In studying the causes of dating violence, researchers have investigated three broad areas: early life experiences, individual characteristics, and relationship characteristics. While each of these areas has been shown to play a role in dating violence, the interactive processes which lead to violence among dating couples have not been investigated. This study examined the degree to which individuals control others and the relationship of this control factor to dating violence. Data were obtained from a sample of 583 white heterosexual college students who were involved in a dating relationship. Data were obtained on 1,096 relationships. For an analysis on inflicting violence, complete data were available for 318 relationships for men and 286 relationships for women. For the analysis of sustaining violence, complete data were available on 429 relationships for men and 426 relationships for women. Data were analyzed from men and women who inflicted and sustained violence while dating. The results indicated that, net to other effects, men and women who acted to control others were more likely to inflict and sustain violence while dating. Future research is needed to continue building upon the findings that interactional characteristics such as interpersonal control are vital to understanding interpersonal violence. (NB)
Control and Dating Violence

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Abstract

Prior research has not examined the interaction patterns within dating relationships that may influence dating violence. The present research addresses one interaction pattern: the degree to which individuals control others. A sample of white heterosexual college dating relationships is examined. Data are collected on men and women who inflict and sustain violence while dating. The results indicate that, net of other effects, men and women who act to control others are more likely to inflict and sustain violence while dating. Future research is needed to continue building upon our findings that interactional characteristics such as interpersonal control are vital to understanding interpersonal violence.

***********

In studying the causes of dating violence, researchers have investigated three broad areas: Early life experiences, including witnessing and experiencing violence in childhood, have been examined (Laner and Thompson, 1982; Sigelman et al., 1984; Gwartney-Gibbs et al., 1987; Stets and Pirog-Good, 1987). Individual characteristics, including sex role attitudes (Bernard and Bernard, 1983; Bernard et al., 1985), instrumental and expressive traits (Stets and Pirog-Good, 1987), self-esteem (Deal and Wampler, 1986; Burke et al., 1987), gender identity (Burke et al., 1987) and attitudes about violence (Cate et al., 1982; Henton et al., 1983) have been addressed. Relationship characteristics, including the seriousness of the relationship (Cate et al., 1982; Laner and Thompson, 1982; Henton et al., 1983; Stets and Pirog-Good, 1987; Arias et al., 1987) or level of emotional commitment (Billingham, 1987) have been analyzed.

While each of these areas has been shown to play a role in dating violence, the interactive processes which lead to violence among dating couples have not been investigated. Since sociologists have long stressed...
the relevance of interaction in understanding and predicting behavior (Mead, 1934; Blumer, 1969; Stryker, 1980), the neglect of this area for understanding dating violence is surprising. To begin to remedy this neglect, our paper examines the effect on dating violence of one element of interaction, the degree to which individuals control others.

We define violence as "an act carried out with the intention or perceived intention of causing physical pain or injury to another" (Gelles and Straus, 1979; Straus and Gelles, 1986; Stets and Straus, 1988). This definition is synonymous with the legal concept of "assault," where it is not necessary that an injury result (Uniform Crime Reports, 1984) and the concept of "physical aggression" used in social psychology (Bandura, 1973; Berkowitz, 1983). Control is defined as the process whereby individuals get others to behave according to their own will. It is a strategy for maintaining power, authority, or dominance over another in face-to-face interaction (Lipman-Blumen, 1984).

THEORY AND HYPOTHESES

Control

Control operates on both societal and interpersonal levels, though it is different at each level. The assumption one makes regarding where control exists (in the macro or micro structure) influences one's conceptualization of how control relates to violence, whether one focuses on male and/or female violence, and how control is measured.

Most marital violence researchers have confined their conception of control to the societal level. They have focused on husband-to-wife violence. Two theories explain how control on the societal level influences violence. The Patriarchal theory indicates that violence by husbands is a result of the subordinate position that women occupy relative to men in the larger society (cf. Dobash and Dobash, 1979). Men's use of violence in the micro structure reflects and reinforces their power and control in the macro structure.

The Resource theory (Gelles and Straus, 1979) states that since male superiority is ascribed in our society, if a man's position of power is threatened by the lack of an objectively high status, violence becomes the "ultimate resource" to control and maintain dominance (Allen and Straus, 1980). In this way, lack of control in the macro structure influences behavior in the micro structure. (Measures of macro level control typically include husband's occupational status, prestige, education, and income relative to other men or to their wives). Although this theory has received support in marital violence studies (Allen and Straus, 1980; Hornung et al., 1981; Kalmuss and Straus, 1982), it has not been supported in studies on dating violence (DeMaris, 1987).1

Control may also be conceptualized at an interpersonal level. This conceptualization begins with the assumption that control is a basic, though variable, interpersonal need which manifests itself in the desire for power and authority over others, and therefore over one's immediate environment (Schutz, 1960). People are viewed as falling along a
continuum of always needing to control others to never needing to control others.

The need to control others reveals itself in a variety of ways, ranging from acts of persuasion to acts of coercion. When acts of controlling another are met with resistance, those who control may respond with violence (Stets, 1988). This does not mean that controlling another always leads to violence; other possible responses include leaving the situation, crying, or being verbally abusive.

Moreover, some people may use violence in response to frustration or provocation rather than as an instrument for control. Therefore, violence may be impulsive as well as instrumental in nature (Berkowitz, 1983; Stets, 1988). We want only to indicate that control can lead to violence.

While those who act to control others may be more likely to inflict violence, they also may be more likely to sustain violence for two reasons. First, those who resist control may inflict violence to stop the other from controlling them. In this sense, they are using violence as a way of obtaining control of their own. Alternatively, those who resist control may inflict violence in order to defend and protect themselves from the violence they may have sustained. Again, violence can have instrumental and/or impulsive elements. In either case, the above is consistent with research that has identified the reciprocity of violence (Cate et al., 1982; Henton et al., 1983; Deal and Wampler, 1986; Gwartney-Gibbs et al., 1987).

Conceptualizing control as an interpersonal need that manifests itself in interaction implies that instead of focusing only on male violence, researchers need to pay attention to both male and female violence. In other words, irrespective of macro resources, men may want to dominate interpersonally and inflicting violence may be a means toward that end. The same holds true for women.

While research has provided clues about the relationship between interpersonal control and violence, no direct tests of this relationship have been undertaken. Qualitative research on male-to-female violence in a small sample of marital, cohabiting, and dating relationships reveals that violence occurred when men tried to modify or change their partner’s behavior and their partners resisted (Stets, 1988). In this study, it seemed that violence was used to control women in interaction; to get them to behave in a particular fashion. What is unclear is whether this relationship exists in a broader, more general sample of people using a direct measure of interpersonal control.

Another clue comes from examining personality traits of individuals. It has been argued that these traits have implications for our understanding of interpersonal control and violence. Specifically, Stets and Pirog-Good (1987) found that the personality dimensions of instrumentality and expressiveness predict dating violence, especially for men. Instrumentality was found to negatively influence dating violence. The researchers suggested that individuals scoring high on instrumentality (for example, having independence) have control over their own lives, are less likely to control another, and thus less likely to be involved in violence. Emotionality positively influenced dating violence. Stets and Pirog-Good argued that individuals scoring high on expressiveness (for
example, emotionality, devoting self completely to others) may be more dependent on others and more likely to control others through violence. While the interpretations of the relationship between control, violence and these personality traits are appropriate, the question remains as to whether control is actually operating.

DeMaris (1987) presumably examined the relationship between control and violence, but did not employ a direct measure of interpersonal control. Respondents were asked the degree to which they believed that control of the relationship should be equally shared or be in the hands of the male or female in the relationship. Thus, DeMaris actually measured traditional sex role attitudes about who should have power in a relationship, rather than interpersonal control outside the realm of sex role attitudes.²

The present research goes beyond these recent studies on control and violence by introducing a direct measure of interpersonal control. From the above discussion, several competing hypotheses may be offered for the relationship between interpersonal control, gender and violence. On the one hand, control may be important in explaining male only violence if men use violence as an extension of their macro level control (cf. Dobash and Dobash, 1979). On the other hand, if control is viewed as a basic interpersonal need (Schutz, 1960), then control should be relevant in explaining both male and female violence.

Finally, we must consider the possibility that control may be important in predicting female only violence. Since women have control in the private sphere, the internal world (Lipman-blumen, 1984), their maintenance of power in interpersonal relationships may be through the use of violence. We will test these competing hypotheses through separate analyses of men and women who inflict and sustain violence while dating. In order to reduce the possibility that the relationship between interpersonal control and violence is spurious, we control for other variables that may influence both control and violence. These variables are discussed below.

Other Variables

The factors we examine are subsumed under the three broad areas mentioned earlier. They include background characteristics of witnessing and experiencing violence in childhood, individual characteristics such as self-esteem and acceptance of violence, and the relationship characteristic of behavioral involvement. These factors have been shown to be important determinants of violence, and they may influence interpersonal control as well.

Studies in dating violence reveal that those who witness and experience abuse in childhood are more likely to be involved in violence while dating (Laner and Thompson, 1982; Bernard and Bernard, 1983; Roscoe and Benaske, 1985). It is also possible that witnessing and/or experiencing abuse as a child influences interpersonal control. Individuals who grow up in a violent home experience unpredictability in others' behavior. Consequently, as individuals mature, they may go to great lengths to obtain control in their own relationships as a way to ensure predictability in their partner's behavior. Research also shows
that acceptance of violence positively influences dating violence (Cate et al., 1982; Henton et al., 1983). Acceptance of violence may also influence control. Those who may feel that it is appropriate to hit may also feel that it is appropriate to control another.

Dating violence research reveals that low self-esteem influences violence (Deal and Wampler, 1986). This finding is consistent with research on marital violence (Walker, 1979; Goldstein and Rosenbaum, 1985; Hotaling and Sugarman, 1986). Low self-esteem may also be related to control. Those with low self-esteem lack self-respect, and feel unworthy and inadequate (Rosenberg, 1979). These individuals may act to control others in order to raise their self-esteem.

Finally, research in dating violence reveals that the more serious the relationship, the greater the likelihood that violence will occur (Cate et al., 1982; Laner and Thompson, 1982; Laner, 1983; Henton et al., 1983; Sigelman et al., 1984; Roscoe and Benaske, 1985; Stets and Pirog-Good, 1987; Arias et al., 1987). Behavioral involvement, a characteristic of serious relationships, also positively influences violence while dating (Burke et al., 1987). Behavioral involvement and control may be associated with one another as individuals in more involved dating relationships may feel that they have the "right" to control their partner.

Because these variables may influence both violence and interpersonal control, they will be included and controlled in our test of the relationship between interpersonal control and violence. This will reduce the probability of spuriousness between control and violence.

METHOD

Sample

During the spring of 1987, we obtained a random sample of upper level classes from a listing of courses at a large Midwestern university. Letters were sent to the professors in the sampled classes explaining our research and asking if they would agree to have their students participate in our questionnaire. The multiple choice questionnaire covered: 1) experiences of physical, psychological, and sexual violence with up to four dating partners during the past 12 months; 2) background information, including respondent's childhood experiences of violence, attitudes on violence, and self-esteem; and 3) characteristics of the dating relationships, including the degree of control and level of behavioral involvement with each partner.

Eighty-three percent of the randomly selected population completed the questionnaire on an in-class basis. Those not participating were married or not dating. Comparing our sample to the general distribution of upper class students showed no significant departures for age, sex, and area of study. Because of the very low frequency of nonwhites in our sample, they were excluded from our analysis. The final sample included 583 respondents and 1096 relationships. For the analysis of inflicting violence, we had complete data on 318 relationships for men and 286 relationships for women. For the analysis of sustaining violence, we had
complete data on 429 relationships for men and 426 relationships for women.

Measures

Dependent Measures:

Physical Violence. The Conflict Tactics Scale (CTS) was used to measure violence in dating relationships (Straus, 1979). The scale is divided into three major types of conflict resolution tactics: reasoning, verbal and violent tactics. The 19-item scale starts with less coercive items and gradually becomes more coercive towards the end of the scale.

Although the CTS does not incorporate the context in which violence arises or the injury that results (Ferraro and Johnson, 1983; Breines and Gordon, 1983; Gelles, 1985). It is the most comprehensive index on the frequency and form of tactics used to resolve conflict. It has high reliability (Straus et al., 1980) and has been used in numerous studies on dating violence (Cate et al., 1982; Lamer and Thompson, 1982; Henton et al., 1983; Makepeace, 1983; 1986; Sigelman et al., 1984; Lane and Gwartney-Gibbs, 1985; Roscoe and Benaske, 1985; Deal and Wampler, 1986; Stets and Pirog-Good, 1987; Burke et al., 1987; Arias et al., 1987; Billingham, 1987).

Respondents were asked to fill out the CTS with reference to how often they inflicted and sustained the various tactics with up to four people they had been dating in the past year. On average, males had 1.9 dating partners and females had 1.8 dating partners. The violent tactics of the CTS formed the dependent variables. These included: "threw something at the partner." (inflicted violence) and "threw something at me" (sustained violence), "pushed, grabbed, or shoved the partner (me)," "slapped or spanked the partner (me)," "kicked, bit or hit the partner (me) with a fist," "hit or tried to hit the partner (me) with something," "beat up the partner (me)," "threatened the partner (me) with a knife or gun," "used a knife or gun (on me)."

The amount of violence inflicted (8% for males and 14% for females) and sustained (14% for males and 11% for females) was small. Additionally, there were few cases of severe violence. Given this, we determined that little information would be lost by collapsing all levels of violence and creating dichotomous dependent variables. Consequently, a score of one was given to those who inflicted any violent tactics and zero otherwise. Similarly, a score of one was given to those who had sustained any violent tactics and zero otherwise.

Independent Measures:

Control. While we would ideally want to observe and record acts of controlling in interaction, such data is difficult to obtain. A good compromise is to tap into respondents' perceptions of control, which the control scale achieves.

Nine items were selected from a pretest to measure interpersonal control over another. Respondents were to indicate the frequency (i.e., "never," "seldom," "sometimes," "often," or "very frequently", coded 0, 1,
2, 3, and 4) with which each of the following statements described their relationship with each of up to four partners they had been dating:

1) I get my partner to act in a way that I want him/her to act
2) I feel that I know what is best for my partner
3) I accept my partner for who s/he is rather than trying to change him/her
4) I need to know where my partner is at all times
5) There are things about my partner I need to change
6) I keep my partner in line
7) I am successful in imposing my will onto my partner
8) When my partner does not meet my expectations, I understand and accept it
9) I try to get my partner to be like me

Items 3 and 8 were reverse coded. Therefore, a higher score represents more control over the other. A factor analysis revealed one factor with an omega reliability (Haiise and Bohnstedt, 1970) of .79 for men and .83 for women.

Witnessing and Experiencing Violence. The violent tactics of the CTS scale were also used to measure whether respondents witnessed and/or experienced physical violence when young. Respondents were asked to think about the worst year of their childhood in which disputes between their parents and themselves frequently occurred. They were then asked to indicate how often their parents inflicted each of the violent tactics on each other and on themselves. High scores on parent and child violence reflect witnessing frequent domestic violence between parents and experiencing frequent child violence.

Acceptance of Violence. The violent tactics of the CT scale were further used to measure the degree to which respondents felt that the various tactics would be considered an act of violence against women and men. This acceptance of violence scale has been used in other research on dating violence (Stets and Pirog-Good, 1987; Burke et al., 1987). Respondents were asked whether each tactic "always," "depends," or "never" was an act of violence. If the respondent answered "depends" or "never," a score of one was given. Otherwise, it was zero. The scores were summed across items with a higher score reflecting acceptance of violence. Acceptance of violence against women was placed in the model for males inflicting violence and females sustaining violence. Acceptance of violence against men was put in the model for females inflicting and males sustaining violence.

Self-esteem. Self-esteem was measured using the ten-item Rosenberg self-esteem scale (Rosenberg, 1979). The scale has high reliability and has been used in other studies on dating violence (Deal and Wampler, 1986;
Burke et al., 1987). A high score on the Rosenberg scale reflects high self-esteem.

**Behavioral Involvement.** Two variables make up the behavioral involvement measure: the number of months the respondent has been dating a partner and the number of dates per year that the respondent had with the dating partner. The correlation between these two variables was .60. The variables were each standardized (to zero mean and unit variance) and summed to form the scale.

**Analysis**

Two components of our analysis require comment. First, respondents were asked to describe their relationship with each of up to four partners. A unique feature of dating is that individuals may be dating more than one person. This feature should be incorporated into the sampling frame and analysis of dating violence. However, by analyzing relationship level data, we introduce the possibility of correlated errors. Though the estimates would be unbiased, the tests of significance may be inflated. Following Good et al. (1986) and Burke et al. (1987), we used Durbin-Watson to test whether the errors for each of the equations were correlated (Hanushek and Jackson, 1977) and found no significant correlation.

Second, since the dependent variables are binary, OLS is a poor estimation procedure (Hanushek and Jackson, 1977). One problem with OLS is that the predicted values of the binary dependent variables could fall outside of the 0,1 range, which would not be interpretable. Additionally, when a dependent variable has only zero and one values, the OLS assumption that the variance of the error term is constant is violated, rendering significance tests invalid.

Given the 0,1 restrictions on the dependent variable, we use probit analysis (Hanushek and Jackson, 1977; Aldrich and Nelson, 1984). An assumption of the probit model is that there is a normal probability function underlying a binary observed outcome (in this case, inflicting or sustaining violence). We assume that the exogenous variables that we place into the model account for some of the variation in the underlying probability, and we use a maximum likelihood procedure which chooses estimates for the exogenous variables that make the choice or outcome most likely to occur.

**RESULTS**

First, we tested whether the covariances for inflicting and sustaining violence were different for males and females. Box's M test (Morrison, 1976) revealed that the results for men and women differed significantly for both inflicting ($X^2 = 1,766.87, 28$ (df), $p < .001$) and sustaining ($X^2 = 1,329.33, 28$ (df), $p < .001$) violence. Therefore, the underlying causal structures for inflicting abuse differs by sex, and the results for sustaining abuse differs by sex.

Table 1 presents the means and standard deviations for each of the variables for dating relationships as reported by men and women. What is
<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean (S.D)</th>
<th>Mean (S.D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Witnessing Violence</td>
<td>3.950** (12.579)</td>
<td>12.347** (49.872)</td>
</tr>
<tr>
<td>Experiencing Violence</td>
<td>21.808** (41.778)</td>
<td>13.154** (23.950)</td>
</tr>
<tr>
<td>Accept Violence Against Own Sex</td>
<td>1.339** (1.858)</td>
<td>.833** (1.345)</td>
</tr>
<tr>
<td>Accept Violence Against Opposite Sex</td>
<td>1.113 (1.703)</td>
<td>.925 (1.350)</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>32.969** (4.381)</td>
<td>31.860** (4.747)</td>
</tr>
<tr>
<td>Control</td>
<td>10.610* (5.603)</td>
<td>11.517* (5.774)</td>
</tr>
<tr>
<td>Behavioral Involvement</td>
<td>.000 (1.798)</td>
<td>-.000 (1.654)</td>
</tr>
<tr>
<td>Inflict Violence</td>
<td>.085* (.279)</td>
<td>.143* (.350)</td>
</tr>
<tr>
<td>Sustain Violence</td>
<td>.143 (1.351)</td>
<td>.108 (.311)</td>
</tr>
</tbody>
</table>

* = means are significantly different at the .05 level.
** = means are significantly different at the .01 level.
Table 2. Correlation Matrix of Independent Variables by Gender:

<table>
<thead>
<tr>
<th></th>
<th>WITNESS</th>
<th>EXPER</th>
<th>SELFEST</th>
<th>ACPTVF</th>
<th>ACPTVM</th>
<th>CON</th>
<th>BI</th>
</tr>
</thead>
<tbody>
<tr>
<td>WITNESS</td>
<td>---</td>
<td>.01</td>
<td>-.20**</td>
<td>.01</td>
<td>-.06</td>
<td>.14*</td>
<td>.14*</td>
</tr>
<tr>
<td>EXPER</td>
<td>.14**</td>
<td>---</td>
<td>-.02</td>
<td>.08</td>
<td>.02</td>
<td>.02</td>
<td>-.06</td>
</tr>
<tr>
<td>SELFEST</td>
<td>-.01</td>
<td>-.11*</td>
<td>---</td>
<td>.01</td>
<td>-.04</td>
<td>-.17**</td>
<td>-.08</td>
</tr>
<tr>
<td>ACPTVF</td>
<td>-.02</td>
<td>-.04</td>
<td>-.03</td>
<td>---</td>
<td>.70**</td>
<td>.04</td>
<td>-.06</td>
</tr>
<tr>
<td>ACPTVM</td>
<td>-.03</td>
<td>.01</td>
<td>.01</td>
<td>.33**</td>
<td>---</td>
<td>.07</td>
<td>-.06</td>
</tr>
<tr>
<td>CON</td>
<td>-.01</td>
<td>.04</td>
<td>-.28**</td>
<td>.05</td>
<td>.05</td>
<td>---</td>
<td>.30**</td>
</tr>
<tr>
<td>BI</td>
<td>-.08</td>
<td>-.09</td>
<td>-.01</td>
<td>-.03</td>
<td>-.04</td>
<td>---</td>
<td>.24**</td>
</tr>
</tbody>
</table>

WITNESS = witnessing violence when young, EXPER = Experiencing violence when young, SELFEST = Self-esteem, ACPTVF = Accept violence toward women, ACPTVM = Accept violence toward men, CON = Control, BI = Behavioral involvement.

* Males are on the upper half of the correlation matrix and females are on the lower half of the correlation matrix.

* $p < .05$

** $p < .01$
<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Inflict</th>
<th>Sustain</th>
<th>Inflict</th>
<th>Sustain</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTANT</td>
<td>-0.723</td>
<td>-1.625</td>
<td>-0.983</td>
<td>0.025</td>
</tr>
<tr>
<td>WITNESSING VIOLENCE</td>
<td>0.024</td>
<td>0.007</td>
<td>-0.000</td>
<td>-0.000</td>
</tr>
<tr>
<td>EXPERIENCING VIOLENCE</td>
<td>0.001</td>
<td>-0.004</td>
<td>0.002</td>
<td>-0.000</td>
</tr>
<tr>
<td>ACCEPT VIOLENCE</td>
<td>0.113**</td>
<td>0.133***</td>
<td>0.057</td>
<td>-0.101</td>
</tr>
<tr>
<td>SELF-ESTEEM</td>
<td>-0.250**</td>
<td>-0.001</td>
<td>-0.030**</td>
<td>-0.067***</td>
</tr>
<tr>
<td>CONTROL</td>
<td>0.053***</td>
<td>0.033**</td>
<td>0.052***</td>
<td>0.063***</td>
</tr>
<tr>
<td>BEHAVIORAL INVOLVEMENT</td>
<td>0.105***</td>
<td>0.141***</td>
<td>0.252***</td>
<td>0.132***</td>
</tr>
</tbody>
</table>

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>x²</td>
<td>39.01</td>
<td>28.564</td>
<td>61.605</td>
<td>48.234</td>
</tr>
<tr>
<td>df</td>
<td>11</td>
<td>78</td>
<td>108</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>531</td>
<td>286</td>
<td>429</td>
<td>426</td>
</tr>
</tbody>
</table>

** p < .05
*** p < .01
Table 4. Probabilities of Inflicting and Sustaining Dating Violence by Gender

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inflict</td>
<td>Sustain</td>
</tr>
<tr>
<td>BASELINE</td>
<td>.050</td>
<td>.118</td>
</tr>
<tr>
<td>WITNESSING VIOLENCE + 1 SIGMA</td>
<td>.054</td>
<td>.136</td>
</tr>
<tr>
<td>EXPERIENCING VIOLENCE + 1 SIGMA</td>
<td>.055</td>
<td>.204</td>
</tr>
<tr>
<td>ACCEPT VIOLENCE + 1 SIGMA</td>
<td>.073</td>
<td>.174</td>
</tr>
<tr>
<td>SELF-ESTEEM + 1 SIGMA</td>
<td>.031</td>
<td>.117</td>
</tr>
<tr>
<td>CONTROL + 1 SIGMA</td>
<td>.089</td>
<td>.159</td>
</tr>
<tr>
<td>BEHAVIORAL INVOLVEMENT + 1 SIGMA</td>
<td>.100</td>
<td>.175</td>
</tr>
</tbody>
</table>

1 The baseline probabilities show the probability of inflicting and sustaining violence for men and women when the independent variables are set to their mean. The remainder of the table shows the probability of inflicting and sustaining violence for men and women given one standard deviation increase in the independent variables above their mean.
particularly noteworthy is that across relationships, women are more likely than men to control their dating partners and to inflict violence. We also find that across relationships, women are more likely than men to witness violence between their parents, and men are more likely than women to experience child violence. Furthermore, across relationships, men have a higher self-esteem and are more likely than women to accept violence, although this pattern is weak for acceptance of violence against the opposite sex. That is, while men are significantly more likely than women to accept violence against their own sex, they are only slightly more likely than women to accept violence against the opposite sex ($1.113$ versus $.924$, $p < .10$).

In a separate analysis, we examined whether women were more likely to inflict violence because of their greater propensity to control their partners. We combined males and females in a pooled sample. We regressed inflicting abuse on all of the independent variables and the variable sex using probit analysis. We found that sex did not have a significant effect. We then reanalyzed the model with the variable control removed and found that sex had a significant effect on inflicting abuse. Thus, we conclude that sex most likely operates through the variable control.

Table 2 presents the correlation matrix of the independent variables. Of particular importance is the relationship between the independent variables and control. Low self-esteem and behavioral involvement positively influence control for men and women. Witnessing abuse also positively influences control, but only for men. These findings indicate the importance of controlling for these factors in reducing a spurious relationship between interpersonal control and violence.

Table 3 presents the maximum likelihood estimates of the probit equations for men and women. All four equations are significant, indicating that the variables are strong predictors of violence.

Since the coefficients of the probit analyses give the change in standard deviations of the normally distributed, unobserved variables, they are not directly interpretable. To facilitate interpretation of the results, "baseline" probabilities for inflicting and sustaining violence were computed for individuals with average characteristics for each sex. These are reported in Table 4. In addition, the effects of changes in the exogenous variables on these "baseline" probabilities are reported.

Control. The significance tests reported in Table 3 support our hypotheses that interpersonal control positively influences inflicting and sustaining violence for men and women. The effects of control are net of the other variables in the equation, thus reducing the probability of spuriousness. Interpret the magnitudes of these effects, we turn to Table 4. Adding one standard deviation to the control scale mean results in a 76% increase in the probability of inflicting violence for men ($.050$ versus $1.113$, $p < .10$).
to .088) and a 63% increase for women (.104 to .169). Additionally, adding one standard deviation to the mean of the control scale results in a 35% increase in sustaining violence for men (.118 to .159) and a 93% increase in sustaining violence for women (.070 to .135). Overall, the results strongly support the fact that control is particularly relevant in understanding dating violence.8

**Other Variables.** The results reveal that acceptance of violence influences inflicting and sustaining dating violence for men. Additionally, self-esteem influences inflicting violence for men and women, and sustaining violence for women. Finally, behavioral involvement influences inflicting and sustaining violence for men and women. The significance of these variables are shown in Table 3 and the magnitude of the effects are reported in Table 4.

In summary, the findings indicate that while interpersonal control does not have as large an effect on inflicting and sustaining violence for men and women as behavioral involvement, it has a larger and more consistent significant effect than the other exogenous variables. Control is thus an extremely important interactive feature predicting dating violence.

**DISCUSSION**

The primary purpose of this research was to test the net effect of interpersonal control on inflicting and sustaining violence for men and women while dating. Control is measured using self-reports of control in interaction. While we would ideally want micro level interactional data to see how control operates, that kind of data is difficult if not impossible to obtain. We find that women are more likely than men to control in dating relationships. This sex difference may be due to the fact that the control scale deals with power in interpersonal relationships as opposed to power in the wider society. The latter might be measured by socioeconomic status. The greater control of women support the notion that women are more likely to control in the private sphere (Lipman-Blumen, 1984). And, it contradicts the notion that men are more likely to control in the interpersonal sphere as an extension of their macro level control (Dobash and Dobash, 1979).

We examined whether the greater propensity for women to control in dating relationships explained why they were more likely than men to inflict violence. We find that control explains most of the sex differences in inflicting violence in this research. Other research has found that women are more likely than men to inflict violence in dating, cohabiting and marital relationships (Plass and Gessner, 1983; Lane and Gwartney-Gibbs, 1985; Stets and Straus, 1988). And these results also may be explained by women having a greater propensity to control in interpersonal relationships.9

While the relationship between interpersonal control and violence has been suggested in previous work (Stets and Pirog-Good, 1987; Stets, 1988), it has never been directly tested. In this study, we tested it directly and found that net of other effects, control positively influences men and
women inflicting and sustaining violence while dating. Therefore, control is a basic interpersonal need (Schutz, 1960) that may be reflected in violence.

It is possible that those who act to control inflict violence because their partners resist being controlled, and the response to this resistance is violence. Those who act to control also sustain violence, perhaps because their partners inflict violence in an attempt to stop the other from controlling them or as a protective measure from further injury. In either case, this is consistent with research that has identified violence as reciprocal (Cate et al., 1982; Henton et al., 1983; Gwartney-Gibbs et al., 1987).

While it might be worthwhile to have couple data to see if partners agree on the relevance of control in dating violence, research on a small sample of dating couples suggests that partners do agree (Stets, 1988). Future research needs to examine the issue of interpersonal control with a larger, more general sample of violent dating couples.

Future research is needed to continue building upon our theory that interactional characteristics such as controlling one's partner are vital to understanding violence. This effect is not sex-specific and remains after controlling for other variables. We also need to investigate the extent to which control may be implicated in other forms of violence, including child, cohabiting, marital and elderly abuse.

References


FOOTNOTES

1. As DeMaris points out, the contradictory findings may be explained by the different stresses experienced by dating partners and by marriage partners. Since dating couples are in a less committed relationship than married couples, they may be less concerned with economic resources and more concerned with emotional investment.

2. This is not to minimize the importance of examining power and gender as it relates to violence. For example, Coleman and Straus (1986) found that equalitarian couples had the lowest rate of violence, and male-dominant and female-dominant couples had the highest rates of violence.

3. Sustaining violence may influence acceptance of violence. Research needs to explore this with longitudinal data.

4. Sustaining violence may lower self-esteem. Again, longitudinal data is needed to test this.

5. We were interested only in college students' dating experiences. Upper level classes were selected to avoid freshmen whose dating experiences over the past year might include high school relationships.

6. There were only five nonwhite male relationships and three nonwhite female relationships.

7. Other variables that may influence dating violence have not been examined, for example, socioeconomic status. Future research needs to address these factors and examine when they cause the relationship between control and violence to disappear.

8. While the absolute change in inflicting and sustaining violence may appear to be small when the net effects of control are examined (there is about a 5-point increase in violence), this increase is actually quite substantial because it results in a doubling in the rate of violence.

9. Some studies have found no difference in inflicting abuse by sex (Deal and Wampler, 1986; Ma..epeace, 1986; Arias et. al, 1987; Stets and Pirog-Good, 1987). More research is needed to establish the conditions under which there are sex differences in inflicting abuse.