not the Only SA group, was significantly lower than dual perpetrators on hedonism and dominance as motives for sex. In sum, the Only SA group appears to be more similar to the dual perpetrator group than does the Only PA group.

2.8. Do Only SA group and Only PA group differ?

These two groups differed from each other on only two variables, the hedonism and dominance motives for sex, with the Only SA group scoring significantly higher.

3. Discussion

Except for their motives for sex, the Only SA and Only PA groups are remarkably similar. Furthermore, at least in our sample of men reporting on adolescent experiences, dual perpetrators and Only SA men appear more similar to each other than to the Only PA group. Thus, dual perpetrators appear to constitute a truly distinctive group. From a developmental perspective, few young men are likely to be in a serious relationship early in adolescence, although sexual experimentation with females may have begun, thereby exposing young men to more opportunities for sexual aggression than for physical aggression toward a female partner. Thus, sexual aggression may emerge first. Although the findings from numerous studies indicate a strong relationship between childhood experiences with witnessing domestic violence, experiencing parental physical punishment, and childhood sexual abuse and the use of sexual and physical aggression, it may be that this impact is stronger for sexual, but not physical, aggression—at least in adolescence, due in part to the nature of heterosexual interactions in adolescence. Each of these childhood factors distinguished dual perpetrators and the Only SA group from the None group, with dual perpetrators reporting even more of each of these childhood experiences than the Only SA group. Further examination of partner aggression into early adulthood when the likelihood of long-term relationships is greater is needed to determine if there is a differential impact of physical versus sexual abuse in childhood on which form of partner violence is more likely. It is interesting to note that the Only SA group and the dual perpetrators were similar on two of the three motives for sex. Perhaps this says something about the coupling of sex and power and sex and self-centered gratification as a commonality for these two groups.

What is not clear is the extent to which dual perpetration reflects an accumulation of risk factors that increases the likelihood of engaging in an ever-broadening range of negative behaviors directed toward women; that is, dual perpetration differs from Only SA and Only PA in a quantitative manner. There is also the possibility that dual perpetration differs qualitatively from Only SA and Only PA; there may be certain factors that interact to increase the likelihood of dual perpetration. For example, Chiffriller, Hennessy, and Zappone (2006), as well as Monson and Langhinrichsen-Rohling (2002), suggest meaningful differences in the degree of psychopathology, physical abusiveness, and motives for sexual coercion in different typologies of batterers that extend beyond the behavioral manifestations of battering. In fact, their research suggests that men who sexually aggress, whether they also physically aggress or not, may be the most deviant. A similar conclusion can be drawn from the present analyses.

One interesting side note is the observation that had we conducted only standard analyses we would have erroneously concluded that sexually aggressive men and physically aggressive men both differed from their non-aggressive counterparts for all measures of childhood violence, hedonism and conformity as motives for sex, and level of intimacy acceptable for sex, as well as empathy, alcohol use, number of sex partners and delinquent behaviors (see footnote 1). For each of the standard analyses, the "non-aggressive" comparison groups for these two sets of analyses contained men who had committed the *other* form of aggression and each group of aggressive men contained some dual perpetrators. Hence, there is a need for researchers to examine more carefully the differences between sexually aggressive men and physically aggressive men controlling for the other form of aggression.

4. Conclusions

As this paper has noted, there are many commonalities between sexual and physical aggression in relationships. There appears to be some variables that contribute to risk for both types of IPV, including personal variables, environmental or contextual variables, and role-related factors. Each form of aggression is relatively common and observed as early as the teen years. Each appears to reflect "normative" relationships between women and men, and each is blatantly and subtly tolerated by society, as reflected in statements such as "boys will be boys" or "she was asking for it." The low rates of prosecution for sexual assault and domestic violence in the courts in comparison to other serious crimes also speaks to societal tolerance. Theoretical conceptualizations of each have been associated with gender inequalities, gender role prescriptions, cultural myths about women, men and violence, and scripts for enacting power in relationships. Research has found each to be correlated with witnessing domestic violence, experiencing parental physical punishment and childhood sexual abuse, association with delinquent peers, use of alcohol and drugs, and various intrapersonal factors associated with traditional gender role beliefs, hostility toward women, and psychopathic and antisocial tendencies. However, in spite of significant similarities there are important differences that should be recognized. The typography of the behaviors involved is different. Whereas physical aggression can be

described as based on specific behaviors, degree of force used and consequent physical injury, not all forms of sexual aggression involve physical force (such as verbally coerced sexual contact and alcohol- or drug-assisted sexual coercion). Furthermore, the range of relationships in which sexual aggression can occur is greater than physical aggression. There are also important gender-related differences that must be noted. Whereas sexual aggression is predominately a male phenomenon, both women and men engage in physical aggression toward intimate partners, and these dynamics must be considered in any comprehensive investigation of IPV.

However, a number of barriers have obscured potentially important differences between men who engage in only one or both types of partner aggression. These barriers are associated with different research traditions, including who the researchers are, the journals in which they publish, the populations studied, and the measurement instruments used, as well as the operational definitions of IPV used. Our data suggest that it is time to recognize dual perpetration as a unique form of IPV which should be accounted for in IPV research. Failing to acknowledge dual perpetration will lead to misguided conclusions and hinder the study of IPV and the goal of understanding and prevention.

4.1. Limitations

The current findings are speculative. The data used were not collected for the purpose of comparing men who commit different types of IPV. Had different variables or different assessment tools been used, the pattern of results could be different. Instructions for the CTS were limited to romantic relationships, whereas no similar restrictions were included in the instructions for the SES. Also, for the present analyses all types of sexual aggression, as well as all types of physical aggression, were used to categorize men dichotomously as aggressive or not. It is likely that the severity of the aggressive act may affect the strength of the relationships observed. Raping a woman is not the same as verbally coercing a woman into sex, nor is a push qualitatively the same as beating someone. Previous authors have noted heterogeneity among sexually aggressive men (Knight & Prentky, 1990) and physically aggressive men (Monson & Langhinrichsen-Rohling, 2002), distinctions that were beyond the scope of the present analyses. Furthermore, there is no way of knowing for dual perpetrators if the sexual and physical aggression occurred in the same or different relationships. Also, all the current data were collected at one point in time so causal inferences cannot be made. Furthermore, the data were based on young men's retrospective reports of their behavior between the ages of 14 and 18. A different pattern of results may have emerged had an older sample been used.

4.2. Directions for future research

In addition to addressing measurement issues, the type of behavior being assessed should be taken into account. That is, the form of sexual aggression, such as verbal coercion or force, as well as the form of physical aggression, such as a slap versus hitting with an object, may alter the nature of the relationships found. Furthermore, relationship characteristics should be studied more extensively. Is dual perpetration more likely to occur in the same or different relationships? How do relationship factors relate to or interact with issues of power and control? Moreover, the notion of dual perpetration should be extended to examine issues of verbal and psychological aggression and battering. Additionally, a longitudinal perspective would be imperative to examine the development of trajectories of partner aggression. Are men who engage in partner aggression at a younger age more likely to persist and how do patterns of verbal, psychological, sexual and physical aggression change across time and relationships? Ideally, as research on dual perpetration increases, a more complete, unified theory of IPV will emerge. Such a model would have intervention and public policy implications. Practitioners should consider systematically assessing for multiple forms of perpetration and victimization in their clients. Educators interested in developing relationship violence prevention programs should consider incorporating various forms of relationship aggression into their definitions of IPV.

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References

- Abbey, A. (1991). Acquaintance rape and alcohol consumption on college campuses: How are they linked? *Journal of American College Health*, 39, 165–169
- Abbey, A., Zawacki, T., & Buck, P. (2001). Alcohol and sexual assault. Alcohol Research & Health, 25(1), 43-51.
- Ageton, S. S. (1983). Sexual assault among adolescents. Lexington, MA: D. C. Health.
- Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. Psychological Bulletin, 126, 651-680.
- Barnett, O. W., & Hamberger, L. K. (1992). The assessment of maritally violent men on the California Psychological Inventory. *Violence and Victims*, 7(1), 15–28.
- Barnett, O. W., Martinez, T. E., & Bluestem, B. W. (1995). Jealousy and romantic attachment in martially violent and nonviolent men. *Journal of Interpersonal Violence*, 10, 473–486.
- Beneke, W. M., Kohrs, M. B., & Paulsen, B. (1982). Nutritional effects of a behavior modification weight loss program: A biochemical assessment. *Behavioral Assessment*, 4, 339–345.
- Bethke, T. M., & DeJoy, D. M. (1993). An experimental study of factors influencing the acceptability of dating violence. *Journal of Interpersonal Violence*, 8, 36–51.
- Billingham, R. E. (1987). Courtship violence: The patterns of conflict resolution strategies across seven levels of emotional commitment. *Family Relations*, 36, 283–289.
- Bondurant, B., & Donat, L. N. (1999). Perceptions of women's sexual interest and acquaintance rape: The role of sexual overperception and affective attitudes. *Psychology of Women Quarterly*, 23(4), 691–705.
- Brendgen, M., Vitaro, F., & Tremblay, R. E. (2002). Parent and peer effects on delinquency-related violence and dating violence: A test of two mediational models. *Social Development*, 11(2), 225–244.
- Burt, M. R. (1980). Cultural myths and supports for rape. Journal of Personality and Social Psychology, 38(2), 217-230.
- Campbell, A., Muncer, S., Guy, A., & Banim, M. (1996). Social representations of aggression: Crossing the sex barrier. *European Journal of Social Psychology*, 26, 135–147.
- Cate, C. A., Henton, J. M., Koval, J., Christopher, F. S., & Lloyd, S. (1982). Premarital abuse: A social psychological perspective. *Journal of Family Issues*, 3, 79–90.
- Cauffman, E., Feldman, S. S., Arnett-Jensen, L., & Jensen-Arnett, J. (2000). The (un)acceptability of violence against peers and dates. *Journal of Adolescent Research*, 15, 652–673.
- Check, J. V., & Malamuth, N. M. (1983). Sex role stereotyping and reactions to depictions of stranger versus acquaintance rape. *Journal of Personality and Social Psychology*, 45, 344–356.
- Chiffriller, S. H., & Hennessy, J. J. (2007). Male batterer profiles: Support for an empirically generated typology. *Journal of Offender Rehabilitation*, 44(2–3), 117–131.
- Chiffriller, S. H., Hennessy, J. J., & Zappone, M. (2006). Understanding a new typology of batterers: Implications for treatment. *Victims & Offenders*, 1(1), 79–97.
- Craig, M. (1990). Coercive sexuality in dating relationships: A situational model. Clinical Psychology Review, 10, 395-423.
- Davis, T. L., & Liddell, D. L. (2002). Getting inside the house: The effectiveness of a rape prevention program for college fraternity men. *Journal of College Student Development*, 43(1), 35–50.
- Dean, K. E., & Malamuth, N. M. (1997). Characteristics of men who aggress sexually and of men who imagine aggressing: Risk and moderating variables. *Journal of Personality and Social Psychology*, 72(2), 449–455.
- Edleson, J. L., Daro, D., & Pinderhughes, H. (2004). Finding a common agenda for preventing child maltreatment, youth violence, and domestic violence. *Journal of Interpersonal Violence*, 19, 279–281.
- Furman, W., & Simon, V. (2006). Actor and partner effects of adolescents' romantic working models and styles on interactions with romantic partners. *Child Development*, 77(3), 588–604.
- Gottfredson, M. R., & Hirschi, T. (1990). A general theory of crime. Stanford, CA: Stanford University Press.
- Gwartney-Gibbs, P. A., Stockard, J., & Brohmer, S. (1983). Learning courtship violence: The influence of parents, peers, and personal experiences. *Family Relations*, *36*, 276–282.
- Haapasalo, J., & Kankkonen, M. (1997). Self-reported childhood abuse among sex and violent offenders. Archives of Sexual Behavior, 26(4), 421-431.
- Hall, G. C., & Hirschman, R. (1991). Toward a theory of sexual aggression: A quadripartite model. *Journal of Consulting and Clinical Psychology*, 59(5), 662–669.
- Hammock, G. S., & Richardson, D. R. (1997). Perceptions of rape: The influence of closeness of relationship, intoxication and sex of participant. *Violence and Victims*, 12(3), 237–246.
- Hannan, K. E., & Burkhart, B. (1993). The topography of violence in college men: Frequency and comorbidity of sexual and physical aggression. Journal of College Student Psychotherapy, 8, 219–237.
- Hastings, J. E., & Hamberger, L. K. (1988). Personality characteristics of spouse abusers: A controlled comparison. Violence and Victims, 3, 31–48.
 Hersh, K., & Gray-Little, B. (1998). Psychopathic traits and attitudes associated with self-reported sexual aggression in college men. Journal of Interpersonal Violence, 13(4), 456–471.
- Hines, D., & Saudino, K. (2003). Gender differences in psychological, physical, and sexual aggression among college students using the Revised Conflict Tactics Scales. *Violence and Victims*, 18, 197–217.
- Hines, D. A., & Malley-Morrison, K. (2001). Psychological effects of partner abuse against men: A neglected research area. *Psychology of Men and Masculinity*, 2, 75–85.

- Katz, J., Carino, A., & Hilton, A. (2002). Perceived verbal conflict behaviors associated with physical aggression and sexual coercion in dating relationships: A gender-sensitive analysis. Violence and Victims, 17, 93-109.
- Kinsfogel, K. M., & Grych, J. H. (2004). Interparental conflict and adolescent dating relationships: Integrating cognitive, emotional, and peer influences. *Journal of Family Psychology*, 18(3), 505–515.
- Knickerbocker, L., Heyman, R. E., & Slep, A. M. (2007). Co-occurrence of child and partner maltreatment definitions, prevalence, theory, and implications for assessment. European Psychologist, 2, 36–44.
- Knight, R. A., & Prentky, R. A. (1990). Classifying sex offenders: The development and corroboration of taxonomic models. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *The handbook of sexual assault* (pp. 23–52). New York: Plenum Press.
- Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., Ullman, S., West, C., & White, J. (2007). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology of Women Quarterly*, 31, 357–370.
- Koss, M. P., & Gaines, J. A. (1993). The prediction of sexual aggression by alcohol use, athletic participation, and fraternity affiliation. *Journal of Interpersonal Violence*, 8(1), 94–108.
- Koss, M., Gidycz, C., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology*, 58, 162–170.
- Kosson, D. S., Kelly, J. C., & White, J. W. (1997). Psychopathy-related traits predict self-reported sexual aggression among college men. *Journal of Interpersonal Violence*, 12(2), 241–254.
- Kowalski, R. M. (1992). Returning the 'social' to social psychology: Sociohistorical alternatives to conventionalist perspectives. *PsycCRITIQUES*, 37, 237–238.
- Kowalski, R. M. (1993). Interpreting behaviors in mixed-gender encounters: Effects of social anxiety and gender. *Journal of Social and Clinical Psychology*, 12, 239–247.
- Kuffel, S. W., & Katz, J. (2002). Preventing physical, psychological, and sexual aggression in college dating relationships. *The Journal of Primary Prevention*, 22, 361–374.
- Leonard, K. E., & Blane, H. T. (1992). Alcohol and marital aggression in a national sample of young men. *Journal of Interpersonal Violence*, 7, 19–30.
- Malamuth, N. M. (1996). The confluence model of sexual aggression: Feminist and evolutionary perspectives. In D. M. Buss & N.M. Malamuth (Eds.), Sex, power, conflict: Evolutionary and feminist perspectives (pp. 269–295). Oxford University Press.
- Malamuth, N. M., Linz, D., Heavey, C. L., Barnes, G., & Acker, M. (1995). Using the confluence model of sexual aggression to predict men's conflict with women: A 10-year follow-up study. *Journal of Personality and Social Psychology*, 69, 353–369.
- Malamuth, N. M., Sockloskie, R. J., & Koss, M. P. (1991). Characteristics of aggressors against women: Testing a model using a national sample of college students. *Journal of Consulting and Clinical Psychology*, 59(5), 670–681.
- Malamuth, N. M., & Thornhill, N. W. (1994). Hostile masculinity, sexual aggression, and gender-biased domineeringness in conversations. Aggressive Behavior, 20(3), 185–193.
- Marshall, A. D., & Holtzworth-Munroe, A. (2002). Varying forms of husband sexual aggression: Predictors and subgroup differences. *Journal of Family Psychology*, 16(3), 286–296.
- McKenry, P. C., Julian, T. W., & Gavazzi, S. M. (1995). Toward a biopsychsocial model of domestic violence. *Journal of Marriage and the Family*, 57, 307–320.
- Monson, C. M., & Langhinrichsen-Rohling, J. (2002). Sexual and nonsexual dating violence perpetration: Testing an integrated perpetrator typology. *Violence and Victims*, 17, 403–428.
- Murphy, C. M., Meyer, S., & O'Leary, K. D. (1993). Family of origin violence and MCMI–II psychopathology among partner assaultive men. *Violence and Victims*, 8(2), 165–176.
- Ouimette, P. (1997). Psychopathology and sexual aggression in nonincarcerated men. Violence and Victims, 12, 389-395.
- Patterson, G. R., DeBaryshe, B. D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. Special issue: Children and their development: Knowledge base, research agenda, and social policy applicationAmerican Psychologist, Vol. 44(2) (pp. 329–335).
- Patterson, G. R., Reid, J. B., & Dishion, T. J. (1998). Antisocial Boys. In J. M. Jenkins, K. Oatley, & N. L. Stein (Eds.), *Human emotions: A reader* (pp. 330–336). Malden, MA, US: Blackwell Publishing.
- Pedersen, P., & Thomas, C. D. (1992). Prevalence and correlates of dating violence in a Canadian university sample. Canadian Journal of Behavioural Science/La Revue Canadianne des Sciences du Comportement, 24, 490–501.
- Petty, G. M., & Dawson, B. (1989). Sexual aggression in normal men: Incidence, beliefs, and personality characteristics. *Personality and Individual Differences*, 10(3), 355–362.
- Porcerelli, J. H., Cogan, R., & Hibbard, S. (2004). Personality characteristics of partner violent men: A Q-sort approach. *Journal of Personality Disorders*, 18(2), 151–162.
- Prentky, R. A., Knight, R. A., & Sims-Knight, J. E. (1989). Developmental antecedents of sexual aggression. *Development and Psychopathology*, 1 (2), 153–169.
- Rapaport, K., & Burkhart, B. (1984). Personality and attitudinal characteristics of sexually coercive college males. *Journal of Abnormal Psychology*, 93(2), 216–221.
- Riggs, D. S. (1993). Relationship problems and dating aggression: A potential treatment target. Journal of Interpersonal Violence, 8, 18-35.
- Riggs, D. S., & O'Leary, K. D. (1996). Aggression between heterosexual dating partners: An examination of a causal model of courtship aggression. *Journal of Interpersonal Violence*, 11, 519–540.
- Roscoe, B., & Kelsey, T. (1986). Dating violence among high school students. Psychology: A Journal of Human Behavior, 23, 53-59.
- Rosenbaum, A., & O'Leary, K. D. (1981). Marital violence: Characteristics of abusive couples. *Journal of Consulting and Clinical Psychology*, 48, 63–71.
- Russell, R., & Hulson, B. (1992). Physical and psychological abuse of heterosexual partners. Personality and Individual Differences, 13, 457-473.

- Ryan, K. M. (1998). The relationship between courtship violence and sexual aggression in college students. *Journal of Family Violence*, 13, 377–394.
- Saunders, D. G. (1995). Prediction of wife assault. In J. C. Campbell (Ed.), Assessing dangerousness (pp. 68-95). Sage.
- Schumacher, J. A., Feldbau-Kohn, S. R., Slep, A. M. S., & Heyman, R. E. (2001). Risk factors for male-to-female partner physical abuse. *Aggression and Violent Behavior*, 6, 269–352.
- Seto, M. C., Maric, A., & Barbaree, H. E. (2001). The role of pornography in the etiology of sexual aggression. *Aggression and Violent Behavior*, 6 (1), 35–53.
- Shotland, R. L. (1992). A theory of the causes of courtship rape: II. Journal of Social Issues, 48, 127-143.
- Skuja, K., & Halford, W. K. (2004). Repeating the errors of our parents? Parental violence in men's family of origin and conflict management in dating couples. *Journal of Interpersonal Violence*, 19(6), 623–638.
- Smith, P. H., Thornton, G. E., DeVellis, R., Earp, J., & Coker, A. L. (2002). A population-based study of the prevalence and distinctiveness of battering, physical assault, and sexual assault in intimate relationships. *Violence Against Women*, 8, 1208–1232.
- Smith, P. H., White, J. W., & Holland, L. J. (2003). A longitudinal perspective on dating violence among adolescent and college-age women. American Journal of Public Health, 93, 1104–1109.
- Straus, M. A. (1979 Feb.). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) scales. *Journal of Marriage and the Family*, 41, 75–88.
- Straus, M. A., & Ramirez, I. L. (2007). Gender symmetry in prevalence, severity, and chronicity of physical aggression against dating partner partners by university students in Mexico and USA. *Aggressive Behavior*, 33, 281–290.
- Stuart, G. L., & Holtzworth-Munroe, A. (2005). Testing a theoretical model of the relationship between impulsivity, mediating variables, and husband violence. *Journal of Family Violence*, 20(5), 291–303.
- Tang, C. (1999). Marital power and aggression in a community sample of Hong Kong Chinese families. *Journal of Interpersonal Violence*, 14, 586–602.
- Tjaden, P., & Thoennes, N. (2006 January). Extent, nature, and consequences of rape victimization: Findings from the national violence against women survey. National Institute of Justice NCJ 210346.
- Truman, D. M., Tokar, D. M., & Fischer, A. R. (1996). Dimensions of masculinity: Relations to date rape supportive attitudes and sexual aggression in dating situations. *Journal of Counseling & Development*, 74(6), 555–562.
- U.S. Department of Justice (2001). *Table 59: Percent distribution of incidents, by type of crime and time of occurrence.* (Retrieved October 18, 2003, from http://www.ojp.usdoj.gov/bjs/abstract/cvus/time_of_occurrence.htm)
- Van Hasselt, V., Morrison, R. I., & Bellack, A. A. (1985). Alcohol use in wife abusers and their spouses. Addictive Behaviors, 10, 127-135.
- White, J. W., Donat, P. L. N., & Bondurant, B. (2001). A developmental examination of violence against girls and women. In R. Unger (Ed.), *Handbook of the psychology of women and gender* (pp. 343–357). New York: John Wiley & Sons.
- White, J. W., & Koss, M. P. (1993). Adolescent sexual aggression within heterosexual relationships: Prevalence, characteristics, and causes. In H. E. Barbaree, W. L. Marshall, & S. M. Hudson (Eds.), *The juvenile sex offender* (pp. 182–202). New York: NY: Guilford Press.
- White, J. W., & Kowalski, R. M. (1998). Male violence against women: An integrative perspective. In R. G. Geen & E. Donnerstein (Eds.), *Perspectives on human aggression* (pp. 205–229). New York: Academic Press.
- White, J. W., Merrill, L., & Koss, M. P. (2001). Predictors of premilitary courtship violence in a Navy recruit sample. *Journal of Interpersonal Violence*, 16, 910–927.
- White, J. W. & Smith, P. H. (in press). Co-variation in the use of physical and sexual intimate partner aggression among adolescent and college-age men: A longitudinal analysis. *Violence Against Women*.
- White, J. W., Smith, P. H., Koss, M. P., & Figueredo, A. J. (2000). Intimate partner aggression—what have we learned? Comment on Archer (2000). *Psychological Bulletin*, 126, 697–702.
- Wolfe, D. A., & Feiring, C. (2000). Dating violence through the lens of adolescent romantic relationships. Child Maltreatment, 5(4), 360-363.