

## **Predictors of Dating Violence: A Multivariate Analysis**

**Jamila Bookwala**  
**Irene H. Frieze**  
**Christine Smith**

*University of Pittsburgh*

**Kathryn Ryan**

*Lycoming College*

A multivariate approach was used to determine the pattern of predictors associated with engaging in dating violence. Predictors were selected whose relationship to dating violence has been established by earlier research: attitudes toward violence, sex-role attitudes, romantic jealousy, general levels of interpersonal aggression, verbal aggression, and verbal and physical aggression received from one's partner. Participants included 305 introductory psychology student volunteers (227 females and 78 males) who completed a set of scales related to dating relationships. Expecting different patterns of predictors to emerge for men and women, we performed separate multiple regression analyses for each. Of the set of predictors employed, receipt of physical violence from one's partner emerged as the largest predictor of expressed violence for both men and women. In addition, higher scores on attitudes toward violence and verbal aggression, and less traditional sex-role attitudes emerged as significant predictors of expressed violence for men. For women, less accepting attitudes toward violence, more traditional sex-role attitudes, feelings of romantic jealousy, higher general levels of interpersonal aggression, and verbal aggression were predictive of expressed violence. The implications of our findings for future research are discussed.

Recent explanatory models of dating violence emphasize the need to study this phenomenon within the context of several coexisting risk factors instead of considering only isolated variables (Burke, Stets, & Pirog-Good, 1989; Riggs & O'Leary, 1989). Such an approach can be expected to yield a more comprehensive understanding of the factors that are associated with an individual's likelihood to engage in dating violence. It also permits one to study the predictive power of variables within the context of other more (or less) powerful predictors. However, existing models offer generalized explanations for both female- and male-inflicted dating violence. In contrast, we believe that it is very likely that the pattern of risk factors associated with dating violence by females may be quite different from the variables that predict male violence.

This study was guided by two related issues of interest. First, we wanted to determine the pattern of predictors for expressed dating violence, using as predictor variables that individually have been found to be associated with dating violence by other researchers. These include attitudes toward violence, sex-role attitudes, romantic jealousy, general levels of interpersonal aggression, verbal aggression, and verbal and physical aggression received from one's partner. Multiple regression analyses were considered to be the most appropriate for this purpose. Secondly, we expected different patterns of predictors to emerge for men and women, and hence, we conducted the regression analyses separately for each. As a preliminary step, we also performed a multivariate analysis of variance (MANOVA) to determine any gender differences on the range of predictor variables.

In the sections that follow, we first review research documenting the prevalence of dating violence. This is followed by a review of existing research that has examined the association between dating violence and the various predictor variables being considered in this study.

**Violence in dating relationships.** Dating violence refers to "the perpetration or threat of an act of physical violence by at least one member of an unmarried dyad on the other within the context of the dating process" (Sugarman & Hotaling, 1989, p. 5). During the 1980's, empirical research yielded considerable data pointing to the widespread prevalence of dating violence.

Makepeace (1981) published the first study on physical aggression in dating relationships among college students. He asked students whether they knew of anyone who had experienced or had ever themselves experienced any of a variety of violent acts (including violent threats, pushing, slapping, punching, being assaulted with a weapon, and being struck with an object). He reported that 21% of his college student sample had experienced at least one of the aggressive acts. A few years later, Marshall and Rose (1987) reported a much higher rate of dating violence (73% among women and 79% among men). Their measure of violence also included both threatened and actual violence.<sup>2</sup> In their review of several studies on dating violence, Sugarman and Hotaling (1989) suggest that prevalence statistics vary as a function of the study sample and specific questions asked. They found that several studies included threats of violence and direct aggression in defining expressed dating violence. On average, more than one third of the men and women in these studies reported expressing violence toward a date.

Sugarman and Hotaling's (1989) review makes it clear that the expression of violence against dating partners (especially low levels of it) is not specific to either gender. However, previous research has been mixed in terms of whether such behavior is more commonly expressed by one sex or the other. While a number of earlier studies have reported that more males than females were physically aggressive against their dates (e.g., Lane & Gwartney-Gibbs, 1985; Makepeace, 1983), more recent research has revealed either a lack of gender differences in expression of dating violence (e.g., Marshall & Rose, 1990; Thompson, 1991), or females to be more aggressive than males (e.g., Arias, Samios, & O'Leary, 1987; Riggs, O'Leary, & Breslin, 1990).

**Attitudes toward violence.** A review of the literature reveals that some previous research has been conducted on attitudes toward aggression and dating violence. Such research (e.g., Cate, Henton, Koval, Christopher, & Lloyd, 1982; Henton, Cate, Koval, Lloyd, & Christopher, 1983) has shown that individuals who have experienced aggression in a dating relationship tend to hold less negative attitudes toward dating violence. Male offenders of dating violence have been found to exhibit greater acceptance of violence than female

offenders, but no similar relationship was found for nonviolent study participants (Cate et al., 1982; Henton et al., 1983). Comparing males and females, males have been found to be more likely than females to endorse accepting attitudes toward violence (Burke, Stets, & Pirog-Good, 1989).

In this study, respondents' attitudes toward violence were assessed using the Adversarial Sexual Beliefs scale developed by Burt (1980) in her research on rape and rape myths. This scale was employed because it assesses the extent to which respondents expect relationships to be "fundamentally exploitative ... that each party to them is manipulative, sly, cheating, ... and not to be trusted" (p. 218). Burt (1980) found adversarial sexual beliefs to be positively correlated with rape myth acceptance, while Muehlenhard and Linton (1987) found this variable to be an important risk factor associated with date rape. In addition, Koss and her colleagues (Koss, Leonard, Beezley, & Oros, 1985) found that sexually aggressive men hold more adversarial sexual beliefs (as well as other rape-related attitudes). Although the measure of adversarial sexual beliefs has received little attention in the context of dating violence, the findings associated with its use in other aggression-related research rendered it especially suitable for our study. Consistent with prior research, we expected men to endorse attitudes toward violence more strongly than women. We also predicted that higher scores on the adversarial sexual beliefs scale would significantly predict the expression of violence against a dating partner for men; no such relationship was expected for women.

**Sex-role attitudes.** Research on the relationship between sex-role attitudes and violence has revealed that less traditional sex-role attitudes are associated with less time spent in violent relationships (Flynn, 1990) and that more traditional attitudes toward women's roles tend to be associated with early onset of force in a relationship (Follingstad, Rutledge, Polek, & McNeill-Hawkins, 1988). Empirical evidence also points to more traditional sex-role attitudes significantly predicting male infliction of violence (Sugarman & Hotaling, 1989) and to abusive males exhibiting more traditional attitudes toward women than nonviolent males (Crossman, Stith, & Bender, 1990; Ryan, 1992; Sigelman, Berry, & Wiles, 1984; Smith, 1990). General cross-gender comparisons have found men to endorse more traditional sex-role attitudes than women (Spence, Helmreich, & Stapp, 1973).

To study the relationship between sex-role attitudes and dating violence in our sample, we employed the Macho scale (Villemez & Touhey, 1977) as our measure of sex-role attitudes. The Macho scale was designed to assess stereotyped attitudes toward both men and women and hence, is likely to provide more information than a scale that measures stereotypical attitudes toward only one gender, such as the Attitudes Toward Women scale (Spence, Helmreich, & Stapp, 1973). Moreover, the Macho scale has been found to distinguish individuals with less traditional attitudes regarding gender roles from those who hold more conservative attitudes (Gayton, Sawyer, Baird, & Ozmon, 1982). In keeping with previous research, males were expected to obtain higher (more traditional) scores on sex-role attitudes than females. Moreover, because of the association between traditional sex-role attitudes and abusiveness in men, such attitudes were expected to be an important predictor of dating violence for men but not women.

**Romantic Jealousy.** An emotion commonly associated with the occurrence of dating violence is that of romantic jealousy. For example, Makepeace (1981) reported that jealousy was often cited by subjects as a source of conflict that led to aggressive behavior within dating relationships. In their review of approximately forty studies on dating violence, Sugarman and Hotaling (1989) reported that jealousy was perceived to be the most pressing cause of violence in a dating relationship. In fact, they reported that in every

study in which subjects had a chance to check or list jealousy as a cause of dating violence, it was the most frequently mentioned reason. In addition, being categorized as jealous was predictive of expressing violence for women, but this relationship did not hold for men (Stets & Pirog-Good, 1987). This may reflect the fact that many studies find higher levels of self-reported jealousy in women than men (e.g., Mathes, Adams, & Davies, 1985). It may also be related to findings that women's jealousy is more related to dependence on the relationship while men's jealousy is more related to traditional gender-role attitudes (White, 1981; White & Mullen, 1989). In order to further test such relationships, we constructed a measure of romantic jealousy using items that may be commonly understood to be associated with this emotion. We expected women to obtain higher scores on romantic jealousy than the men in our sample. Furthermore, in predicting dating violence, jealousy was expected to be an important predictor for violence by females but not by males.

**General levels of interpersonal aggression.** The extent to which individuals have a history of aggressing against other people — referred to in this paper as the individual's "general level of interpersonal aggression" — has also received some research attention in the dating violence area. According to one explanatory model of dating violence (Riggs & O'Leary, 1989), individuals who have a history of fighting with others tend to be more likely to aggress against a date. Empirical support for this prediction was obtained in a recent study with a stronger correlation obtained between these variables for men than for women (Riggs, O'Leary, & Breslin, 1990). Research (e.g., Deal & Wampler, 1986; Gwartney-Gibbs, Stockard & Bohmer, 1987) also has shown that violence experienced in a previous relationship is a major predictor of violence in one's current relationship. O'Leary, Barling, Arias, Rosenbaum, Malone, and Tyree (1989) found that prior aggression predicted future aggression in married couples, too. In terms of general gender differences, men have been found to report more violence in non-dating contexts than women (e.g., Hyde, 1986).

In the present study, respondents' general levels of interpersonal aggression were assessed using items related to the frequency with which they had ever threatened or used violence against a same-sex friend or a date. Consistent with these findings, we predicted an overall gender effect for general levels of interpersonal aggression, expecting males to report higher general levels of interpersonal aggression than females. However, since having violent experiences with other individuals may facilitate aggression against a current dating partner regardless of an individual's sex, we expected this variable to predict dating violence for both women and men.

**Verbal aggression.** A variable that has received relatively little attention in research on dating violence is verbal aggression, even though it has been discussed as a predictor of aggression within marriages (e.g., Straus, Gelles, & Steinmetz, 1981). Using a sample of college students, Billingham (1987; Billingham & Sack, 1987) found that nonabusive dating subjects reported lower levels of verbal aggression than subjects who had used violence. In addition, he reported significant differences in verbal aggression scores between male and female subjects, with males obtaining lower scores. However, these latter findings are not supported by research on violence in non-dating contexts. For example, studies of general aggression do not support the notion that women are higher in verbal aggression than men (Hyde, 1986). Also, research on violent marriages has shown higher levels of verbal aggression in both husbands and wives who express physical aggression toward each other

(Frieze & McHugh, in press). Despite the lack of focus on the role of verbal aggression in dating relationships in recent years, we believe that it does play an important role in dating violence. We expected verbal aggression to predict physical aggression for both women and men; moreover, we did not anticipate a gender difference in mean scores of verbal aggression.

**Receipt of violence.** Finally, we examined the impact of violence received from one's partner on the expression of violence. Research has revealed that being involved in a relationship in which one's partner is physically violent is a powerful predictor of dating violence (Bernard & Bernard, 1983; Cate et al., 1982; Marshall & Rose, 1990; Gwartney-Gibbs et al., 1987; Sigelman et al., 1984). These results are not unexpected, especially for women. Evidence suggests that when assaulted by someone in a close relationship, women fight back. For example, research on battered women has suggested that much female violence is in response to male-initiated violence (e.g., Frieze & Browne, 1989). Marshall and Rose (1990) reported similar effects for dating. In their research, the most important explanatory variable for women's dating violence was their receipt of partner violence. Hence, they concluded that women may exhibit violence primarily when it is done to them. Makepeace (1986) also reported that females described their violence as self-defensive while males described their behavior as intimidative. Although we expected the effects of received violence to be greater for women than for men, we did predict an effect of this variable for men as well. Boys are socialized in our society to defend themselves and to fight back when attacked, and at the same time, men are socialized not to be aggressive to women (Geen, 1990). Such conflicting norms may create more mixed results for men than for women in terms of the effects of partner violence.

We employed a version of the Straus Conflict Tactics Scale (Strauss, 1979) that measured verbal aggression, expressed dating violence, and receipt of dating violence. This scale is a standard measure of levels of violence in relationships; it measures different strategies people use to resolve conflicts with their partners, including verbal aggression, threats, and a variety of specific acts of physical aggression. Sugarman and Hotaling (1989) point out that the vast majority of studies on dating violence to date have used the Straus Scale to assess levels of aggression in a dating relationship. Threats of violence were included in our measure since they have been used often in previous work.<sup>3</sup>

In summary, we performed multiple regression analyses to assess which of a set of variables known to be predictive of expressed dating violence emerged as significant predictors when considered simultaneously. Anticipating different patterns of predictors for male- versus female-expressed violence, we performed separate regression analyses for men and women. In particular, we predicted that accepting attitudes toward violence, more traditional sex-role attitudes, high general levels of interpersonal aggression, verbal aggression, and physical violence received from one's partner would emerge as significant predictors for men. For women, higher scores on romantic jealousy, high general levels of interpersonal aggression, verbal aggression, and physical violence received from one's partner were expected to predict the expression of violence. In addition, we also performed a preliminary multivariate analysis of variance (MANOVA) to examine gender differences in the mean scores on the various measures employed in the study. This analysis was performed to determine if men indeed scored higher than women on adversarial sexual beliefs (i.e., attitudes toward violence), endorsed more traditional sex-role attitudes, and reported higher levels of general interpersonal aggression and whether women reported greater feelings of romantic jealousy than men.

## METHOD

### Study Participants

Three hundred and five students (227 females, 78 males) at a large university in Western Pennsylvania volunteered to participate in a survey on "Study of Dating Relationships" for Introductory Psychology course credit. This group was drawn from a slightly larger sample. Participants with no prior dating experience were eliminated from analysis as were those reporting on homosexual dating relationships.

Demographic data revealed that 97% of our sample was between the ages of 18 and 22. In terms of racial composition, the participants were 87.9% white, 9.8% black, 0.7% Asian, and 1.6% other or unspecified. Most subjects had never been married (98%), and 67.3% were dating someone at the time of data collection. The average length of the relationship was 3.7 on a 5-point scale, indicating that most of the respondents had been dating their partner between 6 months and 1 year. The modal length of the relationship (40%) was "more than one year."

### Procedures

The data for this study were collected in groups that ranged in size from five to twenty students. The participants were presented with an anonymous survey which included several measures related to dating relationships. They were instructed to respond to the survey in terms of their ongoing dating relationship, or, if they were not engaged in one at the time, to respond to the items in terms of their most recent relationship. The survey packet included the Straus Conflict Tactics Scale (Straus, 1979), the Adversarial Sexual Beliefs Scale (Burt, 1980), and the Macho Scale (Villemez & Touhey, 1977). Measures of jealousy and general levels of interpersonal aggression, constructed for this study, also were included in the set of questionnaires.

### Measures

**Expressed violence.** We employed a subset of Straus's (1979) Conflict Tactics Scale items to measure the extent to which subjects had expressed violence against their partner. Only those items that described threatened or actual violence comprised this scale (e.g., "threatened to hit or throw something at your partner," "threw or smashed or hit or kicked something," "pushed, grabbed, or shoved your partner," "slapped your partner," "kicked, bit, or hit your partner with a fist," "threatened your partner with a knife or gun," "hit or tried to hit them with something," "beat up your partner"). Responses were made on a 5-point scale ranging from "1 = no, never" to "5 = more than ten times". The numerical score for each of the violence items was added to form a total score that was then divided by the number of items to yield a mean score. Thus, higher scores indicated higher frequencies of engaging in a particular aggressive act. Although most studies of dating or marital violence fail to report alphas for the Straus scales, Burke, Stets, & Pirog-Good (1989) reported an alpha of .82 for Straus items similar to those used here. A similar alpha value was obtained in this study (.83).

**Attitudes toward violence.** The Adversarial Sexual Beliefs Scale (Burt, 1980) assesses the endorsement of exploitation in intimate heterosexual relationships. Sample items include "women are usually sweet until they've caught a man, but then they let their true

self show” and “a lot of men talk big, but when it comes down to it, they can’t perform well sexually”. Mean scores were computed by adding scores on individual items and then dividing by the number of items. High scores on this scale indicate agreement that individuals involved in sexual relationships are manipulative, sly, cheating, and not to be trusted (Burt, 1980). A reliability check of scale items yielded a Cronbach’s alpha coefficient of .80, identical to the .80 reported by Burt in her original study.

**Sex-role attitudes.** The Macho Scale was used to assess stereotyped attitudes where high scores indicate adherence to traditional sex-role attitudes. Item content refers to work roles, family roles, and personality characteristics, with several items reflecting stereotyped views of women and men (Beere, 1990). Sample items include “It is important for a man to be strong,” and “There are some jobs that women simply shouldn’t have”. The Macho scale originally contained 28 items and obtained a test-retest reliability ranging from .89 to .94 (Villemez & Touhey, 1977). In the present study, seven scale items had very low item-total correlations ( $r < .27$ ), and hence, they were removed from the scale. The 21-item scale used in this study yielded a Cronbach’s alpha coefficient of .85, indicating that the revised scale has internal consistency. This alpha is comparable to an alpha obtained with this same subset of 21 items in another study by one of the authors (Smith, 1992).

**Jealousy.** Jealousy was measured using three items from Hatfield and Rapson’s Passionate Love Scale (1987) and three items developed by Grote (1992) to measure love styles. Items were selected to measure emotional reactions to jealousy (e.g. “I feel I can’t control my thoughts; they are obsessively on my partner” and “whenever I think that my partner and I might split up, I become extremely depressed”). The Cronbach’s alpha coefficient for this six-item jealousy scale was .80.

**General levels of interpersonal aggression.** Several items were constructed for this study to assess general levels of interpersonal aggression. The items assessed the frequency with which respondents had engaged in various kinds of aggressive acts in the past (e.g., “Have you ever actually slapped or pushed or used other physical force with a same-sex friend?”). The total range of items addressed getting into physical fights outside the home, directing violence toward objects, threatened and actual aggression against a same-sex friend or a date. Responses were made using a 5-point scale ranging from “1 = no, never” to “5 = often,” with higher scores indicating greater general levels of interpersonal aggression. A modest Cronbach’s alpha value of .63 was obtained for this set of items.

**Verbal aggression.** A subset of Straus’ Conflict Tactics Scale was employed to assess subjects’ verbal aggression against their partner. An example of these items, responded to on 5-point scales measuring frequency, is “insulted or swore at your partner.” Although not of direct interest to us, we assessed partner’s verbal aggression using the same items; however, the items were rephrased appropriately (e.g., “insulted or swore at you”). The Cronbach’s alpha values for subjects’ verbal aggression and partner’s verbal aggression were .77 and .78, respectively.

**Received Violence.** The extent to which the respondent received aggression from their partner was assessed using the items comprising the Expressed Violence Scale (Straus, 1979), described earlier. Although the same response format was employed, items were rephrased to describe partner-inflicted violence on the respondent. A high Cronbach’s alpha was obtained for this set of items (.81).

## RESULTS

### Level of Violence

Violence was a fairly common occurrence in our sample, as can be seen in Table 1. Over half of the women and men reported having engaged in some type of aggressive act against their partner at least once. Conversely, only 36% of women and 35% of the men were in relationships in which neither they nor their partner had ever been violent. For both sexes, the trend for more mutual violence was significant ( $X^2_1 = 52$  for women and 17 for men,  $p < .001$ ).

As shown in Table 2, the most commonly reported violent act was "threw or smashed or hit or kicked something." Threatened violence and pushing or shoving the partner were also relatively common. Less than five percent of either sex reported beating up their partner or threatening them with a weapon. Thus, although the overall prevalence rates of violence reported are quite high, it is important to note that violence of a less serious nature tends to be more common in our overall sample. Moreover, the mean levels were typically low, between 1 (almost never) and 2 (once). A MANOVA comparing males and females across all the individual expressed violence items was significant ( $F_{4,295} = 4.7$ ,  $p < .01$ ). In general, women were more likely to engage in the various acts of violence, except for threatening the partner with a weapon and forcing sex on the partner.

### Mean Gender Differences on Predictor Variables

We performed a preliminary multivariate analysis of variance to determine if men and women obtained significantly different mean scores on the set of predictor variables employed in this study. This analysis resulted in a significant multivariate F-statistic ( $F_{6,296} = 16.35$ ,  $p < .001$ ). The univariate F-statistics yielded by this analysis are contained in Table 3. As hypothesized, men obtained significantly higher scores than women on the Adversarial Sexual Beliefs scale which measured attitudes toward violence ( $F_{1,303} = 28.34$ ,  $p < .001$ ), on the Macho scale measuring sex-role attitudes ( $F_{1,303} = 30.75$ ,  $p < .001$ ), and on general levels of interpersonal aggression ( $F_{1,303} = 35.17$ ,  $p < .001$ ). That is, compared to women, men were more accepting in their attitudes toward violence, were more traditional in their sex-role attitudes, and had had more experiences with interpersonal violence in their adult years. Contrary to our expectations, we obtained a gender difference for verbal aggression where women reported engaging in greater levels of verbal aggression against their dating partner ( $F_{1,303} = 6.24$ ,  $p < .05$ ). Finally, our expected gender difference on romantic jealousy scores was not obtained ( $F_{1,303} = 1.94$ , n.s.).

TABLE 1. Percentages of Females and Males in Violent Relationships

	Female Sample		Male Sample	
	Not Violent	Violent	Not Violent	Violent
Partner not violent	36% (81)	22% (51)	35% (27)	17% (13)
Partner violent	6% (13)	36% (83)	10% (8)	38% (30)

Note: Numbers in parentheses represent actual frequencies.



**TABLE 2. Gender Differences on Self-Reports of Expressing Violent Behavior**

	Males		Females	
	% Ever	Mean	% Ever	Mean
Threatened to hit or throw*	10%	1.2	29%	1.6
Threw, smashed object	47%	1.8	40%	1.8
Pushed or shoved partner*	15%	1.2	38%	1.7
Slapped partner*	6%	1.1	22%	1.4
Kicked, bit partner*	1%	1.0	20%	1.3
Hit partner with object*	1%	1.0	16%	1.3
Beat up partner	1%	1.0	3%	1.0
Threatened with weapon	1%	1.0	1%	1.0
Forced sex on partner*	6	1.1	1%	1.0

Note: Multivariate  $F = 4.7$  ( $p < .01$ ) for gender differences across all acts.

\* = Significant univariate effect for a gender difference on a particular act.

### Relations Among Variables

Correlations were computed among all the variables separately for females and males and are shown in Table 4. The correlation patterns between expressed violence and the entire set of measures we employed were similar for both sexes; however, in most cases the strength of the relationship between variables was greater for women. For both women and men, the variable that correlated most strongly with expressed violence was the receipt of violence from one’s partner. Interestingly, romantic jealousy was significantly correlated with expressed violence only for women while more macho (traditional sex-role) attitudes were not correlated with expressed violence for either women or men. It was also interesting to note that traditional sex-role attitudes were positively correlated with the scale measuring adversarial sexual beliefs for females and males indicating that accepting attitudes toward violence often coexist with gender stereotypic views.

A marked contrast between females and males in correlation patterns was the relationship between jealousy and the other scales. For women, jealousy was significantly

**TABLE 3. Mean Gender Differences on Predictor Variables**

	Males	Females
Adversarial sexual beliefs***	2.54 (.69)	2.12 (.56)
Macho scale***	2.76 (.57)	2.39 (.49)
Romantic jealousy	3.17 (.88)	3.33 (.79)
Gen. interpersonal aggression***	2.07 (.68)	1.59 (.58)
Verbal aggression*	2.22 (1.09)	2.59 (1.22)
Partner’s verbal aggression	2.34 (1.18)	2.21 (1.11)
Sample size	78	227

Notes: The measures were designed as 5-point scales where higher scores represent higher levels/frequencies.

Standard deviations are provided in parentheses.

\*Univariate effect significant at  $p < .05$ .

\*\*\*Univariate effect significant at  $p < .001$ .

TABLE 4. Scale Intercorrelations

	Correlations for Female Subjects						
	Macho	Jealous	General Viol.	Expressed Viol.	Received Viol.	Verbal Aggr.	Partner Verb. Agg.
ASB	.47**	.10	.28**	.18**	.26**	.14*	.14*
Macho		.18*	-.09	.06	.04	.01	.09
Jealousy			-.10	.18**	.10	.15*	.21**
General violence				.41**	.32**	.18**	.12
Expressed violence					.72**	.65**	.59**
Received violence						.56**	.58
Verbal aggression							.77

  

	Correlations for Male Subjects						
	Macho	Jealous	General Viol.	Expressed Viol.	Received Viol.	Verbal Aggr.	Partner Verb. Agg.
ASB	.56**	-.04	.25*	.32**	.26*	.17	.15
Macho		-.04	.22*	.02	.05	.21	.09
Jealousy			.07	.10	.10	.23*	.15
General violence				.23*	.29**	.18	.22
Expressed violence					.56**	.45**	.34**
Received violence						.55**	.65**
Verbal aggression							.74**

Notes:

\*Significant at  $p < .05$ \*\*Significant at  $p < .01$ 

ASB = Adversarial Sexual Beliefs

correlated with expressed violence, verbal aggression, partner's verbal aggression, and scores on the macho scale. For men, however, jealousy was significantly correlated only with verbal aggression. These results suggest that jealousy may operate differently for men and women who are violent.

### Predictors of Expressed Violence

Multiple regression analyses were conducted separately for males and females to determine which variables best predicted the expression of violence for each gender. Expressed violence was regressed on the entire set of variables: attitudes toward violence, sex-role attitudes, romantic jealousy, general levels of interpersonal aggression<sup>4</sup>, verbal aggression, and verbal and physical aggression received from one's partner. Regression equations for both groups were statistically significant and the results of these analyses are presented in Table 5. As we hypothesized, violence received from one's partner was highly predictive of expressed violence for both males and females. Moreover, for women higher scores on feelings of jealousy and verbal aggression, and greater levels of general levels of interpersonal aggression were predictive of expressed violence. Although not anticipated, lower scores on adversarial sexual beliefs and more traditional sex-role attitudes were also predictive of dating violence expressed by females.

For males, only more adversarial sexual beliefs and verbal aggression achieved statistical significance in the expected direction of being direct predictors of expressed violence. In contrast to our predictions, less traditional sex-role attitudes were predictive of expressed violence for men.

**TABLE 5. Multiple Regression Analyses Predicting Expressed Violence**

	Females			Males		
	Beta	Partial r	t	Beta	Partial r	t
Jealousy	.10	.37	2.54*	.03	.04	.32
ASB	-.12	-.17	-2.48*	.30	.30	2.65**
Macho scale	.10	.14	2.11*	-.25	-.25	-2.18*
General violence	.26	.37	5.93***	.07	.09	.72
Verbal aggression	.33	.34	5.31***	.39	.31	2.75**
Received violence	.45	.51	8.76***	.43	.37	3.38**
P's verb aggression	.03	.03	.44	-.26	-.21	-1.77
Multiple R		.82			.66	
R <sup>2</sup>		.67			.44	
Equation F		63.56***			7.71***	
N		227			78	

Notes: The Beta weights in this table represent standardized Betas.

\**p* < .05

\*\**p* < .01

\*\*\**p* < .001

ASB = Adversarial Sexual Beliefs

## DISCUSSION

Our data support other research findings that college students commonly engage in low levels of violent behavior (which is defined as including threats of and specific acts of physical violence) with their dates. Despite the low levels of violence reported by our sample, these findings are disturbing. The initiation of a pattern of violence, even low levels of violence, may mark the beginning of an interaction style that could lead to increasingly severe levels of violence, and eventually to life threatening injuries. As research has revealed, early expression of low levels of violence is often reported in retrospective accounts of severely battered wives (Walker, 1983).

In our sample, the expression of violence against a dating partner was seen in both sexes with women reporting the expression of as much or more violence in their relationships as men. Before discussing the implications of our results, we consider it important to underscore that self-reported data such as ours must necessarily be viewed with caution. It is quite likely that the seriousness of injury resulting for a man from a woman's blow is much less than vice versa (e.g., Brush, 1990; Frieze & Browne, 1989). After all, superior physical strength in most heterosexual relationships can be expected to lie with the man. This may render it grossly incorrect to equate the impact of violence expressed on one's dating partner by women and men. In future research, we recommend the assessment of the degree of injury as well as the types of violent acts done to one's partner. Having drawn attention to this caveat, we proceed with our discussion.

A strong predictor of female violence was the receipt of violence from her partner. This may suggest that women's expression of violence may be at least partly in self-defense. Such conclusions have also been drawn about women's violence in marriage. For example, in one study only 11% of women reported initiating violence, while 53% said such violence was primarily in self-defense or fighting back (Saunders, 1986). This explanation would be quite strong had it not been for the finding that male participants in our sample, too, were

more violent when their partners were aggressive. This points to the need to determine the reason behind why an individual may engage in dating violence (e.g., self-defense, intimidation, provocation, etc.) as it is possible that the reasons vary for women and men. We suggest that these details are important in understanding the nature of dating violence and hence, future research should attempt to determine not only what kind of violence occurs in a relationship, but also the circumstances under which it is expressed.

In predicting expression of dating violence, the regression analyses did yield different patterns of predictors for women and men. Considering the results for females, it appears that a woman is most likely to be violent toward her partner when he is aggressive to her physically, when she is verbally aggressive, when she is violent in other contexts, and when she experiences romantic jealousy in the relationship. Having traditional gender role beliefs was also predictive of female physical aggression, as were the lack of a belief in adversarial relations between women and men. For men, the expression of violence was predicted by engaging in verbal aggression against their female partners as well as the endorsement of the belief that relations between men and women are inherently hostile; however, violent males were not necessarily violent in other contexts. Contrary to our predictions, holding *less* traditional sex-role attitudes was predictive of expressed violence for men. Although this finding is unexpected, some support for it is forthcoming from research on marital violence which has found violent husbands to be lower in masculinity (Rosenbaum, 1986). Perhaps lower masculinity among some men is associated with fewer traditional inhibitions against violence directed at women.

Although adversarial sexual beliefs emerged as a predictor of dating violence in the expected direction for males, the reverse trend was obtained for women. As a possible explanation for this unexpected finding, we propose that women who do not believe that male-female sexual relationships are meant to be hostile or adversarial (i.e., low scorers on the adversarial sexual beliefs scale) could possibly be less tolerant of violence from the partner. Such women may retaliate with violence when abused by their partner. However, we recognize the speculative nature of this explanation since we have no data addressing who initiates the violence in a given relationship.

In conclusion, then, our data support the idea that the determinants of violence are different for men and women. O'Leary and Arias (1988) also obtained similar findings for married couples. Nevertheless, many existing models of dating violence (e.g., Burke, Stets, & Pirog-Good, 1989; Riggs & O'Leary, 1989) do not attempt to account for differences in the psychosocial profile of female and male inflictors of dating violence. This may undermine the overall explanatory power of these models. We recommend, based on our findings, that future theoretical models explaining dating violence consider gender as a potentially important organizing variable.

## NOTES

<sup>1</sup>Portions of this paper were presented at the 63rd Annual Meeting of the Eastern Psychological Association (Boston, 1992).

<sup>2</sup>In a further analysis that eliminated threats (which they labeled as "symbolic violence"), 59% of women and 45% of males reported experience with violence.

<sup>3</sup>This usage is more consistent with Straus's Form N than Form A.

\*Due to the low Cronbach's alpha value obtained for this measure (.63), we performed a second set of multiple regression analyses regressing expressed violence on the individual items in this measure in conjunction with the other predictor variables. None of the individual items was predictive of expressed violence for men. For women, on the other hand, having ever directed violence toward objects, threatened to use physical force with a date, and actually using physical force with a date were significantly predictive of expressed violence ( $t_s > 2.0$ ,  $p < .05$ ). The predictive trends of the remaining variables remained unchanged for men and women.

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*Offprints.* Requests for offprints should be sent to Irene H. Frieze, Department of Psychology, University of Pittsburgh, Pittsburgh, PA 15260.