

Behavioral and Attitudinal Factors Differentiating Male Intimate Partner Violence Perpetrators With and Without a History of Childhood Family Violence

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Abstract This study utilized a sample of men ($N=340$) charged with assault against a female partner to assess differences among IPV perpetrators with and without a history of childhood family violence on factors such as angry, controlling and violent behaviors, substance use related behaviors, and attitudes towards women. Over two-thirds of the sample reported childhood exposure to maltreatment or witnessing IPV. Chi-square analyses and t-tests indicated significant differences between perpetrators with and without a history of family violence on eight of eleven measures. Findings suggest perpetrators with a family violence history more strongly endorse ideas that present women and feminine attributes in a negative light. This research demonstrates that while exposure to family violence during childhood is not necessary for IPV to occur, its presence may be a marker for more severe attitudinal and behavioral problems. Findings highlight the need for primary prevention efforts and can inform secondary prevention strategies.

Keywords Child maltreatment · Witnessing intimate partner violence · Perpetrators of intimate partner violence · Family violence · Violence prevention · Behavior · Attitudes

In the family violence literature, the term “family violence” is broadly defined. One simple definition presents family violence as the experience of direct exposure (e.g., child maltreatment) or indirect exposure (e.g., witnessing inter-parental violence) to violence in the family of origin. Exposure to such violence in childhood has been related to negative social and health outcomes across the lifespan including increased engagement in aggressive behavior (Kernsmith 2006; Murrell et al. 2007). Research has also indicated that childhood family violence (CFV) exposure is a risk factor for adult perpetration of intimate partner violence (IPV) (Straus et al. 1980; See Kerley et al. 2010). CFV exposure, however, is not part of every IPV perpetrator’s life history suggesting there are different pathways to perpetration of IPV and the need for different efficacious interventions.

Reviews of research on perpetration interventions, however, indicate limited program effects and unclear evidence of enhanced efficacy or improved outcomes of recent approaches (i.e., culturally focused, case management, comprehensive and supportive services) (Murphy and Ting 2010). In a systematic review of studies on the association between childhood exposure to violence and occurrence of IPV, Gil-Gonzalez et al. (2008) state that recommendations within IPV prevention continue to lack a basis in evidence, more etiologic evidence is needed to guide effective prevention programs, and greater knowledge is needed on how IPV perpetration is affected by factors such as childhood exposure to violence. Additionally, they advocate greater attention to factors across the social ecology including relationships and attitudes that are patriarchal and sexist. Reed and colleagues (2008) similarly suggest

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a greater focus on relational and contextual factors and state the paucity of studies on such factors and male IPV confounds efforts to develop effective prevention and intervention strategies.

From a social learning theory perspective, the family environment exposes children to attitudes and behaviors related to the development and maintenance of intimate relationships. Development of normative attitudes and behaviors carried into adult intimate relationships can occur via direct imitation and internalization of principles that guide behavior (Bandura 1977). Thus, social learning theory suggests that individuals exposed to family violence in childhood are at increased risk of endorsing violent behavior (Ireland and Smith 2009). Extant research utilizing samples of IPV perpetrators has examined differences between perpetrators by history of alcohol abuse (Makara-Studzinska and Gustaw 2007; Kraanen et al. 2010) and psychopathy (Echeburua and Fernandez-Montalvo 2007). Additionally, a handful of studies with IPV perpetrators has linked family violence exposure to general (non-IPV specific) violence (Boyle et al. 2008; Kernsmith 2006; Murrell et al. 2007); but, limited information exists as to whether IPV perpetrators are distinguished by family violence history on other outcomes. This may be because of a general assumption that most, if not all, IPV perpetrators are exposed to family violence in childhood.

The present study aims to: (1) extend the knowledge base about the influence of CFV on relational factors and gender role attitudes among IPV perpetrators; and (2) support efforts to inform and refine intervention programs for perpetrators. The study focuses on family level risk factors, is framed by social learning theory, and extends lines of research that explore the consequences of direct and indirect exposure to family violence. The analysis explored bivariate relationships between CFV history and both general and specific relational behavior, attitudes and other factors in a sample of IPV perpetrators. We expected two outcomes: (1) a high prevalence of CFV in the sample; and (2) sample outcomes distinguished by family history, such that those with CFV history would exhibit more negative outcomes.

Literature Review

Direct and indirect exposure to childhood family violence are major public health concerns. Given implications of CFV exposure to behavioral and attitudinal outcomes across the lifecourse we review the literature on the burden and consequences of child maltreatment and witnessed IPV as a starting point to further understanding of childhood factors that may differentiate male IPV perpetrators. Recent maltreatment incidence estimates range from about 700,000 to nearly 3 million (39.5 per 1,000) children, depending on data system and maltreatment standard (Sedlak et al. 2010;

U.S. Department of Health and Human Services 2011). Prevalence estimates of witnessing parental physical aggression range from 9 to 27 % in community-based and college-based samples (Henning et al. 1997). Literature reviews also indicate the median rate of maltreatment and witnessing overlap is 40 %, but typically ranges from 30 % to 60 %. Co-occurrence in clinical and shelter based samples, however can reach 100 % (see Appel and Holden 1998; Edleson 1999; Jouriles et al. 2008). With respect to overlap for men, in a health maintenance organization-based sample where 34.6 % of adults reported two or more types of maltreatment, Edwards et al. (2003) report that of the 21.7 % of men who reported physical abuse, about half or 10.8 % also reported sexual abuse, witnessing battering or both.

The literature on child maltreatment has indicated connections between experiencing violence as a child and the context or quality of adult relationships. Though past research has emphasized the experiences of female victims (Colman and Widom 2004), a few studies have included the experiences of male victims. Findings, however, from these studies have been inconsistent. Colman and Widom (2004) concluded that men who experienced physical child maltreatment were more likely to rate their current relationship as high in warmth, supportiveness, and communications compared to their non-maltreated counterparts. Conversely, DiLillo and colleagues (2009) found that a decrease in marital satisfaction for males was predicted by a history of physical and psychological childhood abuse and neglect.

In the child maltreatment literature, it has been theorized that children who were maltreated or who experienced other forms of CFV have an ingrained sense of powerlessness. As a result, they may have an increased need for power or domination over others (Finkelhor and Browne 1985). Males who experience violent victimization may conclude the use of violence is necessary for self-preservation or may frame aggression as a viable tool for achieving and maintaining goals such as controlling one's own life, exerting power over others, and attaining personal satisfaction. However, there has been little empirical research examining the relationship between maltreatment and the need for power and control over an intimate partner.

Substance abuse has been linked to both maltreatment and witnessing of IPV. Studies report higher rates of both physical and sexual child abuse among alcohol abusers than individuals in the general population. Also, higher rates of problematic alcohol use are reported by individuals with a history of child maltreatment (Widom et al. 2007). Advanced alcohol problems have been linked to early alcohol initiation, which in turn has been associated with experiencing maltreatment during early childhood (Hamburger et al. 2008). Outcomes relating alcohol and maltreatment, however, may be gender specific. Widom and colleagues (2007) found no significant path for men from maltreatment to an alcohol diagnosis in young adulthood or excessive drinking

in middle adulthood; but found significant indirect pathways to these outcomes for women. With respect to witnessing IPV, Roustit and colleagues (2009) found adults exposed to inter-parental violence as children had higher risk of alcohol dependence.

Though a large body of research exists on the life-long consequences of child maltreatment on factors such as aggression and general hostility findings have been somewhat mixed. Turner et al. (2006) using a nationally representative sample of children and adolescents, found that maltreatment was an independent predictor of anger/aggression; but that witnessing inter-parental violence was not. White and Widom (2003) found no direct effect of maltreatment on men's aggression or hostility. Conversely, Horwitz et al. (2001) concluded that individuals with child maltreatment history held higher levels of hostility in adulthood.

Additionally, in a review of literature on maltreatment and youth violence, Maas et al. (2008) state the findings of two studies (Fagan 2005; Magdol et al. 1998) suggest the impact of family violence extends into the early adult years and influences IPV perpetration. Furthermore, Kennedy et al. (2002) found witnessing inter-parental psychological aggression was associated with increased reactivity to conflict for males and increased relationship conflict related anger for both males and females. Studies have also found correlations between experiencing family violence, attitudes towards marital violence, and perpetration of intimate partner violence. O'Hearn and Margolin (2000), using a convenience sample of men, found attitudes toward marital violence moderated the relationship between experiencing CFV and perpetrating IPV. Additionally, Reitzel-Jaffe and Wolfe (2001) found family of origin violence positively correlated to both negative attitudes towards women and perpetration of IPV.

In addition to associations between CFV and adult aggression and hostility, studies indicate that men who have experienced child maltreatment have a greater likelihood of being arrested for criminal behavior (Fagan 2005; Gilbert et al. 2009; Smith and Thornberry 1995; Widom et al. 2006). Smith and Thornberry (1995) found a direct correlation between having a history of child maltreatment and delinquency, including having official contact with law enforcement due to delinquent behaviors. Widom et al. (2006) reported men who had child maltreatment history had a higher risk of being arrested for violent crimes. Furthermore, in their review of the literature, Gilbert et al. (2009) found experiencing physical abuse or neglect during childhood increased the likelihood of arrest for both juveniles and adults.

The above review suggests correlates of focus in the present study have been examined among maltreated or IPV exposed samples, but have less frequently been examined among IPV perpetrator samples. The present study fills a gap

by examining the aforementioned correlates by CFV history in a sample of IPV perpetrators. The study aims to extend knowledge that may help inform and refine intervention programs for perpetrators.

Method

Sample

The present study utilized a sample of men arrested for physical assault of a female intimate partner recruited from a corrections probation department in a metropolitan area of Texas. A total of 351 men participated in the survey. About 8 % of the total sample ($N=29$) were administered the survey in Spanish and were retained after T-test and chi square analysis revealed that Spanish respondents had a similar demographic profile to English respondents. Eleven respondents were excluded, because of the presence of missing data (more than 75 %) on the survey items in general and particularly for a lack of data for the study outcomes, resulting in a sample size of 340 men.

Data were collected from January 2005 through April 2006. English or Spanish speaking males, aged 18 or older, who had been charged with assault against a female intimate partner and were on probation were eligible for study participation. For the first 3 months of data collection, probation department personnel referred any man adjudicated in domestic violence court on an assault charge to study recruiters for screening for the current study. After the third month this approach was changed. Recruiters instead approached all men processed through the probation department as they left orientation which enabled them to determine the percentage of the men processed through probation orientation who were eligible for the study.

Men who agreed to be screened and who were determined eligible for participation were directed to a private area in the court to sign a consent form and then complete the survey via audio computer-assisted self-interviewing (ACASI). Study staff were bilingual and consent forms and the survey were provided in English or Spanish, as needed. Each respondent received \$20 in cash for his participation. In total, recruiters approached 9,331 men. Almost 14 % ($n=1,267$) of men approached were known to be eligible for the study. Of these, approximately 27 % completed a survey.

Measures

Individuals were differentiated by *Childhood Family Violence History*. This measure, adapted from Straus et al. (1996), was a dichotomous variable constructed from a series of conflict tactics measures such that individuals who reported experiencing either physical or emotional maltreatment or

witnessing inter-parental violence were categorized as having a CFV history. Those who reported not having either experience were categorized as not having a CFV history. Specifically, the dichotomous measure was constructed from items which asked respondents to rate the frequency with which their father or male guardian or mother or female guardian used specific conflict tactics against (a) each other and (b) against the respondent. The conflict tactics were: (1) insulted, yelled or swore at or threatened to hit or throw something; (2) threw something, pushed, grabbed or shoved, or slapped; or (3) kicked, hit with a fist, or hit with something, beat up or threatened with a knife or gun. These tactics reflect the experiences of psychological, physical and severe physical abuse.

IPV perpetrators with and without a CFV history were compared on behavioral and attitudinal factors. The behavioral factors were: binge drinking, drug dependence, substance abuse-related relationship problems, fighting, non-intimate partner violence related arrests, anger, perceived self-control, ineffective arguing, and power and control. The first four measures were single items in the survey; while the remaining measures were scales constructed from multiple items in the survey.

Binge Drinking was a dichotomous measure which indicated whether the respondent reported that around the time of the IPV incident that they had consumed five or more drinks on an occasion. **Drug Dependence** was a dichotomous measure which indicated whether the respondent felt they could not get through a week without using drugs (not including alcohol, caffeine, nicotine, or drugs required for medical reasons). **Substance Abuse-Related Relationship Problems** was a dichotomous measure which indicated that the respondent reported their drug or alcohol abuse created problems in their romantic relationship. To assess whether perpetrators with a history of CFV had a greater propensity to be aggressive than those without such a history we included **Fighting**, a dichotomous measure which indicated whether a respondent reported having non-IPV related physical fights as an adult. Impact of CFV exposure may result in greater criminal justice involvement for IPV perpetrators with such a history than other IPV perpetrators. Thus, we included the measure **Non-IPV Arrests**. This was a dichotomous measure which indicated that the respondent reported that prior to the IPV arrest that they had been arrested on a violence charge that was not domestic violence.

In addition to categorical measures, we included four scales to assess behavioral aspects of relational interactions such as management of responses to anger, propensity to become violent, ineffective arguing, and propensity to control the behavior of a partner. **Anger** was a six item subscale from the Aggression Questionnaire, adapted from Buss and

Perry (1992). A representative item was “Sometimes I fly off the handle for no good reason”. A high score was indicative of higher propensity to express angry behavior. The standardized Cronbach’s coefficient alpha was 0.78. **Perceived Self-Control** was a six item scale adapted from Tolman et al. (1996). A representative item was [how likely is it that you feel you would get physically violent] “If she (your partner) started yelling at you”. A low score was indicative of being less in control and thereby having a higher propensity to be situationally violent with one’s partner. The standardized Cronbach’s coefficient alpha was 0.88. **Ineffective Arguing** was an eight item scale adapted from Kurdek’s (1994) Destructive Arguing scale. A representative item of this scale was “Our arguments seemed to end in frustrating stalemates”. A high score was indicative of having a higher degree of ineffective communication with a romantic partner. The standardized Cronbach’s coefficient alpha was 0.75. **Power and Control** was a nine item subscale taken from Hamby (1996) Dominance scale. A representative item from this scale was “I tried to keep my partner from spending time with the opposite sex”. A high score was indicative of having a higher propensity to dominate and control one’s partner. The standardized Cronbach’s coefficient alpha was 0.76.

The attitudinal measures were adversarial sex beliefs and sex role hostility. **Adversarial Sex Beliefs** was a nine item scale adapted from Burt (1980). A representative item from this scale is “A man’s got to show the woman who’s boss right from the start or he’ll end up henpecked.” A high score was indicative of being more adversarial. The standardized Cronbach’s coefficient alpha was 0.77. **Sex Role Hostility** was a 10 item scale adapted from Check et al. (1985). A representative item from this scale was “When it really comes down to it, a lot of women are deceitful”. A high score was indicative of being more hostile. The standardized Cronbach’s coefficient alpha was 0.63.

All scales were constructed from survey items measured on 5 point Likert scales with responses that ranged from Strongly Disagree (1) to Strongly Agree (5). Items for each scale were summed and then divided by the number of items in order to attain mean scores. See Appendices A and B for a complete listing of items included in the behavioral and attitudinal scales.

Analysis

Chi-square analyses were conducted to assess differences between perpetrators with and without a history of childhood violence on categorical variables. T-tests were conducted to assess differences between individuals with and without a history of childhood violence on the scale measures.

The data analysis for this paper was generated using SAS software, Version 9.2 of the SAS System for Windows. (SAS Institute Inc. SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc., Cary, NC, USA). Since we examined differences on 11 behavioral and attitudinal factors by family violence history, we also assessed significance upon applying a Bonferroni adjustment (.05/ $n=11$ tests). Because Bonferroni adjustments are deemed relatively conservative, we report significant findings at the $p<.05$ level; but also comment in the discussion on implications for factors that did not reach significance at the Bonferroni adjustment level of $p<.005$.

Results

One-third of the sample were 18–25 years in age, 36 % were 26–35 years of age, 22 % were 36–45 and 9 % were 46 years or older. Eighteen percent of the sample was white, about 47 % was Black, 31 % was Hispanic, and 3.5 % reported some other race. Thirty-nine percent of the sample had not earned a high school diploma, 33 % had a high school diploma, and 28 % had education beyond high school. Seventy-one percent reported a CFV history, with 59 % reporting having experienced maltreatment and witnessed IPV and 11.9 % reporting having experienced at least one or the other.

The current analysis examined differences in demographic, behavioral and attitudinal factors in the lives of male perpetrators of intimate partner violence with and without a childhood history of family violence. The proportion of respondents with a history of CFV did not differ by age group; but did differ significantly, at the $p<.05$ level, by race and education level. For example, when looking only at white non-Hispanics, Black non-Hispanics and Hispanics – whites were more likely than Blacks and Hispanics to have been exposed to family violence in childhood. Sixty-seven percent of both Blacks and Hispanics reported exposure to family violence; while 82 % of whites reported a history of childhood family violence. Likewise, a much larger proportion of respondents with education beyond high school (81 %) reported a history of CFV as compared to those with less than high school (68 %) or high school diplomas (65 %).

Results of chi-square analyses assessing differences between the comparison groups on categorical behavioral measures can be seen in Table 1. Perpetrators with a history of CFV and those without such a history differed significantly on Substance Abuse-Related Relationship Problems, ($1, N=279$)= $17.7, p<.0001$ and Fighting ($1, N=293$)= $22.8 p<.0001$. Specifically, higher proportions

Table 1 Chi-square results: behavioral factors by childhood family violence history

Variable	Childhood family violence history		Chi-Square
	Yes	No	
	% (Number)	% (Number)	
Binge at IPV incident	63.8 (95)	50.0 (26)	3.04
Drug dependence	20.3 (42)	19.5 (16)	0.02
Substance abuse-related relationship problems	48.5 (98)	20.8 (16)	17.7****
Fighting	38.9 (81)	10.6 (9)	22.80****
Non-IPV arrests	20.3 (42)	12.9 (11)	2.19

**** $p<.0001$

of perpetrators with a family violence history than without such a history had alcohol and drug abuse related relationship problems and reported physical fighting. These reported relationships did not change when assessed against the Bonferroni level of significance ($p<.005$).

The results of the T-tests found in Table 2 also indicated a number of differences between perpetrators with and without a history of childhood family violence. Specifically, those with a history of CFV held more adversarial sex beliefs, were more hostile towards women, expressed more anger, reported more ineffective arguing, and expressed a greater desire to control their partners than those without a CFV history. Perpetrators with a CFV history also on average scored low on perceived self-control, meaning they were more likely than those without a CFV history to feel as though they would express violence toward a partner in response to particular situations. When the Bonferroni adjustment was applied, differences between the groups did not reach

Table 2 T-test results: behavioral and attitudinal factors by childhood family violence history

Variable	Childhood family violence history		t	SE
	Yes	No		
	Mean (SD)	Mean (SD)		
Anger	19.28 (7.21)	16.09 (5.72)	-3.91****	0.81
Perceived control	23.26 (6.24)	27.69 (4.02)	7.04****	0.63
Ineffective arguing	27.39 (7.18)	22.96 (6.68)	4.97****	0.89
Power and control	16.19 (5.26)	14.45 (5.85)	2.38*	0.73
Adversarial sex beliefs	23.20 (7.89)	20.44 (7.95)	-2.66**	1.04
Sex role hostility	24.52 (6.88)	22.08 (7.15)	-2.62**	0.93

* $p<.05$, ** $p<.01$, **** $p<.0001$

significance for adversarial sex beliefs, hostility toward women, and power and control.

Discussion

This exploratory study was conducted to assess whether behavioral and attitudinal factors differed in a sample of IPV perpetrators by childhood family violence history. We explored these relationships because research indicates that exposure to CFV may be associated with increased likelihood for behavioral and psychosocial problems that might impact IPV perpetration prevention efforts. We hypothesized the prevalence of exposure to family violence in our sample would be high. The data confirmed this hypothesis. Over two-thirds of the sample reported exposure to either child maltreatment or to witnessing IPV as a child. Levels of exposure to any or multiple forms of CFV in this sample are consistent with the high end of the range reported in the literature, which has typically been associated with clinical and domestic violence shelter based samples (Appel and Holden 1998; Edelson 1999; Jouriles et al. 2008). We also hypothesized that levels of dysfunction would differ by CFV history. Perpetrators exposed to family violence as children were expected to display higher mean scores on these measures than perpetrators without this exposure. This hypothesis was partially supported. Of the eleven measures used in our comparisons, perpetrators with and without a history of family violence differed on eight. As predicted, the differences indicated that those with a history of family violence had worse outcomes.

This finding suggests that while the two groups may share some similar behaviors, IPV perpetrators exposed to family violence as children displayed higher levels of problems such as those related to substance use, involvement in fights, and general displays of anger. These findings were generally consistent with results of prior research on the effects of childhood maltreatment and witnessing of IPV though few, if any, of the earlier studies specifically focused on adult samples of IPV perpetrators. As previously discussed, prior studies indicated significant relationships between maltreatment and problematic adult alcohol use (Widom et al. 2007) as well as between witnessing IPV and adult alcohol dependence (Roustit et al. 2009). Though the present study did not find these relationships (via measures of binge drinking and drug dependence) it did shed light on a link between CFV and substance abuse-related problems specific to intimate relationships. This may indicate that those with a history of CFV may not be more likely to abuse substances; but among perpetrators who abuse substances, those with a history of childhood violence may be impacted more severely. It is possible that the substance

use of this group may rise to a level that it creates more problems in their intimate relationships or that the types of actions taken when substances are used are more problematic. Furthermore, they may differ from other IPV perpetrators in that their substance abuse-related social problems may exert a greater influence on their IPV related behaviors.

With respect to associations between CFV and anger and aggression, earlier studies indicated mixed findings (Fagan 2005; Horwitz et al. 2001; Kennedy et al. 2002; Maas et al. 2008; Turner et al. 2006; White and Widom 2003). The current study found consistent significant relationships between anger, perceptions of control (or likelihood of becoming violent with an intimate partner) and reports of (general) fighting. Also, it is interesting to note that although perpetrators with a childhood history of violence were found more likely to engage in fighting than those without a history of such violence, in contrast to earlier studies (Widom et al. 2006) no differences were found in the likelihood of involvement in the criminal justice system for other types of violent offenses. It is possible that individuals with a history of family violence are more likely to engage in fighting overall; while men without this history may be more likely to use violence only in specific contexts. Additionally, the frequency of fighting amongst those with family violence history may not translate into higher contact with the criminal justice system because the behaviors may not be brought to the attention of law enforcement.

Results further point to behaviors that place individuals at high risk of relational conflict, such as engagement in destructive arguing and perceived likelihood of situational use of physical violence against an intimate partner. It also suggests that this group more strongly endorses ideas that present women and feminine attributes in a negative or unfavorable light. Though the literature suggests that victims of maltreatment may have increased need to exert power over others (Finkelhor and Browne 1985), we are not aware of other empirical studies that have found significant relationships between CFV and these behaviors in a population of IPV perpetrators. Similarly, the results of the present study extend the results of Reitzel-Jaffe and Wolfe (2001), one of the only studies we are aware of that empirically links CFV to negative attitudes toward women. As previously mentioned, all of these factors were significant at the $p < .05$ level; however, power and control, adversarial sex beliefs and hostility towards women did not reach significance when the Bonferroni correction was applied. Thus, additional attention is needed in examining relationships between CFV and these factors in the lives of IPV perpetrators in order to more definitively assess the nature of their association.

It is interesting, however, to note that almost all of the variables for which those with a childhood history of exposure to violence scored higher than those without such history were variables related to the intimate partner relationship or how the respondents related to the women in their lives. Anger, ineffective arguing, perceived self-control, power and control, adversarial sex beliefs, and sex role hostility all focus on relating to women, or a female intimate partner (i.e., beliefs about sex or attitudes and hostility toward women), or the man's ability to manage an intimate relationship (i.e., levels of anger, inability to have healthy and positively resolved arguments, and need for power and control in relationships). These findings along with the substance abuse-related relationship problems suggest that perpetrators with a childhood history of violence exposure may have more challenges than those without such history dealing with anger and hostility, particularly as it relates to women; and may have more difficulty developing or sustaining a healthy relationship given their childhood histories.

This study demonstrates that while exposure to family violence during childhood was not necessary for IPV to occur, its presence was associated with high levels of several attitudinal and behavioral factors that may complicate the trajectories for these perpetrators. Maltreatment as a child can damage males in ways that make problem behavior more likely during adolescence and adulthood (Fagan 2005; Schumacher et al. 2001). This may include heightened risk for aggression towards others generally and within specific relationship contexts that may rise above and beyond those of males without this experience. Witnessing interparental IPV may expose young males to problematic models for interactions within intimate relationships. This lays the foundation for harmful behavior and instills ideas, beliefs, and mindsets that support violence against the opposite sex. It has long been acknowledged that children exposed to family violence require services to assure that they go on to live productive lives (Harris et al. 2007). We are not aware of other studies that have examined the association of a family violence history and negative behavioral and attitudinal relationship oriented outcomes within a sample of identified IPV perpetrators. Thus, the findings extend what is known about the consequences of exposure to family violence. This study can inform secondary prevention efforts with IPV perpetrators with and without family violence histories and it highlights the value of primary prevention of child maltreatment and exposure to intimate partner violence.

Limitations

Several study limitations must be acknowledged. First, the generalizability of the study is limited given that it is

regional in nature, utilizes data from court-mandated men (who may, for example, represent more serious offenders or perpetrators whose behaviors have been reported), and has a response rate of 27 %. Although the study's response rate was relatively low, a rate of this magnitude is not uncommon for court-mandated samples (Davis and Taylor 1999). Second, the study utilized self-reports by the men, which may have introduced reporting bias. This may be particularly relevant where retrospective reports of family violence are concerned as such reports are subject to the limitations of recall or intentional misreporting due to social desirability. Third, the conception of family violence used in this study did not include several other commonly measured forms of family violence (such as child neglect, elder maltreatment, and violence among other relatives). While the dataset included a measure of child sexual abuse, this measure could not be utilized in the present study because of the small number of valid responses provided by members of the sample.

Taking the limitations into context, we conclude that our findings suggest IPV perpetrators with a history of family violence may require greater resources to compensate for past harms and to assure that secondary prevention efforts designed to avert further perpetration are most effective. In this group, attitudes and behaviors that may lead to continued IPV may be more entrenched. Particularly relevant and possibly related to future IPV perpetration among perpetrators who are family violence victims are the negative attitudes and behaviors toward women and intimate relationships. As such, secondary prevention strategies might want to take into account these differences between IPV perpetrators and tailor their programs to give more attention to issues such as power and control, anger, and hostility toward women for male perpetrators who have a childhood history of family violence.

Our findings may suggest that without attention to the differences in these two groups of perpetrators, secondary prevention efforts may be less effective for perpetrators with a family violence history. Also, because findings indicate that men with a family violence history appear to exhibit increased levels of a constellation of risk factors it is possible that they are also at higher risk for recidivism of IPV. Thus, future research and evaluation with longitudinal samples of male perpetrators should examine whether and how family violence history influences the efficacy of secondary prevention programs and the likelihood of recidivism after treatment for IPV. Lastly, research examining in further detail the context of the family violence (e.g., if maltreatment was perpetrated by a mother, father, or both, the added exposure of sibling abuse) may shed additional light on the association of family violence exposure in childhood with later negative IPV perpetration related outcomes.

Appendix A

Behavioral scale construction

Scale	Scale items
Anger	I flare up quickly but get over it quickly. When frustrated, I let my irritation show. I sometimes feel like a powder keg ready to explode. I am an even-tempered person. ^a Some of my friends think I'm a hothead. Sometimes I fly off the handle for no good reason.
Perceived self control	Item Stem: How likely is it that you would have gotten physically violent with your partner if these things had happened? If you had been drinking and felt angry. ^a If you didn't get the respect you deserved. ^a If you couldn't get any peace and quiet. ^a If her friends or family criticized you or gave her wrong ideas. ^a If you felt the pressure building up. ^a If she started yelling at you. ^a
Ineffective arguing	By the end of an argument, each of us had been given a fair hearing. ^a When we began to fight or argue, I thought, "Here we go again." Overall, I'd say we were pretty good at solving our problems. ^a Our arguments were left hanging and unresolved. We would go for days without settling our differences. Our arguments seemed to end in frustrating stalemates. We needed to improve the way we settled our differences. Overall, our arguments were brief and quickly forgotten. ^a
Power and control	I tried to keep my partner from spending time with the opposite sex. It bothered me when my partner made plans without talking to me first. My partner should not have kept any secrets from me. I insisted on knowing where my partner was at all times. I tended to be jealous. I had a right to know everything my partner did. It would have made me mad if my partner did something I had said not to do. I understood there were some things my partner may not have wanted to talk about with me. ^a I had a right to be involved with anything my partner did.

Response Categories for all items are on a five point scale ranging from Strongly Disagree (1) to Strongly Agree (5)

^a Indicates the item was reverse coded prior to scale construction

Appendix B

Attitudinal scale construction

Scale	Scale items
Adversarial Sex Beliefs	A woman will only respect a man who will lay down the law to her. Many women are so demanding sexually that a man just can't satisfy them. A man's got to show the woman who's boss right from the start or he'll end up henpecked. Women are usually sweet until they've caught a man, but then they let their true self show. A lot of men talk big, but when it comes down to it, they can't perform well sexually. In a dating relationship a woman is largely out to take advantage of a man. Men are out for only one thing. Most women are sly and manipulating when they are out to attract a man. A lot of women seem to get pleasure in putting men down.
Sex role hostility	It doesn't really bother me when women tease me about my faults. ^a I do not often find myself disagreeing with women. ^a There are a number of women who seem to dislike me very much. I generally don't get really angry when a woman makes fun of me. ^a Lately, I've been kind of grouchy with women. When it really comes down to it, a lot of women are deceitful. I never have hostile feelings that make me feel ashamed of myself later. ^a I don't usually wonder what hidden reason a woman may have for doing something nice. ^a Very few women talk about me behind my back. ^a I have been rejected by too many women in my life.

Response Categories for all items are on a five point scale ranging from Strongly Disagree (1) to Strongly Agree (5)

^a Indicates the item was reverse coded prior to scale construction

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