

Injuries of Women and Men in a Treatment Program for Domestic Violence

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Both conflict tactics and injuries resulting from marital violence were assessed for both members of the dyad in a sample of 180 couples referred to a treatment program for domestic violence in three military bases. Though both men and women reported engaging in topographically similar aggressive acts, the percentage of women reporting injuries, especially severe injuries, was much higher than the corresponding percentage of men. Injuries were also related to use of more severe aggressive behaviors as assessed by the Conflict Tactics Scale. These results provide support for conceptualizations of spouse abuse which stress the importance of addressing impact dimensions of aggression in addition to topographic dimensions in comparing this phenomenon across genders.

KEY WORDS: abuse; injuries; domestic violence; military sample; physical abuse.

INTRODUCTION

Since domestic violence emerged from behind closed doors, research interest in the topic has burgeoned. In fact, it is believed that the rate of expansion of research on this topic has surpassed that of other areas in the social sciences in the last decade (Gelles and Conte, 1990). Much of this research has used the Conflict Tactics Scale (CTS; Straus, 1979) to measure aggression between spouses. Use of this instrument has, however, been somewhat controversial. One of the strongest criticisms delivered against use of this instrument has been that it understates victimization of

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women and overstates violence by women (Straus, 1990). The controversy about use of the CTS is also due to the fact that survey samples yield results that appear very different from the clinical descriptions of abused women who use the services of domestic violence programs, where differences between men and women regarding fear of physical violence and injuries have been repeatedly described. The concern about under-reporting of violence by men and the clinical reports of differential injuries of men and women has led to criticisms concerning the CTS' failure to take into account both the impact and contextual dimensions of aggression between spouses.

Results from national family violence surveys using the CTS indicate that women not only engage in physical violence as often as men (Straus *et al.*, 1980), but according to Straus (1990) they also initiate violence as often as men do. However, as these authors correctly point out, the context in which aggression was initiated was not assessed. Further, in a community longitudinal study with 272 engaged couples in New York state who were followed up for two and a half years after marriage, men and women reported similar rates of physical aggression against their partners. These results remained the same regardless of whether rates were obtained from self reports by an individual (about his or her behavior) or from a combination of individual and partner reports (O'Leary *et al.*, 1989). In this study of newlywed couples the level of violence was rarely severe and the injury rate was almost nonexistent.

Given the similarity of the rates of self-reported physical aggression by men and women, researchers have qualified their findings, arguing that acts of aggression by women toward men are not the same as acts of aggression by men against women (O'Leary *et al.*, 1989; Straus, 1990). Even if physical injury does not occur, as is often the case in nonclinical samples, it has been argued that neither the meaning nor the consequences of the aggression are the same for men and women. Because men are on the average much bigger and stronger than women, the psychological and physical damage they inflict also is likely to be much greater (O'Leary *et al.*, 1989; Straus *et al.*, 1980, 1990; Walker, 1989). Because of this greater potential for injury, women who have been hit by their partners are more likely to live in fear of being hit than men who have been hit by their partners (O'Leary and Curley, 1986). In line with the reasoning about the different meanings of physical aggression for men and women, it has been proposed that women usually employ violence as a reaction to men's violence against them and thus in self defense (Saunders, 1986; Walker, 1989).

The scarce research that has simultaneously assessed both conflict tactics used and their psychological and physical consequences provides some support for the need to consider male aggression toward the female partner as a more serious act than female aggression toward the male partner. Stets and Straus (1990) report that in a nationally representative sample more of the female victims (3%) than the male victims (0.4%) needed to see a doctor for a violent incident. These gender differences were magnified when the comparison was made between those women and men who were severely assaulted. There also was a tendency for more women than male victims to lose more time from work and spend more days in bed due to illness. Women victims were also found to have a higher rate of depressive symptomatology than male victims; this difference was apparent for women in severely violent relationships but not for those in relationships characterized by minor violence. However, in the nationally representative sample, Stets and Straus (1990) conclude that only a small percentage of abused women are injured seriously enough to require medical attention, and that the previously reported differences on injuries, time lost from work, days spent in bed due to illness, and depressive symptomatology between men and women victims are not particularly strong.

The national survey data contrast with findings from studies using clinical samples. In the latter studies women are reported to initiate the violence much less frequently than their partners and to use violence primarily in self defense (Saunders, 1986). Furthermore, Cascardi, Langhinrichsen, and Vivian (1992) found, in a clinic sample of couples requesting marital therapy, that women reported sustaining more injuries than their husbands in situations where they both reported using similar conflict tactics. It has been suggested that the reported differences may be a result of the different samples used: namely, clinical versus random or nonclinical samples (Stets and Straus, 1990). The type of aggression reported in national surveys may be qualitatively and functionally different from the aggression reported in clinical samples. Thus, whereas a high percentage of women in the nonclinical samples may be initiating aggression, those women in clinical samples may hardly ever initiate and may use aggression primarily in self defense. In addition, aggression of men in the clinical samples may also more frequently constitute attempts to control their partners than that of men in nonclinical samples. Their aggression therefore would be more frequently instrumental and coercive and would likely lead to escalating patterns of frequency and intensity. One would then expect greater differences in injury rates between the sexes than in nonclinical samples. To date there have been no studies reported in which both type of aggression used and injuries suffered have been assessed in both women and men

in a treatment sample, where the presenting complaint is that of domestic violence.

The purpose of the present study was to simultaneously assess both conflict tactics used and their consequences in a sample of men and women involved in a treatment program for interspousal violence.

METHOD

Subjects

Subjects were 180 couples who had been referred to a treatment program for domestic violence being conducted at three military bases. The most common source of referral was through military police following response to domestic disturbance calls. All those couples involved in domestic disturbances responded to by the military police were mandated to attend this screening interview. The data reported on in this paper were obtained during the screening interview. The mean age of the sample was as follows: husbands, $M = 25.5$ ($SD = 4.6$), wives, $M = 24.2$ ($SD = 4.8$). The racial composition of the male sample was 43% White, 46% African-American, 7% Hispanic, and 4% other. Forty-six percent of the wives were White, 42% African-American, 7% Hispanic, 5% other. Most subjects had completed twelve years of education. The average length of time in the service was six years ($SD = 4.8$) for the husbands. The vast majority of the women were military wives. Eighty-two percent of the husbands and 75% of the wives were married for the first time. The modal length of marriage was one year, with most of the couples (67%) having been married between 1 to 3 years. The mean marital adjustment scores of the husbands, as measured by the Dyadic Adjustment Scale (Spanier, 1976) was 90.2 ($SD = 24$), and the wives was 86.13 ($SD = 23.6$). Both these scores are at the top of the distressed range.

Measures

Conflict Tactics Scale (CTS)

The CTS (Straus, 1979) is an 18-item self-report scale assessing the frequency of behaviors an individual may engage in during a conflict with a partner. Individuals are asked to indicate whether they engaged in the behaviors within the past year. Eight items on the scale involving an act of physical aggression against the partner comprise the physical aggression

index. The CTS has high internal consistency (Straus., 1979) and significant interpartner reliability (Jouriles and O'Leary, 1985; O'Leary and Arias, 1988). The Modified CTS used in this study includes additional conflict tactics not included in the CTS (e.g., "physically forcing your spouse to have sex" and "driving recklessly to frighten your spouse") and omits one item. The following eight items were included in the physical aggression index used separately in the analyses in this study: (1) pushed, grabbed, or shoved spouse; (2) slapped spouse; (3) kicked, bit, or hit with a fist, (4) choked or strangled spouse; (5) physically forced spouse to have sex; (6) beat up spouse; (7) threatened spouse with a knife or a gun; and (8) used a knife or gun on spouse. Factor analyses of the MCTS indicates that all of the physically aggressive items are highly correlated with each other. The overall alpha coefficient of these physically aggressive items was .87 for females ($n = 896$) and .91 for males ($n = 7,504$) (Pan, *et al.*, in press).

Injury Index

Within the context of a conjoint interview and following their description of the last incident of violence in their relationship, spouses were asked what sort of injuries they had sustained as a result of the violence. The participants were asked to classify level of injury sustained in their last episode of violence as follows: (1) no injuries, (2) minor; no treatment needed, (3) moderate; treatment needed, (4) serious; hospitalization (5) permanent disability.

Procedure

All husbands and wives participated in a conjoint structured interview as to physical aggression and injuries (Neidig, 1984).² In each case, questions were addressed first to the husband, then to the wife, and responses were recorded by the interviewer. As part of this interview, both husbands and wives were asked to describe the last incident of violence in their relationship and following the format noted above they were questioned about their injuries. Subjects were also asked to independently complete a written version of the CTS regarding the same physically aggressive behaviors. Subjects were required to report on both their own and their spouses' use of conflict tactics during the preceding year in the CTS.

²This conjoint interview format was followed at the time of the data collection with military samples though our clinical and research interviews with civilians involve independent assessments of domestic violence (O'Leary *et al.*, 1994). Implications of the impact of interview format appear in the discussion section.

RESULTS

Prevalence of Physical Aggression

In all of the couples either the husband or the wife (or both) reported at least one episode of physical aggression during the previous year, ranging in severity from pushing, grabbing, or shoving, through the use of a knife or a gun against the spouse (items 18–25 on the MCTS). In 82% of the couples both husband and wife reported engaging in physical aggression. Based on reports of the wife, in 9% of the couples only the husband was physically aggressive. Based on reports of both husband and wife, in 4% of the couples, the wife was the only physically aggressive partner. Using Pearson correlations on overall level of physical aggression, level of agreement between husbands and wives' reports on the MCTS was significant and moderately highly correlated; husband-to-wife aggression, $r = .50$, $p < 0.001$, and wife-to-husband aggression, $r = .51$, $p < 0.001$. Agreement that there was some husband-to-wife physical aggression was .90; and, agreement that there was some wife-to-husband aggression was .84.

Prevalence of Injuries

In 65% of the couples the husband or the wife reported having experienced injuries as a result of the violence. Most of the injuries were reported as not requiring medical attention (76%) and none led to permanent disability. However, in the total sample, there was a substantial number of couples (24%) reporting injuries that required some treatment. The wife reported receiving injuries when the husband did not in 38% of the couples, whereas the husband reported being the sole person injured in only 5% of the couples (see Table I). Wives reported sustaining considerably more injury than the husbands, $X^2(9, N = 180) = 29.04$, $p < 0.0006$. Importantly, this result was true whether the data were analyzed by presence or absence of injury, (McNemar test for related samples) $X^2(1, n = 180) = 43.7$, $p < 0.00001$, or by severity of injury, (McNemar test for related samples) $X^2(1, n = 180) = 20.02$, $p < 0.00001$ (see Tables II and III).

Injuries on the MCTS

Association between injuries sustained and conflict tactics used was examined by grouping items on the MCTS in terms of presence of acts of physical aggression against the partner (items 18–25). ANOVAs performed

Table I. Injury Levels Reported by Husband and Wife^a

Husband	Wife				Total
	None	Minor	Sgnft.	Severe	
None	63	40	25	3	131
Minor	4	30	7	1	42
Sig.	4	1	1	0	6
Severe	1	0	0	0	1
Total	72	71	33	4	180

^a $\chi^2 = 29.03, p < .0006.$

Table II. Any Injury Reported by Husband and Wife^a

Husband	Wife		Total
	No	Yes	
No	63	68	131
Yes	9	40	49
Total	72	108	180

^a $\chi^2 = 43.69, p < .00001.$

Table III. Serious Injury Reported by Husband and Wife^a

Husband	Wife		Total
	No	Yes	
No	137	36	173
Yes	6	1	7
Total	143	37	180

^a $\chi^2 = 20.02, p < .000010.$

on this index revealed that husbands of those wives reporting injuries note having used more severe conflict tactics than husbands of the wives who did not report injuries, $F(1, 171) = 5.89, p < 0.016$. Injured wives reported that husbands used more severe conflict tactics than non injured wives, $F(1, 172) = 15.05, p < 0.0001$. Wives of those husbands reporting that they received injuries also reported using more severe conflict tactics, $F(1,172) = 6.61, p < 0.01$ than wives of those husbands not reporting injuries. The injured husbands, however, did not report that their wives used more severe conflict tactics than wives of non injured husbands.

An exploratory item analysis on the CTS items revealed that a higher percentage of injured than non-injured wives reported that their husbands:

1) threatened to withhold money, take away the children, or have an affair, $X^2(1, n = 150) = 4.27, p < 0.04$; 2) slapped them, $X^2(1, n = 174) = 7.93, p < 0.005$; 3) kicked, bit, or hit them with a fist, $X^2(1, n = 174) = 7.54, p < 0.006$; and 4) beat them up, $X^2(1, n = 176) = 15.01, p < 0.0001$. Similarly, a higher percentage of the husbands of the injured wives themselves reported having: 1) pushed, grabbed, or shoved their partner, $X^2(1, n = 180) = 6.14, p < 0.01$; 2) kicked, bit, or hit their partner with a fist, $X^2(1, n = 178) = 5.07, p < 0.02$, and 3) beat up their partner, $X^2(1, n = 178) = 6.33, p < 0.01$, than husbands of the non-injured wives. When the comparison was made between those wives who received minor versus severe injuries, the more severely injured wives reported their spouses to more frequently have used a knife or a gun on them, $X^2(1, n = 178) = 10.45, p < 0.001$. Their husbands, however, did not report themselves to differ in their use of conflict tactics from those husbands who injured their wives less severely.

Extending the exploratory analysis to conflict tactics used by wives of injured husbands, it was revealed that in comparison to non-injured husbands, husbands more frequently reported wives to have threatened them with a knife or a gun $X^2(1, n = 179) = 3.85, p < 0.05$. Notwithstanding, a higher percentage of wives of injured husbands than those of noninjured husbands reported themselves to have: 1) threatened to withhold money, take away the children, and have an affair, $X^2(1, n = 152) = 7.89, p < 0.005$; 2) threatened to hit or throw something at their spouse, $X^2(1, n = 179) = 4.94, p < 0.03$; 3) kicked, bit, or hit them with a fist, $X^2(1, n = 179) = 3.72, p = .05$; and 4) threatened their spouse with a knife or gun, $X^2(1, n = 179) = 8.36, p < 0.004$.

Sex Differences on the MCTS

An item by item analysis of sex differences on MCTS items 18–25 (using the McNemar test for related samples) revealed that men reported themselves more frequently than did women to: 1) push, grab, or shove the spouse, $X^2(1, N = 178) = 15.02, p < 0.0001$; 2) choke or strangle the spouse, $X^2(1, N = 176) = 22.82, p < 0.00001$; 3) to physically force the spouse to have sex, (binomial, 2-tailed $p < 0.004$; and 4) to beat up the spouse, $X^2(1, N = 176) = 10.47, p < 0.001$. Women, on the other hand, reported themselves more frequently than did men to: (1) have kicked, bit, or hit the spouse with a fist, $X^2(1, N = 177) = 25.81, p < 0.00001$, (2) to have threatened the spouse with a knife or a gun, $X^2(1, N = 178) = 12.02, p < 0.0005$; and (3) used a knife or a gun on the spouse, Binomial 2-tailed $p < 0.01$.

DISCUSSION

The present results indicate that although both husbands and wives receive injuries when they use aggressive conflict tactics in dealing with the conjugal problems, percentage of wives receiving injuries is highly disproportionate to the number of husbands. In addition, presence of injuries appears to be positively related to use of more severe conflict tactics as measured by the MCTS, for both husbands and wives. However, conflict tactics used bear little relationship with severity of injury received, with the exception of using a knife or a gun. Alternatively stated, severity of the conflict tactic used is related to whether or not injuries are sustained but not to the severity of the injury. Sex specific relationships were found to emerge in both tactics related to injuries in either sex, and frequency of use of particular tactics. Women's injuries were related to slaps, kicks, bites, hits with fists, and beatings. Men's injuries were related to thrown objects, kicks, bites, hits with fists, and threats with knives or guns. Interestingly, women appear to need to resort to use of weapons to cause injuries, whereas men do not appear to need to do so. Men were more likely to push, grab, shove, choke, strangle, and beat up their spouses than were women. Women were more likely to kick, bite, hit with a fist, threaten with a knife or a gun, and use a knife or a gun on spouses than were the men. Given that men are usually larger and stronger than women and given that the vast majority of cases of domestic violence did not involve serious injuries, it is possible that most men do not intend to physically harm their partners. Aggression by men against wives may reflect expressions of anger designed to gain control of the partners, not expressions of anger intending to produce injury. Future research on this issue should address the intent and motives of men who are physically violent with their spouses, much as the men in our study, as well as in even more severe cases where men do kill their partners.

Results, in this study contrast sharply with low injury rates presented in nonclinical populations (Stets and Straus, 1990), and thus support the notion that there may be qualitative differences between the types of aggression reported in community and treatment samples. There was a much higher percentage of injuries requiring medical attention reported in this sample for both women and men (21% and 4%) than in the national survey reported on earlier (3% and 0.4%) (Stets and Straus, 1990).

The above results provide support for approaches to domestic violence that stress the importance of addressing impact and topographic dimensions of aggression when comparing this phenomenon across genders (Koss, 1990; Walker, 1989). In this sample, simply counting violent acts as if they were all equal does not account for the sex-specific effects of the

violence. A man's slap or kick is not equivalent to a woman's as a woman is much more likely to receive injuries when subjected to this form of relationship aggression than are males. The cases where women inflict injuries on their male partners are likely to involve the use of weapons or objects.

As a result of this difference, women are also likely to live in greater fear of being hit than are men. The experience of being hit by a spouse has different physical and psychological consequences for men and women. Evidence has been presented attesting to women victims suffering more psychological injury than male counterparts in terms of psychosomatic symptoms, stress, and possibly more depressive symptomatology (Stets and Strauss, 1990). In domestic violence treatment samples, approaches that assess the extent of physical aggression by simply summing items on the CTS (O'Leary *et al.*, 1989; Straus, 1979) may lead some to minimize the severity of the gender differences in such treatment samples. Nonclinical sample results have led some to state that women are perpetrators of domestic violence in almost equal numbers as men (McNeely and Robinson-Simpson, 1987; Mills, 1990; Mould, 1990). Results from this study suggest that the latter statement would be true if we adopt a definition of domestic violence based solely on rates of conflict behaviors engaged in by males and females. However, in this military population of people being treated for domestic violence, an analysis of injuries sustained indicates that whereas 5% of the husbands receive injuries when their spouse does not, the corresponding percentage for wives is 38%. These figures may actually be underestimations of the extent of injuries sustained. Because the interviews were carried out conjointly, some of the women may have been reluctant to disclose the extent and severity of their injuries because of concerns about the husband's response following the interview. In addition, wives may have elected to withhold information for fear that their husband's job might have been jeopardized.

Notwithstanding the above, results of this study also attest to the fact that some men are also victims of domestic violence and that there is ongoing mutual combat with both parties reporting injuries in a number of cases. In 22% of the couples in this study both the husband and wife reported receiving injuries resulting from the violence. The underlying dynamics of these couples may be different from the majority of couples where the wife is clearly the victim. Treatment strategies may also be different for these couples. Thus, a multiaxial assessment may be needed to fully understand and help couples presenting with domestic violence. Type of conflict tactics engaged in and injury are two possible axes.

The issue of how severe the violence has to be in order to be considered problematic can be addressed in light of these findings. The fact

that treatable injuries are not restricted to the most severe level of tactics suggests that any level of physical aggression should be considered to be potentially injurious. The additional psychological sequelae further reinforces the notion that any level of physical aggression is to be considered problematic and toxic.

Finally, some data have been presented attesting to the construct validity of the CTS, in that the likelihood of injuries for both sexes was related to both self and spouse reports of the severity of conflict tactics. Specific conflict tactics were related to the probability of injury. Sex specific relationships emerged with reference to both the type of conflict tactic associated with injuries and the specific conflict tactics used.

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