

CHAPTER 3

Risk Factors for Physical Violence Between Dating Partners: Implications for Gender-Inclusive Prevention and Treatment of Family Violence

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A sometimes bitter debate has waged for more than 25 years over research indicating that women physically assault their male partners at about the same rate as men physically attack female partners. Yet the evidence from almost 200 studies is overwhelming (Archer, 2000; Moffitt, Caspi, Rutter, & Silva, 2001; Straus, 1999, 2005b). In recent years, the focus of the debate has shifted somewhat. Although still denying the overwhelming evidence of approximately equal rates of assault by men and women, those who believe that male dominance and male degradation of women is almost always at the root of partner violence now tend to focus on asserting or implying that, when women physically assault a partner, the causes or motives are different than when men attack their partners. Unfortunately, much of what has been written on differences in causes and motives is based on the beliefs and values of the authors rather than on empirical comparisons of men and women.

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For example, Dobash, Dobash, Wilson, and Daly (1992) asserted that men's and women's motivations for violence differ. But the only evidence they referred to is the greater injury rate suffered by women. Although it is true that female victims are more often injured, injury is a consequence of assault, not a cause. Neither Dobash et al.'s research nor any of the studies they cited provided evidence on differences in motivation or risk factors.

Similarly, Hamberger and Guse (2002) asserted that "men in contrast [to women] appear to use violence to dominate and control," but even though the article cited about 80 studies, none provided empirical evidence on gender differences in dominance and control motivation, yet there are at least eight studies showing that dominance or control is related to violence against a partner by women as well as by men (Graham-Kevan & Archer, 2005; Kim & Clifton, 2003; Laroche, 2005; So-Kum Tang, 1999; Stets & Pirog-Good, 1990; Straus, Gelles, & Steinmetz, 1980; Straus & Members of the International Dating Violence Research Consortium, 2006; Sugihara & Warner, 2002).

Yet another example of this type of claim is the statement by Nazroo (1995). However, the evidence he presents concerns differences on anxiety and fear and the fact that male violence is more intimidating. These are extremely important dimensions, especially for victim services, but none of these are etiological factors, and all could follow from the greater average size and strength of men rather than from the implied but undemonstrated difference in motives. We believe that the unstated agenda of authors such as Dobash and Dobash and Nazroo is to excuse violence by women by implying that violence by women is morally courageous because it is assumed to be in self-defense, whereas violence by men is morally indefensible because it is assumed to be an act of domination rather than self-defense. Some violence by women is in self-defense, but, as will be shown in the review of previous research later in this chapter, the available studies find that this also applies to some violence by men. The same distortion of the scientific evidence by selective citation applies to discussion of dominance and control. Only studies showing male use of violence to coerce, dominate, and control are cited despite a number of studies showing that this also applies to violence by female partners (Dutton & Nicholls, 2005). We agree that violence by men against a partner is morally indefensible but that this also applies to partner violence by women.

Although there has been much research on partner violence, including risk factors, most of the studies of risk factors and motivations for partner violence provide data only on these variables for violence by men. The comprehensive set of articles reviewing risk factors for

family violence by Heyman and colleagues (Heyman & Slep, 2001) is restricted to violence by men. When women are included in a study, men are not (Straus, in press). For example, in one of the relatively few studies that obtained data on motives by women offenders, Fiebert and Gonzales (1997) found that 46% of women reported that they had hit their partner because he "wasn't sensitive to my needs," 44% "to gain my partner's attention," 38% because they did not believe the hitting would hurt him, 38% because he was "being verbally abusive to me," and 43% because the partner "was not listening to me." However, the sample was entirely women so that no comparisons with men were possible. Notable exceptions include the Winnipeg, Canada, study by Sommer (1994), which found self-defense to be a motive for only 10% of female and 15% of male respondents who had engaged in intimate partner violence, and the British Survey by Carrado, George, Loxam, Jones, and Templar (1996), in which the predominant motives for assaulting a partner were "to get through," reported by 53% of women and 64% of men, and to retaliate, given by 52% of women and 53% of men.

Given the overwhelming evidence that women physically assault partners at about the same rate as men, it is important to determine the extent to which this violence has different roots for men and women. Whatever the answer, it can help provide a sounder theoretical understanding of the phenomenon of partner violence and can help in designing prevention and treatment programs. This chapter is intended to provide some of the needed information by presenting the results of an empirical study of gender differences in risk factors for partner assault. The analysis compares men and women on the degree to which 21 hypothesized risk factors were related to physically assaulting a dating partner. The risk factors examined fall into two broad categories. The first category refers to personal psychological characteristics that are hypothesized to increase the probability of domestic violence, such as antisocial personality and attitudes approving violence. The second category refers to characteristics of the relationship, such as dominance of one partner and communication problems.

A clear answer to the etiological issues that are the focus of this chapter requires longitudinal data. However, the data available to us, like the data in almost all previous studies, are cross sectional. Consequently, we use the term *risk factor* (Kleinbaum, Kupper, & Morgenstern, 1982) because it refers to variables that are associated with an increased probability of the dependent variable but are not necessarily direct causes. For example, inadequate anger management skills could be a cause of violence in relationships. But for some it might be an effect of relying on

physical force and therefore never having to learn to effectively control anger. Longitudinal research is needed to trace out the causal sequence, and a randomized trial is needed to determine whether anger management training contributes to primary or secondary prevention of partner violence. However, an important first step is to determine whether inadequate ability to deal with anger is associated with partner violence by women as well as men.

RELEVANCE OF INFORMATION ON DATING PARTNERS

Research on violence between dating partners is important for understanding domestic violence and for designing prevention and treatment programs. At least 50 studies have found that the rate of violence between dating couples is two to three times greater than among married couples (Stets & Straus, 1989; Straus, 2004b; Sugarman & Hotaling, 1989). Moreover, the risk factors for dating violence are remarkably parallel to the risk factors for marital violence, and violent behavior in dating relationships often carries over into marriage (O'Leary, Malone, & Tyree, 1994; O'Leary et al., 1989). Conceptually, dating is a stage in the family life cycle. Because dating violence is a stage in domestic violence, the study of dating couples can help increase our understanding of violence in marriage. In addition, dating may be a stage in the family life cycle that is strategic for purposes of primary prevention (O'Leary & Sweet Jemmott, 1995).

PREVIOUS RESEARCH ON GENDER DIFFERENCES IN RISK FACTORS

There does not seem to have been a systematic review of empirical studies of differences between men and women in the etiology of domestic assault. None of the three textbooks we checked contained a section on this issue, and our search of *PsychLit* and *Sociological Abstracts* did not uncover a review article. This could be the result of an absence of comparative research to review, but it might be the result of a reluctance to evaluate gender differences in etiology on the basis of empirical evidence. Those who subscribe to the patriarchal dominance theory of partner violence find the very idea of an empirical test ridiculous, offensive, or both. Those who are not committed to that ideology may fear they will be

ostracized and blacklisted, as has happened to one of us Straus (Straus, 1990c).

Our search of literature from 1970 to 2004 identified 51 studies that met the criteria of including information for both men and women (Medeiros & Straus, 2006). These 51 studies included comparisons of men and women in respect to 242 variables. Most studies contributed data for more than one of the gender comparisons. Despite the extensiveness of the search and the large amount of research located, there are likely to be a number of studies that were missed. Nevertheless, the volume of research that we were able to locate suggests that the absence of previous systematic comparative reviews may reflect inattention to this controversial issue rather than a lack of research on the issue. In fact, the number of results in these 51 studies is so extensive that it required 19 pages of tables to summarize the results. Because the many tables and the many pages of explanatory text are more than can be included in a chapter on empirical results from a new study, those tables and their discussion are presented in a separate article (Medeiros & Straus, 2006).

Percentage of Studies Finding Similar Results for Men and Women

We identified four types of studies based on the type of data reported. The type that most adequately addressed the issue of gender differences in risk factors were studies that performed statistical tests for differences in the relationship between various risk factors and partner assault for men and women. We located seven studies that examined the relationship of 25 variables to partner violence and provided data on whether there was a statistically significant gender difference in the relationship between a risk factor and partner assault (i.e., an interaction effect). Seventy-two percent of the relationships analyzed found no significant difference between the risk factors for assault and gender for men and women.

In the second type of study, we located and compared violent men and violent women on a total of 56 characteristics, such as educational level and score on a measure of anger. In 73% of these comparisons, no significant difference was found between men and women in the risk factors examined.

The third type of study is similar to the second type in that it also compared violent men and women. However, unlike the second type of study, the authors did not test the significance of the gender difference. We classified the results as different for men and women if the percentage for the gender with the larger percentage was at least 20% greater. Using

this criterion, of the 28 variables in six studies, 43% of variables had similar results for men and women.

The fourth type of study examined the relationship between risk factors and partner assault for men and women separately but did not test for differences between men and women. We located 23 studies of this type. They reported results on gender differences in the relation of 147 risk factors for partner assault but did not test for interactions or test for the significance of the difference in the correlation for men and women. Sixty percent of the variables showed the same relationship for men and women (e.g., both nonsignificant, both positive and both significant, both negative and significant, and so on). Thirty-nine percent showed relationships with the dependent variable that was in the same direction for both men and women but was significant for one and not the other. One percent of variables in these studies showed opposite relationships for men and women (one positive and significant, the other negative and significant). These results can be interpreted as showing that there was a similar etiological pattern for 60% of the risk factors examined or for 99% if studies showing the same direction of effect are included.

Specific Gender Differences and Similarities

The specific gender differences and similarities found in the studies we reviewed are given in the tables in Medeiros and Straus (2006). Examples include the following:

- Eight out of 10 of the analyses found similar relationships between youthfulness and partner assault for both men and women.
- All four studies of the link between conflict in the relationship and partner assault found similar relationships for males and females.
- In five of seven studies, similar numbers of men and women cited self-defense as a reason for assaulting their partner.
- Dominance was linked to partner assault for both men and women in four of five studies.
- Three of four studies found a similar relationship between having an angry personality and assaulting a partner for men and women. All six studies that looked at anger or provocation as a reason for partner assault found a similar relationship for men and women.

Conclusions From Previous Research

The studies that used tests of significance for gender differences in the characteristics of male and female offenders found parallel results for males and females for 72%. Studies that examined differences in risk factors found

parallel relationships for males and females in 73% of the comparisons. For the two groups of studies that did not apply tests of significance, the first found parallel results for 43% of the comparisons. The second of these two groups of studies found parallel results for 60% of the comparisons using one criterion for "parallel results" and for 99% of the comparisons using *another criterion*. Taking all four types of studies together suggests that the studies reviewed found parallel results for males and females. If one rules out measurement and sampling error as the explanation for the one-quarter of comparisons showing a difference in risk factors for males and females, our review suggests that although the predominant pattern is parallel etiology for males and females, there are many exceptions. It is important for both theoretical understanding of the etiology of partner violence and for prevention and treatment efforts to more clearly identify the differences and similarities between men's and women's partner violence. The research described in the following sections is intended to contribute to that end.

METHOD

Sample

The sample consists of 854 undergraduate students (312 men and 542 women) from two universities who were enrolled in sociology courses or introductory psychology in 1998, 1999, and 2000. The sample was restricted to those who were or had been in a heterosexual romantic relationship of a month or longer. The sample was also restricted to unmarried students.

Data Collection

The questionnaire booklet consisted of: (a) a cover sheet explaining the *purpose of the study and the participant's rights and providing the name of a contact person and telephone number for those who might have questions after the test session was over*, (b) the demographic questions, and (c) the instruments described in the measures section.

The data were gathered using procedures reviewed by and approved by the board for protection of human subjects at each university. The sociology class participants were tested during a classroom period. The purpose, task demands, and rights were explained orally as well as in printed form at the beginning of each test session. Participants were told that the test session would involve answering questions concerning attitudes, beliefs, and experiences they may have had, including questions on sex and other sensitive issues. They were assured of the

anonymity and confidentiality of their responses, and they were told that the session would take about an hour. In practice, most students completed the survey in 40 to 45 minutes. The psychology class participants were tested in groups of 20 to 30. They were asked to sign written consent forms before completing their questionnaires. After receiving directions about using the machine-scored answer sheets, they worked at their own paces. A debriefing form was given to participants as they left the testing room. It explained the study in more detail and provided

TABLE 3.1 Characteristics of Respondents and Their Relationships

Characteristic	Total (<i>n</i> = 854 ^a)	Men (<i>n</i> = 312 ^a)	Women (<i>n</i> = 542 ^a)	Chi-square
Year in college				3.77
Freshman	46	46	47	
Sophomore	22	22	21	
Junior	20	18	21	
Senior	12	15	11	
Age in years				
Median category ^b	19	20	19	26.7**
Father's education				2.33
High school/less	42	41	43	
Some college	7	8	7	
College degree	29	28	30	
Graduate degree	22	23	21	
Mother's education				16.1*
High school/less	46	47	45	
Some college	9	6	11	
College degree	29	33	27	
Graduate degree	16	15	16	
Family income				
Median group	60,000– 69,999	70,000– 79,999	60,000– 69,999	44.42**
Reporting on current relation				
Previous	45	52	42	7.8**

(Continued)

TABLE 3.1 (Continued)

Characteristic	Total (<i>n</i> = 854 ^a)	Men (<i>n</i> = 312 ^a)	Women (<i>n</i> = 542 ^a)	Chi-square
Relationship Type				0.62
Dating	97	97	97	
Engaged	4	3	3	
Relationship Length ^c				12.71*
1–11 months	33	37	32	
1 Year–1 Year, 11 months	40	41	40	
2 Years or more	27	23	29	
Sexually active	75	71	78	5.53*

^a The *n*'s vary slightly from question to question because of variation in missing data.

^b The categories used for the logistic regression are 18, 19, 20, 21, 22–24, 25–29, 30–39, and 40–49.

^c The categories used for the logistic regression are 2 = about 1 month, 3 = about 2 months, 4 = 3–5 months, 5 = 6–11 months, 6 = about 1 year, 7 = more than 1 year but less than 2 years, 8 = about 2 years, 9 = more than 2 years but less than 4 years, and 10 = 4 years or more.

* = $p < .05$. ** = $p < .01$.

names and telephone numbers of area mental health services and community resources, such as services for battered women. Students from the psychology subject pool received two credits toward the fulfillment of their introductory psychology course research requirement for their participation.

Table 3.1 shows that 40% of the respondents were in their first year at the university. The median age was 19 years, but some older students were included. Their socioeconomic background was relatively high: about half their parents had had at least some college education, and the median income category was \$60,000 to \$69,999.

Relationship Characteristics

Almost all the students described a dating relationship (97%) as opposed to more committed relationships. However, sexual relations were reported to be part of the relationship by 75% of respondents. About half the sample had been in the relationship described for between 1 and 11 months. Slightly more than half the sample described a current relationship, and the remainder described a previous relationship.

Gender Differences in Characteristics of the Sample

The male and female students were similar in year in school, father's level of education, and type of relationship (dating vs. engaged). Males reported higher median age and family income. Females were more likely to report that sex was part of the relationship. The women had been in their relationships slightly longer than the men, and more were in the relationship they described at the time of testing. The fact that more women than men had relationships of a year or more and the fact that more of them reported on current relationships may affect both the nature and frequency of experiences and behavior reported and memory for events that took place between respondents and their partners. The differences between the male's and female's reports of their mother's education were statistically significant, but no clear pattern of differences emerged.

Measures

Partner Assault

The revised Conflict Tactics Scales, or CTS2 (Straus, Hamby, Boney-McCoy, & Sugarman, 1996), was used to measure physical assault by the respondent. The CTS has been used in more than 300 studies of both married and dating partners in the past 25 years, and there is extensive evidence of reliability and validity (Archer, 1999; Straus, 1990a, 2005b; Straus & Ramirez, in press). The Physical Assault scale of the CTS2 was used for this study. It includes subscales for "minor" and "severe" assaults. The Minor Assault scale includes acts such as slapping or throwing something at the partner. The Severe Assault scale includes acts such as punching and choking. The difference between the minor and severe subscales is analogous to the legal categories of simple assault and aggravated assault. (For a complete list of the CTS questions and for data on validity and reliability, see Straus, 2004a; Straus et al., 1996.)

Risk Factor Variables

The Personal and Relationships Profile (PRP) was used to obtain the data on risk factors. The PRP is a 21-scale instrument designed for research on partner assault. The variables measured by the PRP scales were selected on the basis of a review of the theoretical and empirical literature on the etiology of partner violence. Some of the scales in the PRP measure personal or intrapsychic characteristics of the respondent, and some measure characteristics of the relationship as reported by the

respondent. The personal characteristics scales are Antisocial Personality, Borderline Personality, Criminal History, Depression, Gender Hostility, Neglect History, Posttraumatic Stress Disorder, Social Desirability, Social Integration, Substance Abuse, Stressful Conditions, Sexual Abuse History, and Violence Approval. The relationship characteristics scales are Anger Management, Communication Problems, Conflict, Dominance, Jealousy, Negative Attribution, Relationship Commitment, and Relationship Distress.

The steps used to develop the PRP, along with data on reliability and validity, are given in Straus, Hamby, Boney-McCoy, and Sugarman (1999) and Straus and Mouradian (1999). The specific items used to measure each of the 21 constructs are given in Straus et al. (1999). The instructions for the PRP ask the respondents to indicate whether they agree or disagree that the statement describes themselves, using the following response categories: Strongly Disagree = 1, Disagree = 2, Agree = 3, and Strongly Agree = 4.

Social Desirability Scale

Research that uses self-reports to obtain data on sensitive issues needs to take into account defensiveness or minimization of socially undesirable behavior. We did this by using the Social Desirability scale of the PRP. This is a 13-item version of the widely used Marlowe-Crowne Social Desirability Scale developed by Reynolds (Reynolds, 1982). The scale measures the degree to which respondents tend to avoid disclosing socially undesirable behavior, such as partner assault and other crime.

Socioeconomic Status

A scale to measure the socioeconomic status (SES) of the student's family was computed using the number of years of education completed by the student's father and mother and family income. Each of these three variables were transformed to z scores and summed. The sum was transformed to a z score. This approach to measuring SES provides a score that indicates the number of standard deviations above or below the mean of the families of all students at their university.

Data Analysis

The relationship between gender, the 21 PRP scales, and assault on a dating partner was examined using nested multinomial logistic regression

analyses. For each PRP scale, two models were run. The first model regressed partner assault on the PRP scale, respondent's sex, family SES, and social desirability. The second model included all the variables in the first model plus a gender by PRP scale interaction. The dependent variable for all models was the four-category Severity Level measure of assaults in the past year (Straus & Douglas, 2004): no assaults in past year, minor assaults in the past year but no severe assaults, and any severe assaults in the past year.

RESULTS

Prevalence Rates

Many previous studies of dating relationships have found that between 25% and 45% of respondents assaulted their partner in the previous 12 months (Stets & Straus, 1989; Sugarman & Hotaling, 1989). The 23% rate for this sample is consistent with those studies. Most assaults against dating partners fall within the "minor violence" category, and that is also

TABLE 3.2 Logistic Regression Results for the Relation of 21 Risk Factors to Minor Assault^a

	<i>Model 1</i>			<i>Model 2</i>		
	OR	SE ^{2b}	z	OR	SE ^{2b}	z
Anger management	0.21	0.36	-4.34***	0.19	0.60	-2.78***
x gender				1.12	0.71	0.16
Anti-social personality	1.97	0.33	2.03**	2.67	0.53	1.87*
x gender				0.62	0.62	-0.76
Borderline personality	1.78	0.25	2.31**	1.48	0.46	0.86
x gender				1.27	0.51	0.46
Criminal history	1.28	0.24	1.00	1.29	0.24	0.72
x gender				1.00	0.35	-0.01
Relationship conflict	1.72	0.54	2.15**	2.05	0.44	1.62
x gender				0.77	0.51	-0.50
Communication problems	2.30	0.32	2.59**	3.77	0.53	2.49***
x gender				0.48	0.62	-1.18
Depression	0.90	0.26	-0.42	1.16	0.44	0.34
x gender				0.69	0.52	-0.72

(Continued)

TABLE 3.2 (Continued)

	<i>Model 1</i>			<i>Model 2</i>		
	OR	SE ^{2b}	<i>z</i>	OR	SE ^{2b}	<i>z</i>
Dominance	2.24	0.34	2.40**	3.36	0.56	2.16**
x gender				0.53	0.69	-0.91
Gender hostility	1.00	0.23	-0.01	1.39	0.23	0.88
x gender				0.60	0.37	-1.14
Jealousy	1.19	0.21	0.82	1.25	0.39	0.57
x gender				0.94	0.45	-0.14
Negative attributions	1.55	0.21	2.05**	1.71	0.36	1.48
x gender				0.86	0.43	-0.36
Neglect history	0.74	0.29	-1.02	0.75	0.47	-0.60
x gender				0.97	0.60	-0.05
Posttraumatic stress disorder	1.13	0.21	0.59	1.37	0.46	0.69
x gender				0.79	0.50	-0.48
Commitment	0.84	0.20	-0.87	0.99	0.35	-0.02
x gender				0.79	0.42	-0.57
Relationship distress	1.18	0.18	0.91	1.09	0.34	0.26
x gender				1.11	0.39	0.26
Sexual abuse history	1.00	0.29	0.00	1.39	0.47	0.71
x gender				0.59	0.58	-0.90
Social integration	0.71	0.31	-1.13	1.00	0.52	0.00
x gender				0.60	0.61	-0.84
Stressful conditions	0.69	0.32	-1.14	1.29	0.54	0.47
x gender				0.41	0.63	-1.43
Substance abuse	1.77	0.21	2.73**	1.94	0.35	1.88*
x gender				0.87	0.43	-0.33
Violence approval	1.28	0.29	0.86	2.04	0.48	1.48
x gender				0.49	0.58	-1.22
Violence socialization	1.10	0.25	0.37	1.02	0.45	0.05
x gender				1.10	0.52	0.19

^a For risk factor × gender interactions, male = 0, female = 1.

^b Standard errors (SE) are for the coefficient (b), not the odds ratio.

* $p < .10$. ** $p < .05$. *** $p < .01$.

TABLE 3.3 Regression Results for the Relation of 21 Risk Factors to Severe Assault^a

	<i>Model 1</i>			<i>Model 2</i>		
	OR	SE ^{2b}	z	OR	SE ^{2b}	z
Anger management	0.14	0.47	-4.21***	0.19	0.74	-2.26**
x gender				0.63	0.89	-0.52
Antisocial personality	7.39	0.43	4.64***	10.74	0.70	3.40***
x gender				0.56	0.83	-0.70
Borderline personality	1.73	0.32	1.71	2.93	0.57	1.88*
x gender				0.49	0.65	-1.10
Criminal history	2.29	0.29	2.90***	1.79	0.43	1.36
x gender				1.50	0.54	0.75
Relationship conflict	3.83	0.33	4.08***	9.88	0.61	3.73***
x gender				0.26	0.70	-1.91*
Communication problems	4.92	0.42	3.78***	4.60	0.66	2.33**
x gender				1.12	0.79	0.14
Depression	1.02	0.33	0.05	1.45	0.55	0.68
x gender				0.59	0.65	-0.81
Dominance	3.77	0.43	3.07***	5.32	0.70	2.38**
x gender				0.57	0.88	-0.63
Gender hostility	1.70	0.29	1.84	1.89	0.45	1.41
x gender				0.84	0.56	-0.32
Jealousy	2.00	0.28	2.50***	1.53	0.49	0.87
x gender				1.46	0.58	0.65
Negative attributions	2.44	0.27	3.32***	3.26	0.44	2.68**
x gender				0.64	0.54	-0.84
Neglect history	2.01	0.32	2.21**	2.17	0.51	1.52
x gender				0.89	0.64	-0.19
Posttraumatic stress disorder	1.27	0.27	0.87	3.32	0.58	2.06**
x gender				0.29	0.65	-1.89*
Commitment	0.96	0.26	-0.14	0.84	0.44	-0.39
x gender				1.23	0.54	0.38

(Continued)

TABLE 3.3 (Continued)

	<i>Model 1</i>			<i>Model 2</i>		
	OR	SE ^{2b}	z	OR	SE ^{2b}	z
Relationship distress	1.38	0.23	1.41	1.64	0.42	1.17
x gender				0.79	0.50	-0.48
Sexual abuse history	1.99	0.30	2.30**	4.15	0.46	3.10***
x gender				0.29	0.62	-2.02**
Social integration	0.59	0.40	-1.31	0.68	0.66	-0.59
x gender				0.81	0.79	-0.26
Stressful conditions	2.26	0.41	2.00**	3.89	0.66	2.05**
x gender				0.44	0.78	-1.05
Substance abuse	1.29	0.27	0.95	2.84	0.46	2.26**
x gender				0.29	0.57	-2.19**
Violence approval	2.76	0.37	2.77***	7.02	0.61	3.20***
x gender				0.23	0.75	-1.98***
Violence socialization	1.49	0.31	1.31	1.69	0.54	0.97
x gender				0.84	0.64	-0.28

^a For risk factor \times gender interactions, male = 0, female = 1.

^b Standard errors (SE) are for the coefficient (b), not the odds ratio.

* $p < .10$. ** $p < .05$. *** $p < .01$.

the case for this sample. Fifteen percent of the sample restricted their violence to minor assaults, and 8% engaged in one or more of the acts in the Severe Assault scale of the CTS2.

The rates for perpetration of partner violence by men and women are also consistent with many previous studies of violence in dating relationships in that the rates for men and women are about the same or somewhat higher for women (Archer, 2000; Stets & Straus, 1989; Straus & Ramirez, in press; Sugarman & Hotaling, 1989): For Minor Violence, the rates are 13% for men and 16% for women. For Severe Violence, the rates are 7% for men and 8% for women.

Risk Factors for Minor Assaults

Total Sample

The columns of Table 3.2 under the heading "Model 1" give the results of the multinomial logistic regression analyses using the total

TABLE 3.3 Regression Results for the Relation of 21 Risk Factors to Severe Assault^a

	<i>Model 1</i>			<i>Model 2</i>		
	OR	SE ^{2b}	z	OR	SE ^{2b}	z
Anger management	0.14	0.47	-4.21***	0.19	0.74	-2.26**
x gender				0.63	0.89	-0.52
Antisocial personality	7.39	0.43	4.64***	10.74	0.70	3.40***
x gender				0.56	0.83	-0.70
Borderline personality	1.73	0.32	1.71	2.93	0.57	1.88 *
x gender				0.49	0.65	-1.10
Criminal history	2.29	0.29	2.90***	1.79	0.43	1.36
x gender				1.50	0.54	0.75
Relationship conflict	3.83	0.33	4.08***	9.88	0.61	3.73***
x gender				0.26	0.70	-1.91*
Communication problems	4.92	0.42	3.78***	4.60	0.66	2.33**
x gender				1.12	0.79	0.14
Depression	1.02	0.33	0.05	1.45	0.55	0.68
x gender				0.59	0.65	-0.81
Dominance	3.77	0.43	3.07***	5.32	0.70	2.38**
x gender				0.57	0.88	-0.63
Gender hostility	1.70	0.29	1.84	1.89	0.45	1.41
x gender				0.84	0.56	-0.32
Jealousy	2.00	0.28	2.50***	1.53	0.49	0.87
x gender				1.46	0.58	0.65
Negative attributions	2.44	0.27	3.32***	3.26	0.44	2.68**
x gender				0.64	0.54	-0.84
Neglect history	2.01	0.32	2.21**	2.17	0.51	1.52
x gender				0.89	0.64	-0.19
Posttraumatic stress disorder	1.27	0.27	0.87	3.32	0.58	2.06**
x gender				0.29	0.65	-1.89*
Commitment	0.96	0.26	-0.14	0.84	0.44	-0.39
x gender				1.23	0.54	0.38

(Continued)

TABLE 3.3 (Continued)

	<i>Model 1</i>			<i>Model 2</i>		
	OR	SE ^{2b}	<i>z</i>	OR	SE ^{2b}	<i>z</i>
Relationship distress	1.38	0.23	1.41	1.64	0.42	1.17
x gender				0.79	0.50	-0.48
Sexual abuse history	1.99	0.30	2.30**	4.15	0.46	3.10***
x gender				0.29	0.62	-2.02**
Social integration	0.59	0.40	-1.31	0.68	0.66	-0.59
x gender				0.81	0.79	-0.26
Stressful conditions	2.26	0.41	2.00**	3.89	0.66	2.05**
x gender				0.44	0.78	-1.05
Substance abuse	1.29	0.27	0.95	2.84	0.46	2.26**
x gender				0.29	0.57	-2.19**
Violence approval	2.76	0.37	2.77***	7.02	0.61	3.20***
x gender				0.23	0.75	-1.98***
Violence socialization	1.49	0.31	1.31	1.69	0.54	0.97
x gender				0.84	0.64	-0.28

^a For risk factor x gender interactions, male = 0, female = 1.

^b Standard errors (SE) are for the coefficient (b), not the odds ratio.

* $p < .10$. ** $p < .05$. *** $p < .01$.

the case for this sample. Fifteen percent of the sample restricted their violence to minor assaults, and 8% engaged in one or more of the acts in the Severe Assault scale of the CTS2.

The rates for perpetration of partner violence by men and women are also consistent with many previous studies of violence in dating relationships in that the rates for men and women are about the same or somewhat higher for women (Archer, 2000; Stets & Straus, 1989; Straus & Ramirez, in press; Sugarman & Hotaling, 1989): For Minor Violence, the rates are 13% for men and 16% for women. For Severe Violence, the rates are 7% for men and 8% for women.

Risk Factors for Minor Assaults

Total Sample

The columns of Table 3.2 under the heading "Model 1" give the results of the multinomial logistic regression analyses using the total

sample to test the relationship between each of the risk factors measured by the PRP to minor assault. The following eight PRP variables were found to be associated with an increased probability of using only minor violence: Anger Management, Antisocial Personality Traits, Borderline Personality Traits, Relationship Conflict, Communication Problems, Dominance, Negative Attributions About Partner, and Substance Use.

To illustrate how to interpret this table, the entry in the row for “Anger Management” under “OR” (odds ratio) of .21 indicates that each increase of 1 point on the 4-point Anger Management scale multiplies the odds of a minor assault occurring by .21. Because multiplying by a fraction reduces the size of the product, this means that there is a *decrease* of 79% in the probability of minor violence. In short, the ability to control anger is a protective factor that greatly reduces the chances of physically attacking a partner. On the other hand, in the row labeled “Anti-Social Personality,” the odds ratio is 1.97. This indicates that each increase of 1 point on the 4-point Antisocial Personality scale multiplies the odds of a minor assault 1.97 times (i.e., that each increase of 1 point on the Antisocial Behavior scale almost doubles the probability of a minor assault).

Risk Factor by Gender Interactions

The columns of Table 3.2 headed “Model 2” give the results of the multinomial logistic regression analyses in pairs. The first row of each pair is the main effect when an interaction term is added to model 1. The lower row of each pair gives the results of the test for the interaction of each of the risk factors measured by the PRP with the gender of the student. None of the interaction terms are statistically significant. This indicates that the relationships between the risk factors and partner assault do not differ significantly for men and women.

Risk Factors for Severe Assaults

Total Sample

The columns in Table 3.3 headed “Model 1” give the results of the logistic regression analyses for severe assault for the total sample. The following 12 PRP variables were associated with an increased probability of using severe violence: Anger Management, Antisocial Personality, Criminal History, Conflict With Partner, Communication Problems, Dominance, Jealousy, Negative Attribution About the

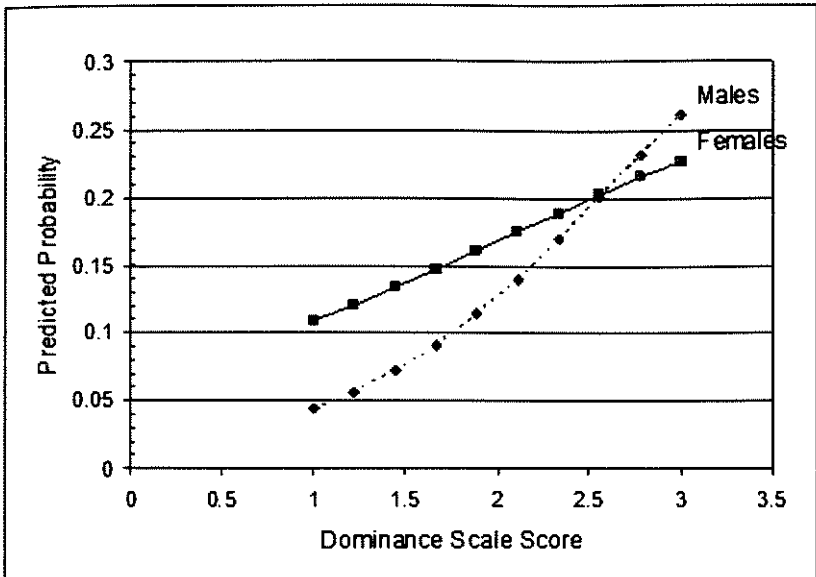


FIGURE 3.1 Relationship between Dominance scale score and probability of severe assault on a partner, by gender

Partner, Neglect History, Sexual Abuse History, Stressful Conditions, and Violence Approval.

Risk Factor by Gender Interactions

The columns of Table 3.3 headed “Model 2” give the results of the logistic regression analyses that included a test for the interaction of each risk factor with gender. Only 3 of the 21 risk factors had a significant interaction with gender at the $p < .05$ level, while two other risk factor \times gender interactions approached significance ($p < .06$). Thus, for 16 of 21 risk factors examined, the relationship between the risk factor and severe partner assault is similar for men and women.

Because the presence or absence of an interaction with gender is the key issue of this chapter, Figure 3.1 illustrates the typical result (lack of a significant interaction). It shows that the more one partner dominates the relationship, the greater the probability of violence by the dominant partner, regardless of whether the dominant partner is male or female.

Visual examination of the plot lines for males and females shows that the link between dominance and severely assaulting is somewhat stronger for males than females but not enough stronger to be statistically significant. Even if it were significant, Figure 3.1 shows that, for both men and women, the greater the degree of dominance in a relationship, the greater the probability of severely assaulting a partner.

Three risk factors that had significant interactions with the respondent's gender are Sexual Abuse History, Substance Abuse, and Violence Approval. The differences in the effects of these risk factors for men and women, holding all other variables at their mean, are discussed in the following paragraphs.

For Sexual Abuse History, the interaction effect shows that for a man with a sexual abuse history score of 1 (the minimum), the predicted probability of assaulting a partner is about 4%, while for a man with a score of 4 (the maximum), the predicted probability of assaulting a partner is about 49%, an increase of 45 percentage points. Among women, a minimum score on the Sexual Abuse History scale is associated with an 8% predicted probability of assaulting a partner, holding all other variables at their mean, and the maximum score is associated with a 12% probability, a difference of only 4 percentage points. Thus, a history of sexual abuse victimization is a much greater risk factor for men to commit severe assaults on partners than for women.

For Substance Abuse, the significant interaction shows that men who reported the lowest score on the Substance Abuse scale had about a 3% predicted probability of assaulting a partner, while those with the highest score had a 21% probability of assaulting a partner, an increase of 18 percentage points. For women with the lowest score on the substance abuse scale, the probability of assaulting a partner is about 10%, while for women who use substances the most, the predicted probability of assaulting a partner is 9% (i.e., almost the same rate). Thus, substance abuse is a risk factor for severe partner assault by men but not by women.

For Violence Approval, the significant interaction shows that, for men with the minimum Violence Approval score, the predicted probability of assault is about 1%, while for men with the highest Violence Approval score, the predicted probability of assault is 44%, an increase of 43 percentage points. For women with the minimum Violence Approval score, the predicted probability of assaulting a partner is 6%, while for women with the maximum Violence Approval score, the predicted probability of assault is 30%, a difference of 24 percentage points. Thus, the significant interaction effect indicates that approval of violence is associated with an increased probability of actual violence for both men and women but less strongly for women.

In addition to the three significant interaction effects, there were two additional interaction effects that were marginally significant ($p < .06$): Posttraumatic Stress Symptoms and Relationship Conflict.

For Posttraumatic Stress Symptoms, the almost significant interaction shows that the predicted probability of severe partner assault is 2% for men with the lowest PTS scores, while for men with the maximum score, the predicted probability of severe partner assault is 32%, a difference of 30 percentage points. In contrast, for females, the predicted probability of partner assault remains the same.

For Relationship Conflict, the interaction shows that for men with the minimum Relationship Conflict score, the predicted probability of severely assaulting a partner is less than 1%, while for men with the highest scores, the predicted probability is 64%, a difference of 63 percentage points. For women with the lowest Relationship Conflict score, the predicted probability of a severe assault is 4%, while for women with the highest scores, the predicted probability of assault is 28%, a difference of 24 percentage points. Thus, increases in conflict are associated with partner assault by both males and females, but for males there is a substantially greater increase in the probability of assault than for females.

To summarize: Of the five significant and marginally significant interactions, two showed that the risk factor applied to both men and women but somewhat more strongly to men (Relationship Conflict and Violence Approval); one showed that the risk factor applied to both men and women but much more strongly for men (Sexual Abuse History); and only two showed that the risk factor applied only to men (Substance Abuse and Posttraumatic Stress Symptoms).

DISCUSSION

This chapter reported a study of 854 university students (312 men and 542 women) focused on the question of whether the risk factors for physically assaulting a dating partner were different for men and women. When the dependent variable was minor assaults, such as slapping and throwing things at a partner, 8 of the 21 risk factors were found to be related to the probability of assaulting a partner. For all eight, the relationship was parallel for male and female students:

Anger Management
Antisocial Personality Traits
Borderline Personality Traits
Relationship Conflict
Communication Problems

Dominance
Negative Attributions About the Partner
Substance Abuse

When the dependent variable was severely assaulting a partner, such as punching or choking, 12 risk factors were found to be associated with an increased probability of assaulting a partner:

Anger Management
Antisocial Personality
Conflict With Partner
Communication Problems
Criminal History
Dominance
Jealousy
Negative Attributions About the Partner
Neglect History
Sexual Abuse History
Stressful Conditions
Violence Approval

For 9 of the 12 risk factors (75%), the relationship of these risk factors to severely assaulting a partner was parallel for males and females. Only three had a significant interaction with gender, although two more approached significance. Sexual Abuse History was associated with an increase in the probability of assaulting a partner for both men and women, but the effect was far stronger for men than for women. Substance Abuse and Posttraumatic Stress Symptoms were associated with an increase in the probability of assaulting a partner for men but not for women. Relationship Conflict and Violence Approval were associated with an increase in the probability of assaulting a partner for both men and women, but the relationship was stronger for men.

Limitations

The fact that this study is based on a sample of university students rather than a “clinical” sample of men and women arrested for partner violence or men and women who are victims of partner violence is both a strength and an *important limitation*. It is a strength because population samples are needed to guide prevention efforts. What is true of a clinical population often does not necessarily apply to the general population (i.e., the target of primary prevention). To assume that it does apply has

been called the "clinical fallacy." Conversely, what is true of the general population does not necessarily apply to clinical populations. To assume that it does has been called the "representative sample fallacy" (Straus, 1990b). A simple but important example is the widely held belief that once partner violence starts, it may escalate, but it will not cease. That is correct for samples of women in shelters for battered women. They would not be there if it had ceased. On the other hand, studies of the general population, such as Feld and Straus (1989), consistently find high rates of cessation. Thus, policies and practices based on the clinical group may not apply to the general population, just as advice based on the general population may not apply to clinical populations. Similarly, the results of this study concerning gender symmetry in perpetration and in etiology may not apply to severely assaulted and oppressed women, such as those who seek help from a shelter for battered women, or to women who are part of the less than 1% of violent couples who have had violence progress to the point of police intervention (Kaufman Kantor & Straus, 1990).

Caution is also needed because the results are based on cross-sectional data and may not reflect a cause-and-effect relationship between the risk factors studied and partner assault. However, the analyses controlled for a number of variables that could produce spurious results, such as confounding with socioeconomic status and social desirability response set.

Conclusion

With these limitations in mind, the results of this study suggest important conclusions about two widely held beliefs: that partner violence is an almost uniquely male crime and that when men hit their partners, it is primarily to dominate women, whereas partner violence by women is an act of self-defense or an act of desperation in response to male dominance and brutality. These beliefs were not supported by the results of this study. Instead, we found, as have many other studies, about equal rates of assaulting a dating partner by male and female students. Our investigation of risk factors also produced results that contradict the male dominance/female self-defense belief. The relationship to minor assaults of all 21 of the risk factors, including score on the Dominance scale, was parallel for men and women. For severe assaults, of the 12 risk factors found to be associated, we found no significant difference between men and women in nine of them, again including Dominance. Or, putting it the other way, around, 75% of the risk factors that were found to

be associated with severely assaulting a dating partner were parallel for men and women. It may be more than a coincidence that our review of previous research also found that about 75% of the variables related to partner violence were related for both men and women.

In respect to the key variable of dominance in the relationship, the results showing a parallel relationship of score on the Dominance scale to assaulting a dating partner by either the male or the female partner are consistent with the eight studies mentioned in the introduction. Thus, it is the injustices and power struggles that are associated with inequality that give rise to violence, not just inequality in the form of male dominance. If male dominance is much more prevalent than female dominance (as is widely assumed), that aspect of inequality is extremely important for understanding, preventing, and treating family violence. However, the empirical research on American couples has found that equal power relationships are predominant. The percentage of male-dominant couples in three large surveys ranged from 9% (Coleman and Straus, 1986) to about 25% (Blood & Wolf, 1960; Blumstein & Schwartz, 1983). The percentage of female-dominant relationships is similar.

It is important for both a theoretical understanding of domestic violence and clinical practice to keep in mind that dominance is a "risk factor," not a one-to-one cause. For example, extremely male-dominant partners in the National Family Violence Survey had a 10 times greater *probability* of assaulting a partner than did equalitarian men, but that raised the rate from 2% to 20%, which means that 80% of extremely male-dominant partners did not assault their partner in the year covered by this study. These same principles apply to all risk factors such as binge drinking (Kaufman Kantor & Straus, 1987). Most binge drinkers are not violent to their partners, as can be seen from the fact that, despite the three times greater probability of partner violence (from 6% among non-drinkers to 22% for binge drinkers), more than three-quarters of binge drinkers in that study did not assault their partners in the year of the study.

These results do not indicate that there is no difference in the etiology of violence against partners by men and women. Our study in fact identified at least three such differences. If these results are confirmed by other studies, partner violence prevention or treatment programs need to be constructed in ways that are aware of both the ways in which the risk factors are similar for both men and women and the ways in which they are different.

Policy and Practice Implications

This study and those cited in chapter 1 in this volume have revealed an overwhelming body of evidence that mutual violence is the predominant

pattern in the general population, and this study, along with a lesser but still large amount of evidence, suggests that the etiology of partner violence in the general population is mostly parallel for men and women. The fact that we found that dominance in the relationship is a risk factor for violence by women as well as by men is crucial because it contradicts the prevailing assumption that *male* dominance is the major element that needs to be changed to end domestic violence. Male dominance does need to be addressed, but so does female dominance and many other family system problems. In short, partner violence is more a gender-inclusive family system problem than a problem of a patriarchal social system that enforces male dominance by violence.

Unfortunately, the organization, funding, and staffing of current prevention and treatment efforts is wedded to the patriarchal dominance theory (Straus, in press). If researchers or service providers do not declare allegiance to these articles of faith, they risk being denied funding and ostracized (for two sets of personal experiences, see Holtzworth-Munroe, 2005; Straus, 1990c). For example, in December 2005, the National Institute of Justice published two "requests for proposals" for research on physical and sexual violence against partners. Both specified that applications that dealt with male victims would not be considered for funding. The set of nine articles that provided the most comprehensive available review of risk factors for family violence (Heyman & Slep, 2001) included an article on risk factors for male violence but nothing on violence by women. This omission was in response to the interest expressed by the funding agency.

The refusal to recognize the multicausal and family system nature of the problem has hampered the effort to end domestic violence. It has resulted in deliberately ignoring half of the perpetrators. Despite these obstacles, the situation is slowly changing. This book is an example of the process. Another example occurred when the Violence Against Women Act came up for renewal in late 2005. Men's rights groups were successful in having the act revised to include a paragraph permitting funding of services for male victims. These groups also recognize that, because of the ideological commitment and organizational structure of the funding agencies, legal permission to fund programs that address female violence and male victimization does not mean they will do so. Consequently, the groups that lobbied to have the act changed are now preparing for legal action to put that provision into effect. They are, of course, focusing on services for male victims. This will be an important start in recognizing the family system nature of most partner violence. However, much more is needed.

The domestic violence service system, including services for female victims, needs to replace the default assumption that partner violence is primarily the product of male dominance. Instead, the default assumption

needs to be that partner violence is predominantly mutual violence and other kinds of mutual mistreatment and that the risk factors are mostly the same for males and females. At the same time, service providers need to remain alert to cases that do not fit the typical pattern, including cases that fit the classical image of an oppressed and battered spouse. Although there are men who fall in this category, it is more often women. In addition, the harmful effects of all levels of violence are greater for women, physically, psychologically, and economically. Consequently, although services for male victims are needed, the need for services for female victims will continue to be greater.

In addition to services for male victims, many important changes can follow from the predominance of mutual violence and the predominance of parallel etiology of violence by male and female partners. We believe that ignoring these facts hampers prevention and treatment efforts and that the needed changes in prevention and offender treatment programs include the following:

- Replace the single causal factor “patriarchal dominance” model with a multicausal model.
- Replace male dominance as the major risk factor in need of change with dominance by either party but only as one of many risk factors that need attention.
- Give equal attention to developing prevention programs targeted to violence by women and girls.
- Secondary prevention efforts need to be open to a variety of new approaches, of which one of the most promising is restorative justice (Strang & Braithwaite, 2002; see also chapter 27 in this volume).

We believe that these changes in policy and practice, rather than weakening efforts to protect women, will enhance the protection of women because violence by women is a major factor contributing to the victimization of women. When women are violent, they are the partners most likely to be injured (Straus, 2005a, 2005b). Therefore, efforts to end partner violence by women will contribute to the protection of women. It is time to make the effort be one that is aimed at ending all partner violence, not just violence against women. Only then will women, as well as all other human beings, be safe in their own homes.

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