

Sex Differences in Intimate Partner Violence and the Use of Coercive Control as a Motivational Factor for Intimate Partner Violence

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Abstract

Research argues that coercive control (CC) is a special case of intimate partner violence (IPV). The present study hypothesized that instead CC is the *motivator* for other types of IPV, with control of the victim as the goal. When CC fails, physical types of IPV are used. This hypothesized relationship was tested using a large matched sample of 762 divorcing couples participating in divorce mediation. Structural equation modeling was used to analyze the data with CC predicting two latent common factors of the overall level of victimization separately for men and women. Significant causal relationships between CC and the latent construct of victimization for both members of the couples were found. In addition, CC, psychological abuse, sexual assault/intimidation/coercion, threats of and severe physical violence were disproportionately reported as perpetrated by men against women whereas reports of physical abuse (e.g., pushing, shoving, scratching) were not.

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Over the past few decades, the issue of sex¹ and its role in the understanding and prediction of intimate partner violence (IPV) has been vigorously debated (Renzetti, 2006). Currently, the debate is divided into several camps. In its simplest form, the first camp is composed of researchers who argue that women are just as violent as men (Straus, 2006). In the second camp, researchers argue that women are more violent than men (Dutton & Nicholls, 2005; also see Archer, 2000 for a review). In the third camp, researchers argue that women are not as violent as men and that most of the violence perpetrated by women is in response to male-initiated violence (Swan & Snow, 2006). In the final camp, researchers argue that it is not who perpetrates each act of violence that is important; rather, it is the broader context of the relationship in which the abuse occurs which is important (e.g., DeKeseredy, 2006; Johnson, 2006; Kelly & Johnson, 2008; Stark, 2007). Three important issues, which are not always clear in the arguments presented by the different camps regarding the perpetration of IPV, is that these camps are often using different definitions of IPV, different instruments to measure IPV, and assessing their version of IPV using different samples of participants (Holtzworth-Munroe, 2005).

Although the camps differ, it appears there is some consensus concerning a particularly important form of IPV identified as “culture of violence” by Fischer, Vidmar, and Ellis (1993) and then as “intimate terrorism” (Johnson, 2008). The term *Coercive Controlling Violence* was then given to this type of abuse (Kelly & Johnson, 2008). Coercive controlling violence is a pattern of control and manipulation. A person controls their spouse’s actions, relationships, and activities. This type of abuse includes surveillance, and the victim is often punished when they fail to follow the rules established by the coercive party (Kelly & Johnson, 2008). Using Johnson’s (2006) conceptualization, Stark (2006) further discusses what he calls *coercive control* (CC) as a pattern of violence, intimidation, isolation, and control where the main goal is to restrict the other person’s liberties. The perpetrator may also exert control through acts of physical abuse or violence and through sexual assault, intimidation, or coercion, or through verbal threats of serious violence. He argues that researchers should, in fact, examine levels of CC to determine the context in which IPV occurs so that they can gain an understanding the meaning of the IPV. Unfortunately, as IPV is a relatively new concept, there are not-yet-established measures of CC in studies on IPV.

Some researchers further argue for including measures of sexual assault, intimidation, and coercion when comparing use of IPV by men and women

because forced sexual relationships is yet another tool used by the abuser to control the victim (DeKeseredy, 2006; Swan & Snow, 2006). An instrument widely used to measure IPV is the Conflict Tactics Scale (CTS). Although the CTS has been recently revised to include sexual abuse (Straus, Hamdy, Boney-McCoy, & Sugarman, 1996), in many of the older studies, it was not included. Furthermore, there is a need to look at control tactics used by both members of the same couple, an idea also strongly encouraged by Johnson (2006) and Straus (2006).

CC as a Motivator for IPV

More recent research has clarified that, unlike older notions of abuse, CC does not necessarily take the form of violence per se but is instead an underlying relationship dynamic or motivation that might lead to physical and other forms of abuse (Stark, 2007). Although the notion of CC has become increasingly popular, there has been less discussion as to the fundamental motivation behind CC. In other words, *why* do certain people feel the need to control their spouse through coercion? Moreover, what factors account for the individual variability? Why do some men and women coerce whereas others do not? As mentioned, little research exists in the literature concerning CC to answer these questions, and little research examines the role of CC as a motivational factor rather than a distinct form of abuse.

Figueredo and colleagues (Figueredo et al., 2001; Figueredo & McCloskey, 1993; Figueredo, Montero-Rojas, Frías-Armenta, & Corral-Verdugo, 2009) have provided cross-cultural empirical evidence (in the United States, Mexico, and Costa Rica) that one of the major driving forces behind IPV is not just CC, but specifically *sexual* coercion. Wilson and Daly (1992) have argued that this is because men generally are proprietary of women partner's sexuality and some may resort to aggressive tactics to achieve this sexually motivated CC.

More recently, Gladden, Sisco, and Figueredo (2008) measured levels of sexually coercive tendencies in both males and females using the Sexual Acts and Perceptions Inventory (SAPI; Sisco & Figueredo, 2008), which is a less biased measure of sexual coercion than many of the traditional measures. The study found that certain people do not perpetrate sexual coercion. A latent factor (Protective Life History Factor) predicts who does not perpetrate sexual coercion. This Protective Life History Factor is composite of eight predictor variables that essentially describe a latent trait. This latent trait is a general approach to romantic and social relationships that includes a preference for monogamous sexual relationships, a willingness to invest time and energy in attracting and maintaining sexual partners, low risk-taking behaviors, a strong empathy for others' feelings, low levels of

physical and verbal aggression, anger, and hostility, and a desire for strong parental investment in fewer children. Lower levels of sexual coercion perpetration were reported by women compared to men. Females reported higher levels of the Protective Life History Factor, which in turn decreased likelihood of Sexual Coercion perpetration. Based on these results, the researchers argued that men are more sexually coercive than women because they have lower levels of the Protective Life History Factor. There was no direct effect of the sex of the participants on Sexual Coercion after controlling for the levels of Protective Life History Factor, indicating a fully mediated relationship.

The study is relevant to the field of IPV in several ways. First of all, it may provide an explanation for *why* people desire to exercise CC over their partners as well as explain the individual variability between people who coerce and those who do not. Second, it tackles the issue of sex and use of coercive tactics. According to the study, men are more likely to engage in sexually coercive acts. Generally speaking, men's use of CC is motivated by a desire to control the sexuality of their partners. However, when women engage in sexual coercion (i.e., when they have the risk factors or lack protective factors), they might also resort to abusive and aggressive tactics. Another interesting possibility is that men and women simply use different coercive tactics. A study assessing levels of jealousy among male and female college students (Shettel-Neuber, Bryson, & Young, 1978) found that men and women reported different reactions to hypothetical instances of infidelity. Whereas men reported that they would be most likely to become drunk, angry, and threatening, women reported that they were most likely to cry and pretend that the incident did not bother them. Thus, although both sexes have the potential for jealousy and react negatively to the threat of adultery, they differ in the way they display that jealousy with men being more likely to become overtly aggressive (see also Jones, Figueredo, Dickey, & Jacobs, 2007).

The issue of sex differences, or possibly lack thereof, is an important one in IPV research in particularly in terms of the initiation of the abuse in a relationship. Of course, merely measuring behaviors does not tell us much about who truly initiated the abuse since there is a nontrivial chance that each party might blame the other. Research needs to examine CC and who is using CC in the relationship and to what end in addition to measuring IPV acts.

Present Study

The present study set out to improve on previous research in several important ways. First, the present study moved away from using only IPV acts to

measure IPV, instead using a more extensive measurement of CC. Second, the definitions of IPV used were more inclusive adding various forms of psychological abuse and sexually related abuse and violence. Third, probably most important and unique about this study, is the assessment of IPV and related phenomenon from *both* members of a couple.

Gathering information about IPV from both members of a couple with IPV is extremely difficult. There are real concerns that requesting information from victims might further compromise their safety if the abuser discovered their reporting. Data used in this study is from a sample of cases mandated by law to attempt mediation to resolve custody and parenting time disputes prior to the court setting a trial. Because mediation is mandated in the study jurisdiction for both members of the couple and IPV screening is a routine procedure in this context, the researchers were able to gather important information from both members of the couple. Finally, much of the prior research has been done with either shelter, therapy-treatment seeking, or college student samples. This sample was from a court-related agency and was not a convenience sample.

The percentage of divorcing couples who report IPV is difficult to calculate as few studies have assessed this question. IPA in couples participating in divorce mediation, however, has been addressed. Mediation program directors have estimated that between 40% and 80% of their clientele has some type of IPV (Kelly & Johnson, 2008; Pearson, 1997). Research to date does not specify further the specific behaviors that make up these estimates. When considered in this form, this range of IPV is significantly higher than the rate found in the general population, which is estimated to be between 12% and 30%, with an overall rate of approximately 20% (Field & Caetano, 2005).

For the purposes of this article, IPV was defined by specifying multiple types of abuse including Psychological Abuse; Sexual Assault, Intimidation, and Coercion; Physical Abuse; and Severe Threats and Escalated Physical Violence. These four categories were included to examine a pattern of abuse rather than counting single abusive acts. Of particular interest is Stark's hypothesis that types of violence will differ depending on the level of CC. CC is separated from the other categories as it is being considered a motivational factor rather than a specific type of IPV (see Figure 1). Of interest was whether women, men, or both women *and* men reported victimization. Thus, in this article, emphasis was put on the relationship context and the effects of a particular type of motivation for abuse, CC, on the overall level of victimization reportedly experienced by women and men as well as on the different types of IPV victimization reported.

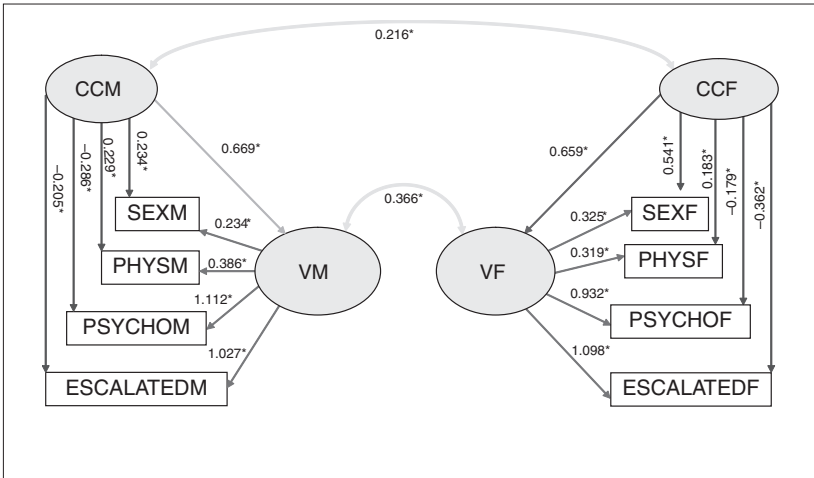


Figure 1. Path model

Note: Bent arrows signify unexplained correlation and straight arrows signify hypothesized causal relationship.

Specifically, the first hypothesis was that CC would have a direct effect on a latent common factor of victimization for women. This would indicate that CC by men over women causes women’s overall victimization (Stark, 2006). In addition, the second hypothesis was that CC would have unique direct effects on the different types of IPV victimization reported for women, above and beyond the effects of the latent common factor of victimization. A parallel hypothesis, the third hypothesis, was that CC would have a significant direct effect on a similar latent common factor of victimization for men. Moreover, the fourth hypothesis was that CC would have unique, direct effect on the different types of IPV for men, above and beyond the effects of the latent factor of victimization. A related hypothesis, the fifth hypothesis, was that there would be a significant positive correlation between women’s victimization and men’s victimization. In other words, male and female victimization in the same couple would be common. To address the direct effects of the latent factors of victimization for women and men, the sixth hypothesis was that there would be a direct effect of women’s victimization on different types of IPV reported by women and, finally, the seventh hypothesis was that there would be a direct effect of men’s victimization on the different types of IPV reportedly experienced by men. Reports of victimization would have particular patterns between the four types of IPV for men and women above and beyond the general victimization in the form of the latent common factor.

Method

Participants

In the present study, 1,015 couples (2,030 individual participants) going through divorce mediation were screened for IPV. The participants were all clients that came into a court-connected mediation program between May 1998 and January 2001 for a first session of custody mediation while in the process of divorce. The participants received standard assessment used by the court at the time but were never randomized to any experimental conditions. Cases where women, men, or both parents failed to fill out all 41 items were excluded, leaving a total number of cases of 762 couples (1,524 individual participants). The 762 couples who completed the RBRS were compared with the 253 who did not on seven demographic variables (i.e., age, income, number of marriages, number of children, religion, education, and ethnicity) and four case variables (i.e., attorney representation, mediator-identified IPV, agreement status, or whether the case was screened out). Continuous variables (age, income, number of marriages, and number of children) were compared using one-way ANOVA tests, and categorical variables were compared using chi-square tests. Of the 11 comparisons, only 3 yielded significant differences between the groups. Those couples not completing the RBRS were older—men's mean age for noncompleters = 38.03 versus completers = 36.56 years, $t(1) = 6.17, p < .05$; women's mean age for noncompleters = 35.86 versus completers = 34.16 years, $t(1) = 10.21$. Couples who did not complete the RBRS were more likely to be screened out before mediation began—29 of 226 versus 33 of 724, $t(1) = 16.31, p < .001$. The final difference was that the couples who did not complete the RBRS were more likely to fail to reach either a partial or full agreement in mediation—88 of 149 versus 189 of 549; $\chi^2(1) = 11.71, p < .01$.

Measure of IPV

Each member of the couple completed the Relationship Behavior Rating Scale (RBRS), which is a 41-item revised version of the paper-and-pencil self-report Partner Abuse Scale (Attala, Hudson, & McSweeney, 1994). The Partner Abuse Scale was originally developed by Walter Hudson in 1994 and consisted of the Partner Abuse Scale: Physical (PASPH) and the Partner Abuse Scale: Nonphysical (PASNP; Beck, Menke, O'Hara Brewster, & Figueredo, 2009). The scale was revised by the former director and staff of the mediation program. The RBRS is a slightly shorter and reworded version

of the Partner Abuse Scale, which asks about different types of abuse during the past 12 months. The scale was reworded and given a timeframe of 12 months. As the present study surveyed couples that were going through divorce, many of whom were, therefore, not living together. The wording of the questions on the scale was also simplified so that it would be comprehensible to participants with different levels of education.

Using the RBRS, husbands were instructed to report abuse from their wives and wives from their husbands during the past 12 months. The participants were asked to rate on a scale of 1 to 7 (1 = *none of the time* and 7 = *all of the time*) how often they had reported a number of different forms of abuse from the spouse in the past 12 months. The participants' responses were clustered into four categories separately for men and women with resulting acceptable Cronbach's alpha reliabilities associated with each: Psychological Abuse (Psychological; $\alpha = .91$ for both women and men); Sexual Assault, Intimidation, and Coercion (Sexual; $\alpha = .83$ for women and $.69$ for men); Physical Abuse (Physical; $\alpha = .83$ for women and $.87$ for men); and Threats of and Escalated Physical Violence (Escalated; $\alpha = .82$ for women and $.70$ for men). The category for the motivating factor of reported CC also had acceptable reliability ($\alpha = .84$ for women and $.79$ for men). The categories were inspired by previous research on IPV (Beck & Raghavan, in press; Figueredo & McCloskey, 1993; Johnson, 2006; Kelly & Johnson, 2008; Stark, 2006).

Data Analysis

The data were analyzed using factor analytical structural equation modeling (SEM). Such a model consists of a *measurement model* as well as a *structural model*. The measurement component included a confirmatory analysis. In this first step, hypothesized correlations between manifest variables (directly measurable variables) and latent variables (which are hypothetical constructs that are not measured directly) were examined (Figueredo & McCloskey, 1993). The structural model was tested by conducting path analyses of restricted models of casual pathways among these latent variables based on a priori theory, and these were tested against correlations of the different constructs (Figueredo & McCloskey, 1993).

In the present study, variables were created for the different types of abuse and violence reported as experienced by men and women (Psychological Abuse [PSYCHOM and PSYCHOF]; Sexual Assault, Intimidation, and Coercion [SEXM and SEXF]; Physical Abuse [PHYM and PSYF]; and Threats of and Escalated Physical Violence [ESCALATEDM and ESCALATEDF]). These types of IPV were considered to be the manifest variables

of the hypothetical, latent V-factor, which represented the overall level of victimization reported as experienced by the participant. As the participants were married couples in mediation, they could not be treated as independent cases. Therefore, there were two V-factors, one representing victimization reported as experienced by women (VF) and the other representing victimization reported as experienced by men (VM). There were also two motivating factors: CC reported as experienced by women (CCF) and CC reported as experienced by men (CCM). Thus, there was a causal pathway between CC reported as experienced by women and victimization experienced by women as well as between CC reported as experienced by men and victimization reported as experienced by men to measure if mean levels of reported CC had a direct effect on the overall level of victimization for women and men in the study, respectively (see Figure 1).

This analysis also examined whether reported CC had unique effects on the different types of abuse above and beyond the common influence of reported CC on the victimization factor (VM and VF) as a whole. To answer the question of whether it was the men's reported CC over women (CCF), the women's reported CC over men (CCM), reported CC from both women and men over each other (CCF and CCM), or neither reported CC initiated by women or men that caused women's and men's victimization (neither CCF or CCM), further restricted models were created and analyzed. SAS PROC CALIS (SAS Institute, 1989) was used to estimate the parameters and to eliminate possible non-significant pathways to determine the model that revealed the best fit for the hypotheses (see Figure 1; Figueredo & McCloskey, 1993).

Finally, to further investigate possible significant differences between the inclusive model and the various restricted models, "difference" tests were run. "Difference" statistical and practical indices of fit reveal any possible gain or loss of fit for the model due to elimination of causal pathways by comparing the restricted model to the inclusive model (see Table 1; Figueredo & McCloskey, 1993).

Results

The sum scores of victimization reported by men and women are detailed in Table 1. Statistically significant differences emerge between women and men with women reportedly experiencing significantly more frequent for Psychological Abuse, $t(759) = 8.51, p < .001$, Threats of and Escalated Physical Violence, $t(759) = 7.85, p < .001$, Sexual Assault, Intimidation, and Coercion, $t(759) = 12.73, p < .001$, and total scores, $t(759) = 10.65, p < .001$. The only type of abuse for which there is no significant difference between women and

Table 1. Sums, Difference Scores, and *t* Tests on Subscales of the Relationship Behavior Rating Scales

RBRS Subscale	Women	Men	Difference: Women Minus Men Scores	<i>df</i>	Paired Sample <i>t</i> Tests
Coercive control	23.46	18.98	4.50	759	7.83**
Psychological abuse	20.88	17.23	3.65	759	8.51**
Physical abuse	2.99	2.80	0.19	759	1.11
Threatened and escalated physical violence	3.35	1.82	1.53	759	7.85**
Sexual assault, intimidation, and coercion	3.65	1.02	2.63	759	12.73**
Total score	55.97	42.44	13.53	759	10.65**

** $p < .001$.

men is for Physical Abuse, $t(759) = 1.11$, ns. In addition, and most important for the hypotheses that we are testing, CC reported by women is significantly higher than CC reported by men, $t(759) = 7.83$, $p < .001$. This establishes the motivational difference between the sexes that presumably drives the overall difference in total IPV, which is also statistically significant.

The Inclusive Model

Six alternative models were run to test the hypotheses and to determine the most acceptable model. The first model was an inclusive model, where the intercorrelations between the factors are freely estimated and all causal pathways are included according to a priori theory (see Figure 1). The model revealed a significant chi-square, $\chi^2(25) = 110.22$, $p < .0001$, which can be attributed to the large sample size (see Table 2). Practical and parsimonious indices of fit for the inclusive model, however, were highly acceptable (NFI = 0.974, CFI = 0.979, RMSEA = 0.067). Furthermore, the standardized regression coefficients (beta weights) for the causal pathways and intercorrelations were all statistically significant ($p < .05$).

Support for hypotheses one and three was found. The coefficients for the pathways between CC reportedly experienced by women (CCF) and victimization reportedly experienced by women (VF; $\beta = 0.669$) and CC reportedly experienced by men (CCM) and victimization reportedly experienced by men

Table 2. Statistical and Practical Indices of Fit for Nested Factor Analytic Structural Equation Models

	χ^2	df	NFI	CFI	RMSEA
Models					
Inclusive model (I)	110.22*	25	.974	.980	.067
Restricted model (R1)	1033.22*	33	.758	.763	.200
Restricted model (R2)	1751.38*	36	.590	.594	.250
Restricted model (R3)	1124.94*	27	.737	.740	.231
Restricted model (R4)	813.69*	27	.810	.814	.194
Restricted model (R5)	1751.38*	28	.590	.592	.285
Differences					
(R1) – (I)	923.00*	8	-.216	-.217	.133
(R2) – (I)	1641.16*	11	-.384	-.386	.183
(R3) – (I)	1014.72*	2	-.238	-.240	.164
(R4) – (I)	813.69*	2	-.164	-.166	.127
(R5) – (I)	1641.16*	3	-.384	-.388	.218

* $p < .0001$.

(VM; $\beta = 0.659$) were quite high, indicating that reporting CC has a boosting effect on victimization for women and men, respectively (see Figure 1).

Support for the second and fourth hypotheses was also found. The pathways representing the unique effects of reported CC on the different types of abuse were those above and beyond what mediated by the common factor. These include the pathways from CC reportedly experienced by women (CCF) to Sexual Assault, Intimidation, and Coercion reported by women (SEXF; $\beta = 0.541$), CC reportedly experienced by women (CCF) to Physical Abuse reported by women (PSYF; $\beta = 0.183$). Pathways were also significant from CC reportedly experienced by men (CCM) to Sexual Assault, Intimidation, and Coercion reportedly experienced by men (SEXM; $\beta = 0.234$). Physical Abuse reported by men (PHYM) had a beta value of 0.229.

Certain unique effects between CC and the types of IPV were estimated as negative regression coefficients. These were, CC reportedly experienced by women (CCF) to Psychological Abuse reported by women (PSYCHOF; $\beta = -0.179$), CC reported by women (CCF) to Threats of and Escalated Physical Violence reportedly experienced by women (EXCALATEDF; $\beta = -0.362$), CC reportedly experienced by men (CCM) to Psychological Abuse reportedly experienced by men (PSYCHOM; $\beta = -0.286$), and CC reportedly experienced by men (CCM) to Threats of and Escalated Physical Violence reportedly experienced by men (EXCALATEDM; $\beta = -0.205$). The

negative beta weights indicate that CC reportedly experienced by women (CCF) and CC reportedly experienced by men (CCM) have a reducing effect on the Psychological Abuse (PSYCHOF and PSYCHOM) and Threats of and Escalated Physical Violence (ESCALATEDF and ESCALATEDM) over and above what was mediated by the common factors (VF and VM). Therefore, although psychological abuse and escalated physical violence are integral parts of victimization in general (as indicated by their loadings from the general factor), they are less used proportionately as instrumentalities for CC than are sexual and physical abuse (as indicated by the specific direct effects of CC).

Support for the fifth hypothesis was also found. There was a significant correlation between victimization of women and men ($r = .366$). Support for the sixth and seventh hypotheses was also found relating to the direct effect of women's victimization on different types of IPV reported by women and a direct effect of men's victimization on the different types of IPV reported by men. For women (the sixth hypothesis), pathways from victimization to the different types of IPV were all significant ($\beta = 0.325$ for Sexual Assault, Intimidation, and Coercion; $\beta = 0.319$ for Physical Abuse; $\beta = 0.932$ for Psychological Abuse; $\beta = 1.098$ for Threats of and Escalated Physical Abuse). For men (the seventh hypothesis), pathways from victimization to the different types of IPV were also all significant ($\beta = 0.234$ for Assault, Intimidation, and Coercion; $\beta = 0.386$ for Physical Abuse; $\beta = 1.112$ for Psychological Abuse; $\beta = 1.027$ for Threats of and Escalated Physical Abuse).

Restricted Models

In the first restricted model, all the causal pathways representing the unique effects of reported CC on the different types of abuse for women and men, respectively, were eliminated to examine whether the unique effects significantly added to the model fit (see Table 2). As with the inclusive model, the chi-square remained significant, $\chi^2(33) = 1033.33$, $p < .0001$, due to the large sample size and other, practical indices of fit were, therefore, used to examine if the model was acceptable. Indices of fit for the first restricted model were not acceptable (NFI = 0.758, CFI = 0.763, RMSEA = 0.200; see Table 2). Furthermore, "difference" tests were conducted. The chi-square and degrees of freedom for the inclusive model were subtracted from the first restricted model but showed a loss of fit (see Table 2). The first restricted model was, therefore, rejected.

A second restricted model was run. The causal pathways between CC reported by women and victimization of women as well as between CC reported by men and victimization of men were eliminated to test whether

they made a significant contribution to the model fit or if they were unnecessary and the model would be acceptable without them. Yet again, chi-square was significant, $\chi^2(25) = 1751.38, p < .0001$, due to the sample size (see Table 2). Practical and parsimonious indices of fit indicated that restricted model two was not acceptable (NFI = 0.590, CFI = 0.594, RMSEA = 0.250; see Table 2). In addition, “difference” tests showed statistical significance and the model restriction was, thus, rejected.

A third restricted model was designed to examine whether CC by men over women caused the victimization of women. Thus, the pathway between CC reported by women and victimization of women was eliminated to see if the restricted model would lead to a loss or gain of fit. As with the previous models, chi-square was significant, $\chi^2(27) = 1124.94, p < .0001$, due to sample size, and other indices of fit were assessed (see Table 2). The practical and parsimonious indices of fit were not acceptable (NFI = 0.737, CFI = 0.740, RMSEA = 0.231), indicating that the pathway was necessary for model fit and that men’s CC over women does lead to women’s victimization.

To determine whether the opposite was true, the pathway between CC reported by men and victimization of men was eliminated in the fourth restricted model. The restricted model revealed a significant chi-square because of the large sample size, $\chi^2(27) = 813.69, p < .0001$, and the practical indices of fit were not acceptable (NFI = 0.810, CFI = 0.814, RMSEA = 0.194; see Table 2). The difference tests indicated that the fourth restricted model caused a loss of fit (see Table 2). Based on the indices of fit and the difference scores, the fourth restricted model was also rejected which suggests that, contrary to expectation, CC by women over men leads to men’s victimization.

Finally, in the fifth restricted model, both causal pathways linking CC (CCM and CCF) to victimization (VM and VF) were eliminated to test whether model fit would increase if the effect of CC on victimization was completely removed, for women and men. As with the other models, chi-square was significant, $\chi^2(28) = 1751.38, p < .0001$ (see Table 2). The practical indices of fit were not acceptable (NFI = 0.590, CFI = 0.592, RMSEA = 0.285). The difference test was statistically significant, indicating that the model could be rejected (see Table 2). Hence, the fifth restricted model was also rejected suggesting that, as expected, CC does make a significant contribution to model fit.

In summary, all five of the restricted models tested were rejectable by both statistical and practical criteria in relationship to the inclusive model. The parameters of the inclusive model, supporting all of our a priori hypotheses, were therefore reported and interpreted.

Discussion

The present study addressed the importance of motivational context in which IPV occurs and aimed to examine the role of sex in a large sample of couples undergoing mediation to resolve parenting time and child custody issues. No study is without limitations and the present study is no exception. This present study asked couples to report on a 41-item questionnaire on the IPV they have reported over the past 12 months prior to the divorce mediation process and, thus, the results are limited to that period. It is possible the results would be different had the measure focused on the entire relationship; however, focusing on the entire relationship might also add problems associated with accurate recall of distant memories. The results of this study cannot be generalized to all couples as all of the couples in this sample have children and are divorcing. They are also in conflict regarding issues related to their children and thus represent a particular segment of the divorcing population.

An important aspect of the study was that it included both members of the couples. As the study couples were both undergoing routine, required screening for IPV in the context of mediation, mediators were trained and sensitive to the issues of IPV and the risk to victims was minimized. Furthermore, in response to the criticism of biased samples (Archer, 2000; Dutton & Nicholls, 2005), the sample was not a shelter one. Although the couples are involved in conflict over important issues and thus can be considered a reasonably high-conflict sample, they were not drawn from shelters. Women and men were given the same 41-item scale and only the cases where both filled out all the items were included in the study. For purposes of analysis, the items were clustered into four categories of abuse based on their nature (Psychological Abuse; Physical Abuse; Sexual Assault, Intimidation, and Coercion; and Threats of and Escalated Physical Violence) as well as a category for the motivational factor of CC. The categories do not focus solely on physical violence or exclude sexual violence/abuse. Thus, this study ultimately yielded a more comprehensive view of the dynamics of IPV than many other studies. Furthermore, the use of equality constraints allowed us to systematically compare the two sexes and their respective use of coercive tactics through multiple forms of abuse.

Types and Levels of Abuse Reported

Results indicate a staggering amount of IPV is reported across both women and men in this sample. However, in terms of the *types* and *levels* of reports by men and women, women disproportionately reported victimization at

significantly higher *levels* and reported more serious *types* of IPV than did men in all categories of abuse except in one category. In the category of physical violence, often referred to as common couple violence, there was no significant difference in reports of victimization (Johnson, 2008). This finding is consistent with prior research finding women and men both perpetrate this type of physical abuse (e.g., pushing, shoving, scratching). Most important, as predicted, CC of women by their partners in this sample is significantly higher than CC of men by their partners, which we are claiming is causal to the overall sex difference in reported *types* and *levels* of IPV.

Patterns of Abuse Reported

In terms of the *pattern* of abuse reported, as predicted, there was a significant causal effect of CC experienced by women on the overall level of victimization experienced by women. This finding illustrates that CC used by men against women, causes women's victimization. As was further predicted, CC by women has significant, although small, unique effects on the different types of abuse, above and beyond the effects caused by victimization. Furthermore, there was a significant, causal relationship between CC experienced by men and men's victimization, revealing that the use of CC by women against men causes men's victimization.

The study also examined the unique effect of CC experienced by men on the different types of abuse experienced by men. Results showed that there were, in fact, unique effects of CC on the different types of abuse for men. It was further predicted that the common factors of victimization for women and men would affect the different types of abuse for women and men above and beyond the effects of CC on those types of abuse. As predicted, victimization experienced by women had a significant direct effect on the different types of abuse experienced by women and victimization experienced by men had a significant direct effect on the different types of abuse experienced by men.

These results indicate that the inclusive model is the model with the best fit and, therefore, the model of choice (see Table 2). In other words, CC by men against women causes women's victimization. Likewise the CC by women against men causes men's victimization. This means that both women and men have similar *patterns* of abuse tactics as instrumentalities of CC, even though the sexes differ systematically in the raw frequencies of their use of certain specific tactics. This again reflects the finding that although men are generally more coercive than women, when the admittedly smaller proportion of women that do become coercive act in ways contrary to their traditional gender roles, they tend to use similar tactics to men (cf. Gladden, Sisco, & Figueredo, 2008).

In sum, the present study has shown that IPV is a complicated phenomenon that cannot simply be narrowed to one form of abuse and claimed to be overwhelmingly initiated by one particular sex. However, in looking closely at particular forms of violence, the victims of life-threatening types of physical violence, threatened physical violence and sexual assault, intimidation, and coercion are overwhelming women in this sample as well as in previous research. IPV is, unfortunately, prevalent and is commonly found in relationships of divorcing people. There might be inflated levels of negativity in reporting due to conflict in the divorce process, which may lead to overreporting of and exaggeration of abuse. However, as the study includes both members of a couple, the bias is not one-sided. Future research will need to validate the findings presented here with other samples to determine if and to what extent these findings can generalize.

Future research might focus on the occurrence and severity of different manifestations of IPV throughout the duration of the marriage and might, thus, learn more about the developmental process of IPV in relationships. For this population in particular, research might focus on the long-term mediation and divorce outcomes for families where life-threatening physical violence and sexual assault, intimidation, and coercion are occurring. Many of these couples were not living together during the reporting period designated; yet staggering levels of IPV were reported. In a broader context, future research will need to validate the findings presented here with other samples to determine if and to what extent these findings can generalize to couples without children, couples remaining in the relationship, and unmarried divorcing couples with and without children.

Authors' Note

Points of view or opinions expressed in this article are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Justice.

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Notes

1. The literature on IPV uses *gender differences* and *sex differences* interchangeably. For the purposes of this article, the term *sex differences* will be used when referring to differences between men and women despite the term used in the original article. This article focuses on differences between the two biological sexes and not people of different gender identities because their perceived gender identities, which may or may not be consistent with their biological sexes, were not measured in this study.

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