Journal of Family Violence, Vol. 10, No. 4, 1995

A Multivariate Investigation of Dating Aggression

Louise Foo[1] and Gayla Margolin[2]

This study investigated the following variables for their unique and combined contributions to dating aggression: exposure to aggression in the family of origin (witnessing interparental aggression or being the victim of aggressive parenting); attitudes justifying dating aggression (when humiliated or in self-defense); child-to-parent aggression; child sexual abuse; violent sexual victimization; alcohol use; and socioeconomic status. One hundred and eleven male and 179 female undergraduates reported on their own aggressive behaviors directed toward dating partners. Together, the predictor variables accounted for 41% of the variance in male-to-female aggression but only 16% of the female-to-male aggression. Humiliation, as a justification for dating aggression, contributes to the prediction of both males' and females' dating aggression, while self-defense, although a highly endorsed condition for justifying dating aggression, does not predict actual aggressive behavior. Exposure to interparental aggression plus the product between exposure and humiliation contribute to the prediction of males' dating aggression but exposure does not play a role in females' dating aggression. Violent sexual victimization contributes unique variance to both males' and females' dating aggression. The present data highlight the importance of examining specific circumstances under which males and females justify dating aggression and how such attitudes condoning aggression affect actual behaviors.

KEY WORDS: dating aggression; family of origin aggression; attitudes justifying dating aggression; child-to-parent aggression; sexual abuse; alcohol; socioeconomic status.

[1,2]Department of Psychology, SGM 501, University of Southern California, Los Angeles, California, 90089-1061.

0885-7482/95/1200-0351$7.50/0

INTRODUCTION

The investigation of dating violence offers a unique window into the linkages between childhood victimization and later aggressive behaviors (Bernard and Bernard, 1983; DeMaris, 1987; Follette and Alexander, 1992; Marshall and Rose, 1987, 1988; Sigelman, Berry, and Wiles, 1984; Tontodonato and Crew, 1992). According to Carlson (1990), the effects of chronic and cumulative exposure to family violence as a child might be observed more readily at the dating stage than in younger children. Dating relationships also might anticipate future intimate relations, in that dating is the context in which individuals are socialized for later marital roles (Bethke and DeJoy, 1993; Burcky *et al.*, 1988; Deal and Wampler, 1986; Follette and Alexander, 1992; Levy, 1990; Makepeace, 1981; Matthews, 1984). Thus, through the study of dating violence, we can learn how exposure to aggression during childhood might set the stage for adult abusive behaviors (Smith and Williams, 1992).

Two psychological processes by which exposure to aggressive models may influence aggression in young adults are observational learning and attitude formation. Observational learning, although defined with varying degrees of behavior specificity, assumes that children learn to behave aggressively by imitating aggressive acts they have witnessed in other family members (Bandura, 1973). Exposure to violent models, particularly one's parents, also might exert its influence through the molding of children's attitudes toward aggression (Ulbrich and Huber, 1981). In view of equivocal findings for each of these key variables, the present study investigated how aggression in the family of origin and attitudes condoning intimate aggression contribute to dating aggression. This study also explored the synergistic effects between exposure and attitudes by examining how the interaction between these two variables contributes to dating aggression. Contributions of other variables which might be risk factors for dating aggression also were assessed: aggression toward parents, alcohol consumption, child sexual abuse, previous victimization in a violent sexual act, and socioeconomic status.

Beginning with Makepeace's (1981) landmark publication, numerous studies have shown that, on average, about one-quarter to one-third of high school and college students reported involvement in dating violence, as perpetrators, recipients, or both (Arias *et al.*, 1987; Bernard and Bernard, 1983; Bergman, 1992; Cate *et al.*, 1982; DeMaris, 1987; Follingstad *et al.*, 1988; Gwartney-Gibbs et al., 1987; Henton et al., 1983; Lane and Gwartney-Gibbs, 1985; Makepeace, 1981, 1987; Marshall and Rose, 1987, 1988, 1990; Matthews, 1984; O'Keeffe, *et al.*, 1986; Riggs *et al.*, 1990; Sigelman *et al.*, 1984). Although prevalence rates for both expressing and receiving dating

aggression repeatedly are higher for females than for males, women are at a higher risk than men for experiencing injuries from dating aggression (Arias *et al.*, 1987; Bookwala *et al.*, 1992; Makepeace, 1986; Riggs, 1993; Stets and Pirog-Good, 1987; Sugarman and Hotaling, 1989).

Studies on exposure to aggressive models to explain prevalence rates of dating aggression have examined witnessing parents' marital aggression (father-to-mother, mother-to-father, or both) and being the victim of aggression by one or both parents. Some studies indicated that both exposure variables were related to dating aggression (Marshall and Rose, 1988; Riggs *et al.*, 1990), while other studies implicated only one type of exposure. O'Keeffe *et al.* (1986) found that students who reported observing interparental aggression had a statistically greater rate of dating violence, whereas the finding between experiencing child abuse and dating aggression was not significant. Sigelman *et al.* (1984), on the contrary, found an association between dating aggression and parent-to-child abuse, but not witnessing marital aggression. Bernard and Bernard (1983) reported that neither witnessing nor experiencing parental aggression alone was related to date assaults, but combination of these two variables (either observing or experiencing) was associated with dating aggression. The relationship of each exposure variable to courtship aggression also varied by gender, with substantially more evidence related to male-to-female dating aggression (Breslin *et al.*, 1990; DeMaris, 1987; Gwartney-Gibbs *et al.*, 1987; Marshall and Rose, 1987; 1988). Exceptions were found by Follette and Alexander (1992) and Tontodonato and Crew (1992). Follete and Alexander (1992) reported an association between fathers' abuse and females' dating aggression, but found no relationship between familial variables and males' dating aggression. Similarly, Tontodonato and Crew (1992) found a trend for predicting parent-to-child violence to females', not males', courtship violence. While exposure to violence in one's family of origin appears to affect dating relationships, it does not fully explain assaults on dates (Follette and Alexander, 1992; Smith and Williams, 1992).

Attitudes about when aggression is acceptable or justifiable in intimate relationships also contribute to the understanding of dating aggression. While the majority of both violent and nonviolent students rated dating violence as unacceptable under most circumstances (Cate *et al.*, 1982; Henton *et al.*, 1983; Smith and Williams, 1992), many saw it as acceptable or normal in at least some situations. Based on a study of female college students, Roscoe (1985) reported that approximately 70% of his participants listed at least one form of dating violence, such as slapping, punching, and kicking, as acceptable, and over 80% offered situations in which physical force between partners was acceptable. Similarly, 50% of Matthews' (1984) nonviolent subjects believed that couples slapping each

other in a dating relationship was at least somewhat normal, and 31% believed this behavior to be at least somewhat acceptable.

Identification of specific circumstances under which males and females condone dating aggression warrants further attention. Roscoe's (1985) subjects indicated that violence might be acceptable in instances of self-defense or when acting out of jealousy. Self-defense may be endorsed by women as a justifiable reason for violence, in that they are at greater risk for injury due to intimate violence than are men and may view aggression as a way to defend against bodily harm. Makepeace (1986) found that females, more often than males, perceived their dating violence as self-defensive. Saunders' (1986) data also lent support to this notion with women reporting self-defense as the most common motive for both severe and nonsevere violence. Men's violence, on the other hand, has been associated with particular sensitivities to humiliation, in particular, jealousy, rejection, and public embarrassment (Dutton and Browning, 1988; Holtzworth-Munroe, 1992). Based on Greenblat's (1985) college student sample, circumstances legitimizing husband's physical force against their wives included both self-defense, jealousy, and wife's out-of-control behavior. The present study further examined both males' and females' tendencies to view violence as justifiable under two sets of conditions, self-defense and when being humiliated by the partner. Self-defense was anticipated to be endorsed by women as a justifiable circumstance for female-to-male aggression, while humiliation was anticipated to be endorsed by men as a justifiable reason for male-to-female aggression.

Three additional issues related to attitudes concern: (a) the extent to which attitudes condoning violence are related to actual violent behavior, (b) the extent to which such attitudes can be attributed to what was learned in the family environment, and (c) the extent to which attitudes and exposure together have an interactive effect in their prediction of dating aggression. While attitudes condoning violence have been associated with dating aggression (Deal and Wampler, 1986; Follingstad *et al.*, 1988; Stets and Pirog-Good, 1987; Tontodonato and Crew, 1992), attitudes and behaviors are not always consistent. Dibble and Straus (1980) indicated that spousal aggression was more influenced by a partner's violence than by the respondents' own attitudes about aggression. Bookwala *et al.* (1992) reported that adversarial sexual beliefs, an indication of attitudes condoning violence, were predictors of males', but not females', dating violence. Additionally, while it may be assumed that a child from a violent, compared to a nonviolent, household is more accepting of dating aggression, only two studies have examined the relationship between exposure to familial aggression and attitudes condoning intimate aggression. Ulbrich and Huber (1981) reported that males, not females, were more likely to approve of

violence against women if they observed their fathers hitting their mothers. Smith and Williams (1992) found one attitude to differentiate students who had been abused by their parents from those not suffering abuse. That is, students who experienced severe abuse from parents were more likely to report that uncontrollable anger justified dating aggression. Finally, an important question to be addressed is whether persons who were exposed to family of origin aggression and who condone aggression in intimate relations are more likely to aggress toward their dates. Witnessing aggressive models in childhood either may facilitate acceptance of intimate aggression or may lead to the rejection of this interactional style. Previous research, however, has not addressed the interactive effects between exposure and attitudes on premarital aggression.

In addition to the two variables of central interest, exposure to aggression in the family of origin and attitudes condoning intimate aggression, this study explores several other variables as possible risks for dating aggression. First, aggression toward one's parents is included as one step in the evolution of aggressive behavior toward loved ones. Cornell and Gelles (1982) reported that adolescent to parent violence was related to the violence that the child has received or witnessed between his or her parents. Furthermore, our own pilot work revealed a moderate association between college students' aggression toward parent and expression of dating aggression, r (62) = .36 for males and r (84) = .36 for females, $p < .05$. The present study examines aggression toward parents as a marker for adopting aggression as a method for solving problems in intimate relationships and explores whether aggression toward the parents predicts to dating aggression. Second, this study considers child sexual abuse and victimization by a violent sexual act in understanding courtship aggression. The stress produced by the trauma of child sexual abuse has been associated with aggressiveness in children (Browne and Finkelhor, 1986; Tong *et al.*, 1987; Trickett and Putnam, 1993). While the relationship between child sexual abuse or violent sexual victimization and dating aggression is, as yet, unknown, it is possible that the aggression may be acted out in dating relationships. Third, alcohol use is posited as a risk factor, as indicated in previous research on the association between alcohol consumption and dating aggression (Burcky *et al.*, 1988; Julian and McKenry, 1993; Makepeace, 1981, 1987; Riggs and O'Leary, 1989). Finally, socioeconomic status is examined in light of the inconclusive data regarding this variable and dating aggression (Deal and Wampler, 1986; Makepeace, 1987; Matthews, 1984; O'Keeffe *et al.*, 1986; Sigelman *et al.*, 1984; Sugarman and Hotaling, 1989; White and Koss, 1991).

In sum, this study takes a multivariate approach toward furthering our understanding of dating aggression. First, descriptive data will be pre-

sented on the frequencies of males' and females' expression of various forms of dating aggression. Second, descriptive data will be presented on the level of exposure to family of origin aggression and on the acceptability of dating aggression under the specific circumstances of being humiliated by one's date or needing to defend oneself when faced with a date's aggression. Third, the association among all the predictor variables will be examined. It is hypothesized, in particular, that greater exposure to aggression in the family of origin will be associated with attitudes reflecting greater acceptance of aggression as a response to being humiliated or being physically attacked.

Finally, separate regression models for males and females will be presented to explore the unique and joint contributions of each predictor to dating aggression. It has been suggested that the pattern of risk factors associated with females' dating aggression might be quite different from that associated with males' dating aggression (Bookwala *et al.*, 1992). In particular, it is hypothesized that exposure variables will predict males', but not females', dating aggression. In addition, it is speculated that attitudes condoning aggression as a means of self-defense will be related to females' dating aggression while attitudes condoning aggression as a response to humiliation is hypothesized to contribute to males' dating aggression. The regression analyses will be conducted in three steps in a hierarchical regression. Step 1, an exploratory analysis, examines the predictive power of aggression toward parents, child sexual abuse, prior violent sexual victimization, alcohol consumption, and socioeconomic status. These are entered first to examine the contributions of these secondary variables, prior to entering our two groups of key variables, exposure and attitudes. Step 2 enters exposure variables (witnessing parents' marital aggression and being a victim of parental aggression) and attitude variables (condoning dating aggression when facing humiliation or an attacking partner), allowing us to examine the predictive power of our two groups of key variables above and beyond the previous set of variables. Finally, Step 3 enters the interaction between the attitude variables and exposure (sum of witnessing and experiencing parental aggression), allowing us to identify whether there are synergistic effects of these variables over and above other variables.

METHOD

Subjects

Four hundred and sixty three undergraduate students initially filled out questionnaires for this study, but 52 data sets were not usable due to

the following reasons: respondent did not specify gender; respondent was married, divorced, or widowed; respondent was exclusively homosexual or had no dating experience. Another 121 students were eliminated due to missing data on important variables, leaving a final sample of 111 males and 179 females. Student *t* tests indicated that there were no group differences between male completers versus noncompleters on any of the predictor or criterion variables, or demographic variables. Female completers versus noncompleters also did not differ, with the exception of information about alcohol use. Answers to three separate questions indicated that female completers drank more than noncompleters. [Female completers compared to noncompleters reported a significantly higher number of times in which they were drunk (M = 1.34 vs. .83), t (180) = –2.08, $p < .05$; a higher number of days in which they had had at least one drink (M = 4.35 vs. 2.63), $t(144) = -2.76$, $p < .01$; and a fewer number of days elapsing between drinks (M = 19.6 vs. 22.6), $t(240) = 2.14$, $p < .05$.]

Male and female respondents did not differ significantly on age, parents' education level, living arrangement, or ethnicity. Age range for male students was 16 to 31 years (M = 19.8 years, SD = 2.4) and for females was 17 to 43 years (M = 19.3 years; SD = 3.1). Parents' years of education ranged from less than 8th grade to graduate training for both male and female subjects. Parents' education level for male subjects showed the following distribution: less than 8th grade = 4.5% for fathers and 5.4% for mothers; some high school or high school completion = 18.2% and 26.1%; some college or college completion = 46.3% and 49.5%; and postgraduate training = 30.9% and 18.9%. Parents' education level for female subjects was distributed into the same categories as follows: 5.6% and 5.1%; 10.7% and 23.1%; 49.1% and 52.2%; and 34.6% and 19.7%. Most respondents did not live with someone with whom they had a romantic relationship; only six women and four men currently lived with a romantic partner. The ethnic composition of male and female subjects was 55.9% and 57.0% Caucasian, 20.7% and 22.3% Asian, 10.8% and 10.6% Latino, 4.5% and 5.6% African-American, and 8.1% and 4.5% were from other ethnic groups. Secondary analyses were conducted separately examining the relationships between the predictors and dating aggression for Caucasians and Asians, as they are the two predominant ethnic groups in the sample.

Measures

Questionnaires were used to collect information on subjects' demographic characteristics, experience of aggression in the family of origin and dating relationships, attitudes toward intimate aggression, alcohol consump-

tion, child sexual abuse, prior violent sexual victimization, and socioeconomic status.

Attitudes About Dating Index

The Attitudes About Dating Index (Margolin and Foo, 1992) is a self-report measure patterned after Greenblat (1985), assessing how justifiable it is for a male to slap or hit his girlfriend and for a female to slap or hit her boyfriend under 24 specific conditions. The term "justifiable" was used to capture attitudes concerning the reason a date might use physical force even if that response is not considered desirable or acceptable. Respondents rated the justifiability of each condition on a Likert 7-point scale, ranging from unjustifiable (1) to justifiable (7). There were two separate listings of the conditions, one evaluating justifiability for a male slapping/hitting his girlfriend (male-to-female aggression) and one evaluating justifiability for a female slapping/hitting her boyfriend (female-to-male aggression). The order of the two versions was counterbalanced so that approximately half of the subjects received the version assessing male-to-female aggression first and the others received the version assessing female-to-male aggression first. Among the 111 male subjects, 62 received the male-to-female aggression version first; of the 179 female subjects, 94 received the female-to-male version first. A Chi-Square test of Gender × Order revealed no significant differences in the number of male and female students receiving each order. For purposes of this study, which focuses on how attitudes are associated with dating aggression, we used the males' justifiability ratings on male-to-female aggression and the females' ratings on female-to-male aggression. Items are worded differently on the male-to-female and the female-to-male version. For example, "He catches her in bed with another man" on the male-to-female version is stated as "She catches him in bed with another woman" on the female-to-male version.

Twelve of the items on this index were *à priori* classified into the two conditions of interest, being humiliated (nine items) and using self-defense against an attacking partner (three items). The Humiliated scale spans dimensions of jealousy, "Catches her in bed with another man", being made to feel stupid, "Makes him look like a fool in front of his family and friends," and insults against a close relation/friend, "Calls his mother nasty names." Item-total correlations ranged from .62 to .84 for males and .64 to .81 for females. The Self-defense scale includes being hit or threatened with a weapon, with item-total correlations ranging from .54 to .63 for males and .48 to .63 for females. Cronbach's alphas for males and females

were .94 and .93 on the Humiliated scale and .75 and .75 on the Self-defense scale.

Conflict Tactics Scales

The Conflict Tactics Scales (CTS; Straus, 1979) offers a comprehensive index of the frequency and form of responses to conflict. This instrument is estimated to have relatively high internal consistency reliability and stable factor structures (Barling *et al.*, 1987; Straus, 1979; Straus *et al.*, 1980) and has been used in numerous studies of dating aggression (e.g., Arias *et al.*, 1987; Henton *et al.*, 1983; Sigelman *et al.*, 1984; Stets and Pirog-Good, 1987). For our purposes here, we used only the Physical Aggression subscale, which consists of the following items for all forms of interpersonal aggression: pushed, grabbed, or shoved; slapped, kicked, bit, hit with a fist; hit or tried to hit with something; beat up the other one; threatened with a knife or gun, used a knife or gun. The parent-to-child version also included spanked and shook the other one. Subjects completed four separate versions of the CTS measure: interparental aggression (father-to-mother and mother-to-father); (b) parents-to-child aggression; (c) child-to-parents aggression; and (d) dating aggression. Data on interparental aggression were separately recorded for father-to-mother and mother-to-father aggression and then summed to form one score.

For purposes of the analyses, each item was scored as never having occurred versus having occurred. Each item that occurred was scored as a '1' and then summed across all items in that scale. Thus, the range of scores was 0–14 for interparental aggression (seven items for father-to-mother aggression and seven for mother-to-father aggression). The range for dating aggression and parent-to-child aggression was 0–7, and the range for child-to-parents aggression was 0–9. [In filling out this form, subjects indicated the frequency of the aggressive behaviors on a 7-point scale: never (0), once (1), twice (2), three to five times (3), six to ten times (4), 11 to 20 times (5), and more than 20 times (6). The occurrence vs. nonoccurrence scoring was adopted due to non-normal distributions if we summed actual frequencies or categories. Moreover, this seemed to be a reasonable and a conservative approach given the retrospective nature of these data and the difficulty in identifying the frequency of occurrence.]

Alcohol Consumption

The measurement of alcohol consumption was derived from the following three items assessing drinking behavior in the past month: the num-

ber of days the respondent had at least one alcoholic beverage, the number of times the respondent had been drunk, and the longest time during which the respondent had not taken a drink (adapted from the Impairment Index (Armor *et al.*, 1976)). To form an alcohol consumption composite score (Alcohol Use), scores of each item were standardized with *z*-transformations and summed. The alpha reliability of this composite scale was .86 for males and .80 for females.

Child Sexual Abuse and Prior Violent Sexual Victimization

Respondents were asked whether: (a) they had nonconsenting sexual contact with an adult or teenager under age 14 [age criterion adapted from Russell (1983)]; and (b) they had been the victim of a violent sexual act. Each question was answered with a "yes" versus "no" response.

Demographic Information

The survey packet included questions regarding the subjects' age, gender, marital status, sexual orientation, living arrangements, ethnic background, and parents' education and occupation. Respondents' socioeconomic status (SES) was estimated from their parents' occupation and years of education, using the Hollingshead's (1965) Two Factor Index of Social Position.

Procedure

With the instructor's permission, the study was introduced during the class period. Surveys were distributed in eight undergraduate social sciences classes and one class for rape counselors. Most students completed the surveys in class, with the exception of one class, in which the questionnaires were sent home in a larger packet of survey forms. Participants were assured of complete anonymity.

RESULTS

Level of Dating Aggression and Aggression in the Family of Origin

Table I presents descriptive data of the percent of respondents who expressed aggressive behaviors toward their dates. The overall level of dat-

Table I. Percent Endorsement of Specific Acts in Males' and Females' Dating Aggression

Aggressive acts	Percent Endorsement		
	Males[a]	Females[b]	Chi-square[c]
Pushed grabbed, shoved the other one	20.7	33.0	5.06[e]
Slapped the other one	9.9	20.7	5.74[e]
Kicked, bit, hit with a fist	7.2	10.6	<1
Hit or tried to hit with something	5.4	10.6	2.36
Beat up the other one	4.5	.6	5.26[e]
Threatened with a knife or gun	2.7	.0	4.89[e]
Used a knife or gun	1.8	.0	3.25
Total[d]	24.3	38.5	6.26[e]

[a] $n = 111$.
[b] $n = 179$.
[c] $df = 1$.
[d] Total percentage of students who endorsed at least one of the aggressive acts.
[e] $p < .05$.

ing aggression was moderately high, with approximately one fourth of the males and two fifths of the females reporting that they engaged in at least one of the aggressive behaviors. The most common act of aggression for both males and females was "pushed, grabbed or shoved the other one." While women's endorsement rates were higher than were men's on the less severe items, this pattern was reversed for the more severe items of "threatening with a knife or gun" and "beat up the other one."

Table II describes the extent to which respondents have witnessed or been victimized by specific acts of aggression in their families of origin, or have been aggressive toward their parents. Overall, approximately one third of the subjects had witnessed interparental violence, and well over half had been the victims of parent-to-child aggression. While the comparison between male and female subjects showed no overall differences in the amount of interparental aggression witnessed, females were more likely to report having witnessed, "kicked, bit, hit with a fist," and "hit or tried to hit with something." No differences were found between males' and females' reports of having been the victim of parent-to-child aggression. In addition, 13.5% of the males and 16.2% of the females reported being aggressive toward their parents. Females, compared to males, were more likely to report that they hit or tried to hit their parents with something.

Endorsement of Conditions Justifying Aggression Toward One's Date

Table III presents the mean ratings and distributions of ratings on the justifiability of self-to-date aggression in each of the three conditions

Table II. Percent Endorsement of Specific Acts by Males and Females for Interparental Aggression, Parent-to-Child Aggression, and Child-to-Parent Aggression

	Interparental			Parent-to-Child			Child-to-Parent		
Aggressive Acts	Male[a]	Female[b]	Chi-square[c]	Male[a]	Female[b]	Chi-square[c]	Male[a]	Female[b]	Chi-square[c]
Pushed, grabbed, shoved the other one	24.3	26.3	<1	27.9	32.4	<1	9.9	11.7	<1
Slapped the other one	19.8	23.5	<1	35.1	40.8	<1	5.4	9.5	1.57
Kicked, bit, hit with a fist	7.2	15.1	4.00[e]	6.3	10.1	1.22	2.7	4.5	<1
Hit or tried to hit with something	11.7	22.3	5.19[e]	18.9	25.1	1.51	2.7	8.9	4.35[e]
Beat up the other one	5.4	8.4	<1	4.5	6.1	<1	.9	1.1	<1
Threatened with a knife or gun	5.4	8.4	<1	2.7	.6	2.32	.9	1.1	<1
Used a knife or gun	1.8	1.1	<1	.9	.0	1.62	.9	.0	1.62
Spanked the other one[d]	—	—	—	51.4	60.3	2.25	—	—	—
Shook the other one[d]	—	—	—	33.3	35.2	<1	—	—	—
Total	30.6	34.6	<1	59.5	69.3	2.92	13.5	16.2	<1

[a] $n = 111$.
[b] $n = 179$.
[c] $df = 1$.
[d] These items only appeared in the assessment of parent-to-child aggression.
[e] $p < .05$.

of self-defense and the nine conditions related to being humiliated. Males' data examined conditions regarding male-to-female aggression, while females' data examined conditions regarding female-to-male aggression. In general, the self-defense items were the conditions rated by both males and females as most justifiable for aggression. A MANOVA on the three self-defense items, however, showed a higher ratings by females than by males $F(3, 286) = 36.6, p < .001$. Females assigned a higher rating of justifiability to, "He comes at her with a knife," and "In an argument, he hits her first." Females similarly rated the humiliation items higher than did males, $F(9, 280) = 2.19, p < .05$. Females assigned higher ratings than did males on five of the nine items.

Intercorrelations Among Predictors

Intercorrelations among the hypothesized predictors of dating aggression for males and females are presented in Table IV. The predictors included two indices of childhood exposure, Interparental and Parent-to-child, two variables reflecting attitudes condoning dating aggression, Humiliated and Self-defense, and the additional five variables, Child-to-parent aggression, Child sexual abuse, Violent sexual abuse, Alcohol use, and SES. For both males and females, the two exposure variables correlated with each other and each correlated with Child-to-parent aggression. The two types of attitudes condoning dating aggression also were correlated for males and females. Exposure in the family of origin was not related to the attitudes condoning dating aggression, indicating that exposure may foster such attitudes in some individuals but is also likely to foster attitudes against dating violence in other individuals. Females who were exposed to aggressive parenting reported a higher likelihood of being a victim of a violent sexual act. Associations also were found for females' scores on child-to-parent aggression with sexual abuse and alcohol use. For males, exposure to aggressive parenting was related only to child sexual abuse.

Prediction of Dating Aggression

Tables V and VI present separate hierarchical regression analyses for male-to-female dating aggression and female-to-male dating aggression and also present the correlations between each predictor and dating aggression. Hierarchical regressions were run, first entering the five secondary variables, second entering the two exposure variables and the two attitudinal variables, and finally entering the products of exposure and attitudes (Exposure × Humiliated, Exposure × Self-defense). The regression equation

Table III. Mean Ratings, Standard Deviations, and Percent of Males' and Females' Endorsement of the Justifiability of Various Attitudes

	Males[a]					Females[b]					
			Percent Endorsement					Percent Endorsement			
			Unjustifiable	Somewhat	Justifiable			Unjustifiable	Somewhat	Justifiable	
Items[c]	*M*	*SD*	1	2–5	6–7	*M*	*SD*	1	2–5	6–7	*F*[d]
					Self-defense						
She comes at him with a knife	5.3	2.2	12.6	26.1	61.3	6.0	1.8	7.3	16.2	76.5	8.0[e]
In an argument, she hits him first	2.7	1.9	42.3	46.8	10.8	5.2	2.2	12.8	28.5	58.7	97.4[f]
She threatens to get her gun	3.6	2.4	34.2	36.9	28.8	4.1	2.5	29.1	30.2	40.8	3.1
					Humiliated						
He catches her in bed with another man	3.0	2.3	49.5	30.6	19.8	3.6	2.5	37.4	32.4	30.2	3.8
He learned that she is having an affair	2.4	1.9	52.3	37.8	9.9	3.1	2.3	43.6	34.1	22.3	6.8[g]
She call him "stupid" over and over again	2.1	1.8	64.0	28.8	7.2	2.8	2.2	47.5	35.2	17.3	7.9[e]
She calls his mother nasty names	2.1	1.7	61.3	31.5	7.2	2.8	2.1	44.1	38.5	17.3	10.4[e]
She flirts with another man in front of him and his friends at a party	2.0	1.7	64.0	28.8	7.2	2.1	1.7	57.5	34.6	7.8	<1

She makes him look like a fool in front of his family and friends	1.9	1.5	68.5	26.1	5.4	2.2	1.7	55.3	36.9	7.8	3.3
She accuses him of being an incompetetent and insensitive human being	1.7	1.3	69.4	27.9	2.7	2.3	1.8	55.9	35.2	8.9	8.2[e]
She insults his best friend	1.6	1.1	71.2	28.8	0	2.0	1.6	59.2	35.2	5.6	6.4[g]
He overhears her talking on the phone with her ex-boyffiend	1.5	1.3	79.3	18.0	2.7	1.6	1.3	76.5	20.1	3.4	<1

[a] $n = 111$.
[b] $n = 179$.
[c] Each items is worded here as it appears on the male-to-female version, and there is a shift in gender on the female-to-male version. For example, "He catches her in bed with another man" is stated as "She catches him in bed with another woman" on the female-to-male version.
[d] $df = 1, 288$.
[e] $p < .01$.
[f] $p < .001$.
[g] $p < .05$.

Table IV. Intercorrelations Among Predictors for Males[a] and Females[b]

Predictors	Interparental	Parent-to-child	Humiliated	Self-defense	Child-to-parent	Violent sexual abuse	Child sexual abuse	Alcohol use	SES
Interparental	—								
Parent-to-child	.33[c] (.49[c])	—							
Humiliated	.12 (.06)	.13 (.01)	—						
Self-defense	.02 (.04)	.14 (.02)	.54[c] (.48[c])	—					
Child-to-parent	.39[c] (.35[c])	.36[c] (.46[c])	.31[c] (−.01)	.08 (−.04)	—				
Violent sexual abuse	−.06 (.26[c])	−.12 (.34[c])	−.03 (.06)	−.04 (.05)	−.04 (.33[c])	—			
Child sexual abuse	.16 (.10)	.28[c] (.17)	.02 (−.12)	.04 (−.12)	.21 (.23[c])	−.04 (.34[c])	—		
Alcohol use	.03 (.07)	−.01 (.19)	.04 (−.01)	.11 (−.05)	.02 (.24[c])	.08 (.03)	.06 (.01)	—	
SES	.03 (.12)	.02 (−.02)	.32[c] (−.03)	.20 (.13)	−.15 (−.03)	.03 (.05)	−.02 (.04)	−.05 (−.26[c])	—

Note: Correlations for females are in parentheses.
[a] $n = 111$.
[b] $n = 179$.
[c] $p < .01$.

for males showed that all of the predictors together explained 40.6% of the variance in male-to-female dating aggression. Step 1 for males produced an $R^2 = .20$ (Adjusted $R^2 = .16$), F (5, 105) = 5.24, $p < .001$, with unique variance from Child-to-parent aggression and Violent sexual abuse. Alcohol use, although significantly correlated with male-to-female dating aggression, did not account for significant unique variance in the regression equation. Entering the exposure and attitudinal variables in Step 2, along with the five original variables, produced an $R^2 = .37$ (Adjusted $R^2 = .32$), F (9, 101) = 6.72, $p < .001$. Here, unique variance came from Interparental aggression and condoning dating aggression when Humiliated.

Including the two product terms in step three resulted in an overall $R^2 = .41$ (Adjusted $R^2 = .34$), F (11, 99) = 6.15, $p < .001$, with unique variance coming from Exposure × Humiliated. To understand this product term, we examined the correlation between attitudes and dating aggression in two groups of males, those who had been exposed versus those who had not been exposed to aggression in the family of origin. The correlations between scores on Humiliated and dating aggression, although higher for the exposed group, $r(72) = .22$, $p < .07$, than for the nonexposed group, $r(39) = .08$, n. s., were not significantly different from one another, as examined through a Z-test of r -to-z-transformed correlations.

The regression equation for females showed that all of the predictors together explained 16.2% of the variance in female-to-male dating aggression (Adjusted $R^2 = .11$), $F(11, 167) = 2.94$, $p < .01$. The results of step one showed a total $R^2 = .09$, (Adjusted $R^2 = .06$), F (5, 173) = 3.37, $p < .01$, with unique variance from Violent sexual abuse. Adding the exposure variables and attitudinal variables resulted in an $R^2 = .15$, (Adjusted $R^2 = .10$), F (9, 169) = 3.30, $p < .01$, with unique variance from the Humiliated attitudinal variable but no significant contribution from either exposure variable. The products of exposure × attitudinal variables did not contribute significantly to the prediction of female's dating aggression. [Due to non-normal distributions of the aggression scores, a more conservative approach of examining the data was attempted in that frequencies of various aggression scales were log-transformed to reduce the skewness of the distributions (Scheffé, 1959). The regression results on log-transformed aggression scores versus the non-log-transformed data were almost identical for females. The total R^2 were the same, and the same variables proved to be significant with only slight variations in the level of significance. For males, the total R^2 in the non-log-transformed regression analysis was .41, $p < .01$ and was .36, $p < .001$ in the log-transformed analysis. Additionally, the log-transformed data showed that alcohol use, but not child-to-parent aggression, to be significant in the first step of the regression analyses. All

Table V. Multiple Regression to Predict Males' Dating Aggression

Variable	r	$R^2\Delta$	F^a
Step 1	—		
Child-to-parent aggression	.30[b]	.08	10.05[b]
Violent sexual abuse	.26[b]	.07	8.68[b]
Child sexual abuse	.16	.01	1.08
Alcohol use	.20[d]	.03	3.61
SES	−.05	.00	<1
Step 2			
Interparental aggression	.45[b]	.13	21.54[c]
Parent-to-child aggression	.15	.00	<1
Humiliaited	.19[d]	.03	5.62[d]
Self-defense	−.03	.02	2.88
Step 3			
Exposure × Humiliated	.38[b]	.03	5.22[d]
Exposure × Self-defense	.09	.01	1.33

Note. n = 111.
[a] df(Step 1) = 1, 105; df(Step 2) = 1, 101; df(Step 3) = 1, 99.
[b] $p < .01$.
[c] $p < .001$.
[d] $p < .05$.

other significant variables for males in the non-log-transformed analysis continued to be significant in the log-transformed analysis.]

Predictor Variables and Dating Aggression in Caucasians Versus Asians

Given that Caucasians and Asians were the two predominant ethnic groups represented in this sample, secondary analyses were run to explore whether both groups show similar patterns on the predictor variables and similar associations between the predictors and dating aggression. Most importantly, no differences were found between Caucasians' and Asians' reported dating aggression, either for males, $F(1, 82) = .02$, n.s., or for females, $F(1, 139) = .80$, n.s. [Asians in this sample (n = 23 males and 40 females) are a diverse group, comprised of persons from at least 8 different ethnic origins in Asia. The Caucasian sample included 61 males and 101 females.] In terms of predictor variables, Asians were more likely than Caucasians to rate humiliation as a justification for dating aggression (for males, $M = 2.62$ vs. $M = 1.77$, $F(1,82) = 7.05$, $p < .05$, and for females, $M = 2.98$ vs. $M = 2.31$, $F(1, 139) = 5.23$, $p < .05$). Caucasians reported greater alcohol use than did Asians (for males, $M = 1.58$ vs. $M = -1.19$, $F(1,82) = 13.67$, $p < .001$, and for females, $M = .45$ vs. $M = -1.24$, $F(1,$

Table VI. Multiple Regression to Predict Females' Dating Aggression

Variable	r	$R^2\Delta$	F^a
Step 1	—		
Child-to-parent aggression	.16[d]	.01	1.97
Violent sexual abuse	.23[c]	.05	9.30[c]
Child sexual abuse	−.06	.02	4.68[b]
Alcohol use	.08	.00	<1
SES	.02	.00	<1
Step 2			
Interparental aggression	.06	.01	1.36
Parent-to-child aggression	.17[c]	.01	1.59
Humiliated	.25[c]	.04	7.37[c]
Self-defense	.15[d]	.00	<1
Step 3			
Exposure × Humiliated	−.01	.00	<1
Exposure × Self-defense	−.10	.00	1.43

Note. $n = 179$.
[a] df(Step 1) = 1, 173; df(Step 2) = 1, 169; df(Step 3) = 1, 167.
[b] Child sexual abuse shows a nonsignificant correlation with females' dating aggression and functions as a suppressor variable in the regression.
[c] $p < .01$.
[d] $p < .05$.

139) = 14.89, $p < .001$). [Means of Alcohol use were based on a composite of z-transformed scores of the three alcohol questions.] Asian females, compared to Caucasian females, also reported a higher SES level, $M = 73.91$ vs. 63.26, F (1,139) = 8.71, $p < .05$.

Correlations between each of the predictor variables and dating aggression are found in Table VII. Not surprisingly, because Caucasian men represent 55% of the total male sample, their pattern of correlations is similar to that for the entire male sample, with interparental aggression, attitudes of humiliation, child-to-parent aggression, violent sexual abuse, and child sexual abuse showing correlations with dating aggression. For Asian males, none of the variables correlated significantly with dating aggression, reflecting both a lower sample size and, in some instances, a lower correlation. The correlation for Caucasian males was significantly different from that for Asian males only for child-to-parent aggression, as examined through a *Z-test of* r-to-z-transformed correlations ($z = 2.21, p < .05$). Caucasian females' pattern of correlations also is similar to the correlational pattern for the entire female sample. No significant correlations were found for Asian women. Z-tests of r-to-z -transformed correlations suggest that correlations for Caucasian females were significantly different from those for Asian females for child-to-parent aggression ($z = 2.60, p < .05$) and violent sexual abuse ($z = 2.14, p < .05$).

Table VII. Correlations Between Predictors and Dating Aggression for Caucasian versus Asian Males and Females

	Males		Females	
Variables	Caucasians (n = 61)	Asians (n = 23)	Caucasians (n = 101)	Asians (n = 40)
Interparental	.36[c]	.20	.17	−.13
Parent-to-child	.18	.26	.14	.31
Humiliated	.31[b]	.20	.28[c]	.23
Self-defense	−.05	−.13	.24[b]	.03
Child-to-parent	.44[c]	−.10	.29[c]	−.02
Violent sexual abuse	.35[c]	—[a]	.40[c]	.01
Child sexual abuse	.26[b]	—[a]	−.01	−.09
Alcohol use	.22	.37	.02	.30
SES	−.12	.18	.04	−.07

[a]Asian men did not endorse any child or violent sexual abuse.
[b]$p < .05$.
[c]$p < .01$.

DISCUSSION

Results of this study provide support for a multivariate model of dating aggression, and highlight the idea put forth recently (e.g., Bookwala *et al.*, 1992) that the determinants of dating violence appear to be different for males and for females. The variables examined here account for 41% of variance in males' dating aggression but only 16% of the variance in females' dating aggression. The primary point of overlap in the model for males and females is found in the attitude that dating aggression is justified when faced with humiliation by one's dating partner, which accounts for unique variance in the prediction of both males' and females' dating aggression. Prior violent sexual victimization, entered as a secondary variable, also proved to be a significant predictor of both males' and females' dating aggression. The primary point of divergence between the two prediction models surrounds history of exposure in the family of origin. Witnessing interparental violence accounts for 13% of unique variance in the prediction of males' dating aggression but is inconsequential in predicting females' dating aggression.

An important contribution of this study is the information as to which attitudes condoning aggression are, in fact, related to actual dating aggression. Previous studies have revealed mixed results regarding the association between attitudes condoning aggression and engaging in dating aggression

(Cate *et al.*, 1982; Deal and Wampler, 1986; Follingstad *et al.*, 1988; Henton *et al.*, 1983; Stets and Pirog-Good, 1987). The results here indicate that justifying dating aggression on the basis of humiliation predicts to dating aggression, while justifying dating aggression on the basis of self-defense does not. What appears to be a heightened sensitivity to issues of jealousy, rejection, and ridicule parallels findings in the literature about men who abuse their wives. The social skill deficits of violent husbands are particularly evident in situations representing threats due to jealousy, wife abandonment, or wife rejection of the husband (Dutton and Browning, 1988; Holtzworth-Munroe and Anglin, 1991; Holtzworth-Munroe and Hutchinson, 1993). Situations surrounding jealousy also have been implicated as a stimulus for dating aggression (Burcky *et al.*, 1988; Girshick, 1993; Makepeace, 1981; Riggs, 1993; Stets and Pirog-Good, 1987). The data here clearly illustrate the highly divergent attitudes found in dating partners about the appropriateness of aggression as a response to jealousy, rejection, and being insulted. For example, in response to the item of "catching her in bed with another man," 20% of the males say an aggressive response is clearly justifiable, while 50% view such a response as completely unjustifiable. This characteristic of being able to justify one's own aggression on the basis of some misdeed by the partner may prove to be an important risk factor for dating aggression as well as an important point of intervention for violent partners.

The attitude that aggression is justified in circumstances of self-defense, in contrast, is not associated with actual dating aggression. As predicted by earlier work (e.g., Greenblat, 1985; Roscoe, 1985), self-defense is a circumstance which commonly seems to justify the use of dating aggression. In this study, 76% of females and 61% of males indicate that physical force is justified when faced with a partner who is attacking with a knife. The anticipated difference between women and men is even more evident, however, with a less extreme presenting circumstance. Fifty nine percent of women, compared to 11% of men, report that dating aggression is justifiable when the partner hits first. Previous work has shown that self-defense is an important motivator of women's aggression, since they are at substantial risk for injury even with the less severe but more common types of aggression, such as a partner's hitting (Saunders, 1988). The data here add to that picture, however, by indicating that attitudes justifying aggression in service of self-defense may be so widespread that this is not a feature differentiating females who are aggressive from those who are not aggressive.

The findings for males as to exposure to aggression in the family of origin show a clear association for witnessing interparental aggression but not for being the victim of parental aggression. As anticipated by previous

research concerning the association between observing interparental aggression and dating aggression (Breslin *et al.*, 1990; Gwartney-Gibbs *et al.*, 1987; O'Keeffe *et al.*, 1986; Riggs *et al.*, 1990), the present data indicate that witnessing interparental aggression predicts males' aggressive dating behaviors. These data support Bandura's (1973) modeling theory of aggression, namely that males imitate their parents' use of force to resolve conflicts in romantic relationships. Our results suggest a trend toward a heightened risk for those males who are both exposed to aggression *and* who condone aggression when humiliated. While this connection is difficult to disentangle without longitudinal data, it is important to understand why exposure would be related to attitudes condoning aggression in some individuals and attitudes opposing aggression in others. Contrary to some previous studies (e.g., DeMaris, 1987; Marshall and Rose, 1987, 1988; Sigelman *et al.*, 1984), there was no association for males between being the victim of parental aggression and their own dating aggression. Data in this study thus suggest that the modeling that occurred in the family of origin is highly specific to aggression between two adult partners.

This study also finds support for the previously unexamined variable of child-to-parent aggression as a predictor of males' dating aggression. There is a significant correlation between aggression toward parents and aggression toward dates for both males ($r = .30$, $p < .01$) and females ($r = .16$, $p < .05$). Furthermore, for males, aggression toward parents significantly contributes to the prediction of dating aggression in the first step of the regression. Replicating Cornell and Gelles (1982), this study also shows significant associations between aggressing toward one's parents and both forms of exposure to family of origin aggression (i.e., having been the victim of parent-to-child aggression and having witnessed interparental aggression) for males and females. The fact that 13% of males and 16% of females engage in child-to-parent aggression warrants further attention, particularly to determine whether aggression toward parents serves as the first step in a long-lasting pattern of aggressing against one's family members.

An unexpected finding is the role of previous sexual victimization in the prediction of males' and females' dating aggression. For females, the association with dating aggression occurs for violent sexual abuse only and not for child sexual abuse. This association between violent sexual abuse and dating aggression for females is understandable in light of the research suggesting that victims of sexual assault may have prolonged reactions of anxiety and fear (Foa *et al.*, 1991). Resick and Schnicke (1992) suggest that the fear reaction may take the form of hypervigilance to signs of perceived threat, such that even ambiguous stimuli trigger responses such as escape and avoidance. It is further posited here that such responses may include

striking out against a date who is perceived as threatening or menacing. The finding that violent sexual abuse also predicts males' dating aggression needs to be taken as speculative. While only two males endorsed the violent sexual abuse item, both of these men reported being aggressive toward dating partners.

In general, we know much less about predicting females', than males', dating aggression, as reflected in the lower amount of explained variance. It is possible, however, that women's aggression is more a function of the proximal variables, such as receiving violence from one's partner or perceiving a threat of unwanted sexual intimacies, than of distal variables, such as observing aggression in the family of origin. According to Bookwala *et al.* (1992), receipt of violence is a particularly strong predictor of female violence. This goes along with our previous suggestions regarding the importance of self-defense as a motivator of females' aggression, coupled with the hypervigilance due to previous experiences of victimization. Further attention to the proximal factors associated with aggression may explain the repeated finding reported here and elsewhere that women report more aggression against their partners than do men (e.g., Lane and Gwartney-Gibbs, 1985; Marshall and Rose, 1987; Riggs, 1993). Women are more likely than men to experience fear and vulnerability, which may result in their striking out against a date. Perhaps also, variables surrounding the women's use of aggression are so emotionally salient that they are more likely than males to remember such instances. To understand women's aggression in dating situations, we need to conduct more extensive and detailed explorations as to the proximal variables underlying their aggression, such as the actual conditions under which they have been aggressive with their dating partners and the internal reactions that trigger such behaviors. We also need to examine the outcomes of such aggression; that is, does a woman's use of physical aggression as a means of self-defense serve to protect her by curtailing the aggressor or further provoke the aggressor? Attention needs to be directed to the question of whether the aggression controlled by proximal variables differs from other types of aggression. For example, is such aggression more or less likely to reoccur? Is such aggression more or less likely to be associated with the woman's decision to terminate the relationship?

Focusing on proximal variables also is important to the understanding of males' aggression. Although this study provides considerable information about males' dating aggression, the reliance primarily on historical data is a limitation. Recent data have suggested that proximal factors reflecting the current life situation of men, for example, life stresses and relationship satisfaction, account for variance in males' aggression toward women (Margolin *et al.*, 1995). Examination of proximal variables, particularly those that

fluctuate over time, is recommended if the goal is to understand the likelihood of aggression at a given time.

Other limitations of this study highlight directions for future research. Longitudinal data are needed if our ultimate intent is to study dating aggression as a linkage between violent exposure in childhood and adult aggressive behaviors. With longitudinal designs, we would not need to rely solely on retrospective information about exposure to violence in childhood. Likewise, by incorporating qualitative data collection, in addition to quantitative data, we would be better able to answer questions as to why aggression exposure is linked with further aggression in some but not all males. Qualitative data also could be used to better explain links between attitudes and behavior. Finally, these data point to the possibility that risk factors for dating aggression may vary according to ethnic background. The data here suggest that certain attitudes, such as humiliation as a justification for aggression, are more prevalent in Asians than in Caucasians, while alcohol use is more common in Caucasians than in Asians. Our conclusions on such differences are quite limited due to small sample sizes. With well-represented samples from different ethnic minority populations, we would be able to examine how antecedents for dating aggression vary by cultural background and level of acculturation.

The burgeoning literature on dating aggression clearly portrays the significance of this problem both in terms of the numbers of persons currently victimized as well as the possible future implications for aggression in later relationships. As suggested by Wolfe *et al.* (1995), adolescence offers a prime opportunity to educate around issues concerning relationships, with the goal of promoting nonviolent dating relationships and nonviolent long-term relationships. To develop such educational programs, however, requires a multidimensional understanding of the antecedents of aggression in dating relationships. The current results are important in that they offer a perspective on factors contributing to dating aggression that could be targets of a therapeutic intervention, such as the data on specific attitudes condoning aggression. In general, large scale surveys have been extremely useful in shedding light on the prevalence of dating aggression and on risk factors contributing to this problem. Research now is needed to make connections among the risk factors, the immediate presenting circumstances, and the attitudes, perceptions, and emotions accompanying specific incidents of dating aggression.

ACKNOWLEDGMENTS

Preparation of this manuscript was supported in part by funding from the Research Scholarship Fund, Clinical Area, Department of Psychology, University of Southern California awarded to the first author and by NIMH RO1 36595 awarded to the second author. The authors wish to thank Margaret Gatz, Elana Gordis, JoAnn Farver, and Richard John for their input in the design and implementation of this study. This paper was presented in a poster session at the 102nd Annual Convention of the American Psychological Association in Los Angeles and at the 28th Annual Conference of the Association for the Advancement of Behavior Therapy in San Diego.

REFERENCES

Arias, I., Samios, M., and O'Leary, K. D. (1987). Prevalence and correlates of physical aggression during courtship. *J. of Interpers. Viol.* 2(1), 82-90.

Armor, D. J., Polich, J. M., and Stambul, H. B. (1976). *Alcoholism and Treatment (R-1739-NIAAA)*, Rand Corporation, Santa Monica, CA.

Bandura, A. (1973). *Aggression: A Social Learning Analysis*, Prentice Hall, Englewood Cliffs, NJ.

Barling, J., O'Leary, K. D., Jouriles, E. N., Vivian, D., and MacEwen, K. E. (1987). Factor similarity of the conflict tactics scales across samples, spouses, and sites: Issues and implications. *J. of Fam. Viol.* 2: 37-53.

Bernard, M. L., and Bernard, J. L. (1983). Violent intimacy: The family as a model for love relationships. *Fam. Relat.* 32: 283-286.

Bergman, L. (1992). Dating violence among high school students. *Social Work* 37(1): 21-27.

Bethke, T. M., and DeJoy, D. (1993). An experimental study of factors influencing the acceptability of dating violence. *J. Interpers. Viol.* 8(1): 36-51.

Bookwala, J., Frieze, I. H., Smith, C., and Ryan, K. (1992). Predictors of dating violence: A multivariate analysis. *Viol. Vict.* 7(4): 297-311.

Breslin, F. C., Riggs, D. S., O'Leary, K. D., and Arias, I. (1990). Family precursors: Expected and actual consequences of dating aggression. *J. Interpers. Viol.* 5(2): 247-258.

Browne, A., and Finkelhor, D. (1986). Impact of child sexual abuse: A review of the research. *Psychol. Bull.* 99(1): 66-77.

Burcky, W., Reuterman, N., and Kopsky, S. (1988). Dating violence among high school students. *School Couns.* 5: 353-359.

Carlson, B. E. (1990). Adolescent observers of marital violence. *J. Fam. Viol.* 5(4): 285-299.

Cate, R. M., Henton, J. M., Koval, J., Christopher, F. S., and Lloyd, S. (1982). Premarital Abuse: A social psychological perspective. *J. Fam. Issues* 3(1): 79-90.

Cornell, C. P., and Gelles, R. J. (1982). Adolescent to parent violence. *Urban Social Change Rev.* 15: 8-14.

Deal, J. E., and Wampler, K. S. (1986). Dating violence: The primacy of previous experiences. *J. Social Pers. Relat.* 3(4): 457-471.

DeMaris, A. (1987). The efficacy of a spouse abuse model in accounting for courtship violence. *J. Fam. Issues* 8(3): 291-305.

Dibble, U., and Straus, M. A. (1980). Some social structure determinants of inconsistency between attitudes and behavior: The case of family violence. *J. Marr. Fam.* 42: 71-80.

Dutton, D. G., and Browning, J. J. (1988). Concern for power, fear of intimacy, and aversive stimuli for wife abuse. In Hotaling, G., Finkelhor, D., Kirkpatrick, J. T., and Straus, M.

A. (eds.), *Family Abuse and Its Consequences: New Directions in Research*, Newbury Park: Sage, pp. 163-175.
Foa, E. B., Rothbaum, B. O., Riggs, D. S., and Murdock, T. B. (1991). Treatment of posttraumatic stress disorder in rape victims: A comparison between cognitive-behavioral procedures and counseling. *J. Consult. Clin. Psychol.* 59: 715-723.
Follette, V., and Alexander, P. C. (1992). Dating violence: Current and historical correlates. *Behav. Assess.* 14: 39-52.
Follingstad, D. R., Rutledge, L. L., Polek, D. S., and McNeill-Hawkins, K. (1988). Factors associated with patterns of dating violence toward college women. *J. Fam. Viol.* 3(3): 169-182.
Girshick, L. B. (1993, August). Teen dating violence. *Viol. Update* 3: 1-2,4, 6.
Greenblat, C. S. (1985). "Don't Hit Your Wife . . . Unless . . . " Preliminary findings of normative support for the use of physical force by husbands. *Victimol. Int. J.* 10: 221-241.
Gwartney-Gibbs, P. A., Stockard, J., and Bohmer, S. (1987). Learning courtship aggression: The influence of parents, peers, and personal experiences. *Fam. Relat.* 36: 276-282.
Henton, J. M., Cate, R., Koval, J., Lloyd, S., and Christopher, S. (1983). Romance and violence in dating relationships. *J. Fam. Issues* 4(3): 467-482.
Hollingshead, A. B. (1965). *Two Factor Index of Social Position*, Yale Station, Connecticut.
Holtzworth-Munroe, A. (1992). Attributions and marital violent men: The role of cognitions in marital violence. In Harvey, J. H., Orbuch, T. L., and Weber, A. L. (eds.), *Attributions, Accounts, and Close Relationships*, Springer-Verlag, New York, pp. 165-175.
Holtzworth-Munroe, A., and Anglin, K. (1991). The competency of responses given by maritally violent versus nonviolent men to problematic marital situations. *Viol. Vict.* 6: 257-269.
Holtzworth-Munroe, A., and Hutchinson, G. (1993). Attributing negative intention to wife behavior: The attributions of maritally violent versus nonviolent men. *J. Abnorm. Psychol.* 102: 206-211.
Julian, T. W., and McKenry, P. C. (1993). Mediators of male violence toward female intimates. *J. Fam. Viol.* 8(1): 39-56.
Lane, E. K., and Gwartney-Gibbs, P. A. (1985). Violence in the context of dating and sex. *J. Fam. Issues* 6(1): 45-49.
Levy, B. (1990). Abusive teen dating relationships: An emerging issue for the 90's. *Resp. Victim. Wom. Child.* 13(1): 5.
Makepeace, J. M. (1981). Courtship violence among college students. *Fam. Relat.* 30: 97-102.
Makepeace, J. M. (1986). Gender differences in courtship violence victimization. *Fam. Relat.* 35: 383-388.
Makepeace, J. M. (1987). Social factors and victim-offender differences in courtship violence. *Fam. Relat.* 36: 87-91.
Margolin, G., and Foo, L. (1992). The Attitudes About Dating Scale, unpublished measure at the University of Southern California.
Margolin, G., John, R. S., and Foo, L. (1995). Interactive and unique risk factors for husbands' emotional and physical abuse of their wives, manuscript submitted for publication.
Marshall, L. L., and Rose, P. (1987). Gender, stress and violence in the adult relationships of a sample of college students. *J. Social Pers. Relat.* 4: 299-316.
Marshall, L. L., and Rose, P. (1988). Family of origin violence and courtship abuse. *J. Counsel. Devel.* 66: 414-418.
Marshall, L. L., and Rose, P. (1990). Premarital violence: The impact of family of origin violence, stress, and reciprocity. *Viol. Vict.* 5(1): 51-64.
Matthews, W. J. (1984). Violence in college couples. *College Stud. J.* 18(2): 150-158.
O'Keeffe, N. K., Brockopp, K., and Chew, E. (1986). Teen dating violence. *Social Work* 31: 465-468.
Resick, P. A. and Schnicke, M. K. (1992). Cognitive processing therapy for sexual assault victims. *J. Consult. Clin. Psychol.* 60: 748-756.
Riggs, D. S. (1993). Relationship problems and dating aggression: A potential treatment target. *J. Interpers. Viol.* 8(1): 18-35.

Riggs, D. S., and O'Leary, K. D. (1989). Theoretical model of courtship aggression. In Pirog-Good, M. A. and Stets, J. E. (eds.), *Violence in Dating Relationships: Emerging Social Issues* Praeger, New York, pp. 53-71.

Riggs, D. S., O'Leary, K. D., and Breslin, F. C. (1990). Multiple correlates of physical aggression in dating couples. *J. Interpers. Viol.* 5(1): 61-73.

Roscoe, B. (1985). Courtship violence: Acceptable forms and situations. *Coll. Stud. J.* 19(4): 389-393.

Russell, D. E. H. (1983). The incidence and prevalence of intrafamilial and extra-familial sexual abuse of female children. *Child Abuse Negl.* 7: 133-146.

Saunders, D. G. (1986). When battered women use violence: Husband-abuse or self-defense? *Viol. Vict.* 1: 47-60.

Saunders, D. G. (1988). Wife abuse, husband abuse, or mutual combat? A feminist perspective on the empirical findings. In Yllo, K. and Bograd, M. (eds.), *Feminist Perspectives on Wife Abuse* Sage, Newbury Park, pp. 90-113

Scheffé, H. (1959). *The Analysis of Variance*, Wiley, New York.

Sigelman, C. K., Berry, C. J., and Wiles, K. A. (1984). Violence in college students' dating relationships. *J. Appl. Social Psychol.* 5(6): 530-548.

Smith, J. P., and Williams, J. G. (1992). From abusive household to dating violence. *Journal of Fam. Viol.* 7(2): 153-165.

Stets, J. E., and Pirog-Good, M. A. (1987). Violence in dating relationships. *Social Psychol. Quart.* 50(3): 237-246.

Straus, M. A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. *J. Marr. Fam.* 41: 75-88.

Straus, M. A., Gelles, R. J., and Steinmetz, S. K. (1980). *Behind Closed Doors: Violence in the American Family*, Anchor, Garden City, NY.

Sugarman, D. B., and Hotaling, G. T. (1989). Dating violence: Prevalence, context, and risk markers. In Pirog-Good, M. A. and Stets, J. E. (eds.), *Violence in Dating Relationships: Emerging Social Issues*, Praeger, New York, NY, pp. 3-32.

Tong, L., Oates, K., and McDowell, M. (1987). Personality development following sexual abuse. *Child Abuse Negl.* 11: 371-383.

Tontodonato, P., and Crew, B. K. (1992). Dating violence, social learning theory, and gender: A multivariate analysis. *Viol. Vict.* 7(1): 3-14.

Trickett, P. K., and Putnam, F. W. (1993). Impact of child sexual abuse on females: Toward a developmental psychobiological integration. *Psychological Sci.* 4(2): 81-87.

Ulbrich, P., and Huber, J. (1981). Observing parental violence: Distribution and effects. *J. Marr. Fam.* 44: 623-631.

White, J. W., and Koss, M. P. (1991). Courtship violence: Incidence in a national sample of higher education students. *Viol. Vict.* 6(4): 247-256.

Wolfe, D. A., Wekerle, C., Reitzel, D., and Gough, R. (1995). Strategies to address violence in the lives of high-risk youth. In Pelad, E., Jaffe, P. G., and Edelson, J. L. (eds.), *Ending the Cycle of Violence: Community Responses to Children of Battered Women*. Sage, Newbury Park, pp. 255-274.