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Violence and Gangs: Gender Differences in Perceptions and Behavior

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Most research on violence has focused on males, but recent studies indicate that females are also involved in violent crimes. Few studies, to date, have examined whether different or similar models explain male and female involvement in violent behavior. In the current research, we examine the relative contribution of social bond, self-control and social learning concepts to the explanation of male and female violent offending. We also explore the unique contribution of gang membership, school environment and prior victimization to these explanatory models. Using a multisite sample of eighth-grade students, we find that results of a Chow test indicate the need for separate theoretical models. Despite some similarities, different factors account for male and female rates of violent behavior.

KEY WORDS: violence; gangs; gender differences; perceptions; violent behavior.

1. INTRODUCTION

The nature and extent of youth crime, especially violent crime (including homicide), became issues of national concern during the late, 1980s and early 1990s (Blumstein, 1995; Fox, 1996; National Institute of Justice, 1994; Reiss and Roth, 1993). Even though most of this attention focused on males aged 16–24 (who exhibited the highest rate of violent offending), some research targeted the apparent increase in the rate of violent offending by young females (Chesney-Lind, 1993). Gang activity was heralded as a cause of the increased violence (e.g., Curry and Spergel, 1988, 1992; Howell, 1994; Huff, 1990; Spergel, 1995). Traditionally, however, gang membership has been viewed as a male phenomenon, thereby excluding females as "legitimate" gang members (e.g., Campbell, 1991; Chesney-Lind, 1993; Chesney-Lind and Brown, 1996; Elliott, 1988; Esbensen and Winfree, 1998). One consequence of this exclusion of females from gang research has been a

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paucity of studies examining gender differences in violent offending and the role of gang membership in violent behavior. The lack of studies has contributed to several misconceptions about female gang involvement and violent crime.

Interest in female gang activities has been amplified by an abundance of media coverage (Chesney-Lind, 1993, 1996). Current estimates of the magnitude of gang involvement by females have a wide range. Whereas official records indicate that fewer than 10% of gang members are female (Curry *et al*., 1994; Howell, 1994), self-report studies consistently find rates between 20 and 46% (Bjerregaard and Smith, 1993; Campbell, 1991; Esbensen *et al*., 1993; Esbensen and Winfree, 1998; Fagan, 1990; Moore, 1991).

In spite of recent claims of an increase in violent crime by females, official records generally indicate that females do not offend at the same rate as do males (Steffensmeier, 1995) and these gender differences have remained significant over time. For example, UCR data show that the male/female ratio for serious assault was 5.6:1 in 1976 and 5.7:1 in 1990 (Chesney-Lind, 1995). On the other hand, some earlier studies using self-report data have indicated patterns of female delinquency parallel to those of males (Hindelang, 1971; Jensen and Eve, 1976; Cernkovich and Giordano, 1979). Other studies have shown that the ratios comparing male to female involvement in crime are similar in both official and self-report data for most offense types (Chesney-Lind, 1995). Yet male/female ratios in self-reports (based on Canter, 1982) are underestimated compared to official arrests for certain types of crime, including serious assault. It may be that the frequency of acts is greater for males than females (Sarri, 1983). A recent study by Triplett and Meyers (1995) using the National Youth Survey data showed gender differences for both the prevalence and frequency of self-reported offending and greater gender differences for more serious offenses. In sum, the patterns of these gender differences in offical and self-report delinquency are unclear and need further examination.

Several studies provide evidence that gang membership increases the prevalence and frequency of serious and violent crime among both males and females (Esbensen and Huizinga, 1993; Esbensen and Winfree, 1998; Fagan, 1990; Shelden *et al*., 1993; Thornberry *et al*., 1993; Tracy and Piper, 1982). However, gender differences may still exist. Bjerregaard and Smith (1993) found that serious delinquency was lower among female than male gang members, even though both male and female gang members had higher rates of delinquency than nongang members. On the other hand, ethnographic accounts suggest some female gang members can be as violent and aggressive as their male counterparts (Campbell, 1991; Moore, 1991; Vigil, 1988).

The inconsistent information concerning the relationship of gender and gang membership to violent crime and the possible causes of gender variation indicates these issues merit further attention. The purpose of the current study was to examine gender differences in violent offending and to test the relative contribution of factors from various theoretical models that may account for this relationship. Are differences in violent crime rates attributable to gender or gang membership, or are there other factors that explain the variation in frequency of violent offending? A review of prior research studies of gender differences in delinquency, aggression, and gang membership focuses on the contributions of factors from social control, social learning, self-control, social strain, and power-control theories.

1.1. Gender Differences and Delinquency Theory

There has been little theoretical advancement regarding gender differences in delinquent behavior. Most criminological theories were developed to explain delinquency in males and offer only partial explanations of female delinquency. The majority of criminologists argue that females commit crimes for the same or similar reasons as males. Unfortunately, there has been very little research testing these various theoretical explanations for the gender gap in delinquency rates.

Many believe that "control theory offers the best possibility for explaining female delinquency and even more important, why it is less frequent than male delinquency" (Box, 1981, p. 144). According to social-control theory, gender differences in delinquency would be accounted for by variations in the weakness of social bonds. The lower rates of delinquency for females are attributed to stronger attachment to family, school, and positive peer associations, as well as commitment and involvement in conventional school activities. Deschenes *et al.* (1990) tested various models based on social-control theory to explain gender differences in self-reported delinquency. Although they found significant gender variation in prevalence and frequency rates of delinquency and drug use, there were few differences in the theoretical models. Delinquent behavior by peers was the most significant factor for both males and females in explaining variation in the rates of general and serious delinquency. A strong social bond to family was more of an insulator against delinquency for females than males. This finding supports the earlier argument of social development theory (Weis and Hawkins, 1981) that, as youths get older, family influence decreases more rapidly for boys than girls.

A recent study by Sokol-Katz *et al.* (1997) found no significant interactions between gender and family attachment or gender and family structure in predicting minor or serious delinquency in a sample of middle-school

students even though gender was related to delinquent behavior. They assert that their results are "consistent with the findings of Gottfredson and Hirschi (1990) and Hagan (1989) who contend that parents selectively impose greater control on daughters than on sons" (1997, p. 213).

According to Gottfredson and Hirschi's general theory of crime (1990), inadequate child-rearing practices and low self-control result in delinquency and crime. Various characteristics associated with the propensity to commit crime include impulsivity, risk-seeking behavior, self-centeredness, and anger. Self-control is developed through parental monitoring or supervision of children's behavior and the appropriate punishment of deviant behavior. Gottfredson and Hirschi argue that crime is age and sex invariant. The multiwave panel data from the Rochester Youth Development Study were used by Jang and Krohn (1995) to test Gottfredson and Hirschi's hypothesis of sex invariance (1990). The results of Jang and Krohn's study indicated that parental supervision changed the nature of the sex–delinquency relationship among youths who were between 13 and 15 years of age but had no effect on older teens.

Another explanation, Hagan's power-control theory, points to differences in class position and family structure as factors affecting the gender gap. According to this theory, which combines feminist, conflict, and control theories, there are greater gender differences among patriarchal than egalitarian families because socialization practices differ (Hagan *et al.*, 1987). In the patriarchal family boys will be socialized to be risk takers and girls will not. Aside from Hagan's (1987) data, there has been little empirical evidence to support power-control theory. In fact, research has shown few gender differences between egalitarian and patriarchal families (Morash and Chesney-Lind, 1991; Jensen and Thompson, 1990; Singer and Levine, 1988). Avakame's (1997) test of an expanded version of Hagan's power-control theory did not find evidence to support the theory. Using self-report data from high-school students in three Canadian cities, he found no gender differences related to delinquency among youths from patriarchal in comparison to egalitarian or matriarchal families. Rather, Avakame stated that the role of the family in setting limits and monitoring children is the most important factor in preventing delinquency.

Some studies do not specify any theoretical model. Gender differences with respect to various types of crime (robbery, assault, property, status offenses, and vandalism) were examined by Jensen (1996) using self-report data from the 1981 Seattle survey data. Regression analysis was used to test whether variations in delinquency rates could be due to a "macho" self-image, attitudes toward law and authority, interaction with delinquent friends, a liberated gender ideology, maternal supervision, and/or perceived risk of punishment. While the regression models explained little more than

15% of the variance, having delinquent peers, a macho self-image, and negative beliefs were the most significant factors. Jensen posited a possible interaction effect with gender and these variables. He concluded,

> Girls may be less inclined to be "risk-takers" than boys because of such positive characteristics and to avoid the risks that they will encounter in interaction with a male world where flirtation with danger and aggressive dominance over others is an acceptable source of status. Not only are they less likely to associate with delinquent peers than boys but when they do they are less likely to imitate such associates. These differences may reflect the prospect that the delinquent associates are boys or tendencies to avoid the types of hazardous situations to which such company is likely to lead. (1996, p. 5).

Other research (Smith and Paternoster, 1987) has examined the relevance of four different theories (social bonding, differential association, social strain, and deterrence) in explaining marijuana use among 10th and 11th graders in a major southeastern city. They found no differences between males and females in the factors explaining either prevalence or frequency of marijuana use. Higher rates of crime for both sexes were correlated with traditional social control variables of peer involvement and attachment, parental supervision, commitment, and beliefs. The lack of gender differences may be related to the researchers' choice of deviant behavior, use of marijuana, which is a relatively common occurrence among both male and female high-school students. However, Smith and Paternoster indicated they found similar results when frequency rates for theft were examined.

In sum, most research finds the same theoretical perspective can be used for both males and females to explain general delinquency, but there is not enough evidence to support any one theory. On the other hand, there is no consensus as to what theory best explains the gender differences in delinquency rates. The results of their study led Rowe *et al*. (1995) to argue that one explanatory framework should be used to explain individual differences within and between sexes. Their findings suggested a single latent trait of impulsivity, rebelliousness, and deceitfulness explained variation in self-reported delinquency among sibling pairs ages 10–16. Thus, further tests of theoretical models for gender differences within and between sexes are needed.

1.2. Gender Differences in Aggression and Violence

There is general consensus that males are more violent than females. Various theoretical models, including biological determinism, social determinism, environmental determinism, cultural determinism, and interactionism, have been posited to account for this difference (Archer and McDaniel, 1995). The most plausible explanations relate to differences in

learning and reinforcement of behaviors through the process of socialization. One point of view argues that levels of aggression are "normally" higher among boys and there is general societal acceptance of this behavior (Maccoby and Jacklin, 1974; Ember and Ember, 1995). In some instances, boys are even encouraged to fight (Sears *et al*., 1957). On the other hand, aggression by girls is often ignored and thereby extinguished (Fagot and Hagan, 1985).

The results of longitudinal studies of the relationship between prosocial behavior and aggression have indicated that early learning of prosocial behaviors was an important factor in controlling aggressive behavior for both males and females (Eron and Huesmann, 1989). On the other hand, there were significant gender differences in the long-term effects. Among females, early aggression predicted later social failure, poor educational attainment, and later aggression for females. For males, however, early low prosocial behavior predicted later low prosocial behavior, regardless of early aggression. Eron and Huesmann (1989, p. 65) concluded that "boys should be socialized the way girls have been traditionally socialized," rather than treating girls like boys.

The role of the family is important in the socialization process. In reviewing the literature on family and delinquency, Loeber and Stouthamer-Loeber (1986) indicated that juvenile aggression and delinquency could be predicted by dimensions of family functioning, including parental neglect, family conflict and disruption, and parental deviance.

Another explanation is that there is greater social control of female behavior. Chesney-Lind and Brown (1996, p. 2) suggest, "Being a girl is to be subject to certain constraints and risk factors which distinguish her experience of violence in important ways from that of boys in her neighborhood." According to Sampson and Laub's (1993) developmental theory, the various informal social controls (family, school/work, and community) that mediate the relationship between structural context and behavior are age graded. Laub and Lauritsen's (1995) review of the literature indicated some of these factors include an unstable home, low IQ, impulsivity, antisocial personality, and rejection by peers. However, they concluded there is a lack of evidence to support a coherent theory. Furthermore, they suggest the need to account for life course transitions within a sociocultural context.

The sociocultural and environmental contexts of behavior are important factors in explaining the relationship between gender and violent behavior, which can be quite complex according to Baskin and Sommers (1993). In their study of females' initiation into violent crime, Sommers and Baskin (1994) found that juvenile females who engaged in violent street crime were likely to live in "distressed communities"; that is, their childhood communities had high concentrations of poverty and stranger victimization.

Female initiation into violent street crime was related to use of alcohol or marijuana and association with a violent peer group.

Neighborhood problems, negative life events, negative relations, and traditional strain are components in an expanded version of Agnew's general strain theory (1989), which Mazerolle (1998) used to explain gender differences in rates of property and violent delinquency. Although Mazerolle found no variation by gender for property crime, he concluded (p. 85), "Males and females respond differently to certain types of strain," which accounts for variation in rates of violent delinquency. Males and females appeared to employ different mechanisms for coping with situations of strain and anger.

Multiple risk factors, including disrupted family status, negative life events, and behavioral and environmental factors were found by Saner and Ellickson (1996) to predict more serious violent behavior among male and female 12th grade students. They found similar factors for both genders, including minor delinquency and low parental support and affection. Gender was a particularly important factor in the overall model. However, Saner and Ellickson found significant differences by gender as well. For example, low academic orientation and negative life events (death of a parent, divorce, or separation) were important for females, whereas early drug use was a stronger predictor for males.

1.3. The Role of Peer Groups and Gang Membership

Social-control and social-learning theories include factors related to attachment or commitment to peers and peer involvement in crime. Thus, it is to be expected that differences in male and female friendships may account for some of the gender variation in delinquency. For example, Morash (1983) found that differences in the severity of delinquency were partially explained by gender, yet peer-group variables, such as the extent of delinquent activity among group members changed the nature of that relationship. She also found that females were less likely to be in peer groups engaging in delinquent activities in comparison to males.

In testing several hypotheses derived from network theory, Florence and Moga (1996) found few differences between male and female groups, except in the group size. In general, females tended to participate in offenses with smaller groups of accomplices than males, particularly for the offenses of trespassing, auto theft, and use of alcohol. However, the mean number of cooffenders was greater for drug offenses. They concluded that the lack of significant findings might be due to the difference between delinquent and nondelinquent friendship groups.

It appears that differences in friendships and offending may be a function of gang membership. Since males are more likely to be gang

members than females and gangs are somewhat bigger than the usual size of nongang delinquent peer groups, the results of Florence and Moga's study may really be related to gang membership. However, Warr (1996) is careful to point out that delinquent groups are different from gangs, particularly in their transitory character. In addition, Warr reiterates Giordano's (1978) finding that exposure to delinquent males in mixed-sex groups leads to delinquency among females. Thus, girls in male gangs may be more likely to be violent.

There is a limited amount of literature on gender differences in gang membership, as most research has focused on male gang members. According to Curry (1998), the early literature on female gang involvement reflected Thrasher's male-centered view of gang life. Females were generally seen as "instruments of the gang" and their activities related to their sexuality. The feminist perspective of female gang involvement suggests either a "liberation hypothesis" (Campbell, 1991; Chesney-Lind, 1993) or a "social injury hypothesis" (Moore, 1991). The first hypothesis is supported by evidence of increasing independence of females in gangs (Harris, 1988). Joe and Chesney-Lind's (1995) finding that females join gangs as a means of protection and a method of coping with hostile environments supports the second hypothesis. Moore's ethnographic study of homeboys and homegirls in Los Angeles revealed several differences in the behaviors of boys and girls in gangs. For example, gang girls were more likely to come from "troubled" backgrounds and were likely to be labeled as "tramps."

Bjerregaard and Smith (1993) have provided a rare case of theoretical examination of gender differences in gang membership. Using data from the Rochester Youth Development study, they examined separate logistic regression equations for males and females. They found modest differences between the two models. The only variable that was uniquely associated with gang membership for females was school expectations. Bjerregaard and Smith found that peer delinquency was associated with gang membership for both males and females. No effect was found for social disorganization or poverty. The overselection of high-risk youth in their sample was stated as a possible reason for the failure to find an effect of these variables that ethnographic researchers suggest are primary explanatory factors of gang involvement.

A reanalysis of the Rochester Youth Development study, one that includes later waves of data and several additional risk factors (Thornberry, 1998), produced different results. Community and environment, as measured by neighborhood disorganization and violence, were more significant risk factors for females than males. In comparison, the role of peers was associated only with males and had no significant effect on females. Family

had little impact on females, whereas family structure, attachment and supervision were important for males. School commitment and attachment were important for both males and females. Low self-esteem and negative life events were associated with male and not with female gang membership. Early involvement in violent delinquency was not related to females joining gangs but was important for males. Thornberry concludes there is no single risk factor or set of factors that are predictive of gang membership; rather, risk is present in the domains of community, family, school, peer, and individual characteristics—there are similarities and differences within each of these domains by gender.

2. CURRENT STUDY

Prior theory and research on violent behavior and gangs have tended to focus on the behavior of males and there are few studies of gender differences. The review of the literature has indicated a lack of consensus on the relationship among gender, violent crime, and gang membership. Most studies attribute the same causes to female and male behaviors. Only a handful of studies have empirically tested whether the same theoretical model can be used to explain criminal behavior.

The purpose of this study was to examine gender differences among eighth-grade students in involvement in criminal activities, focusing on the role of gang membership. Of primary interest was whether the same explanatory factors could be applied to both males and females or whether divergent models were necessary. We addressed these issues by examining two questions.

1. Does gang membership change the relationship between gender and violent crime?
2. Are there gender differences in the correlates of violent crime?

3. RESEARCH DESIGN AND METHODS

This investigation of gender differences in violent behavior is part of a larger evaluation of the Gang Resistance Education and Training (GREAT) program, a gang prevention program for youth in middle schools. As such, evaluation objectives dictated many of the design elements, including site selection and sampling procedures. Although not specifically designed for the purposes of this study, the data collected for the evaluation of GREAT provide a rich data set for studying behaviors and attitudes of gang and

nongang youth. One component of the evaluation was a multi-site, multi-state cross-sectional survey of eighth-grade students[3] conducted during the Spring of 1995.[4]

3.1. Site Selection

Cities in which the GREAT program had been delivered in school year 1993–1994 (when the targeted students were seventh graders) were identified using records provided by the Bureau of Alcohol, Tobacco, and Firearms, the federal agency with oversight of the GREAT program. Prospective sites had to meet two criteria. First, only those agencies with two or more officers trained prior to January 1994 to teach GREAT were considered eligible. Second, in order to enhance the geographic and demographic diversity of the sample, some potential cities were excluded from consideration.[5] Eleven sites that met the requirements for inclusion and agreed to participate were selected for the evaluation: Las Cruces, NM; Omaha, NE; Phoenix, AZ; Philadelphia, PA; Kansas City, MO; Milwaukee, WI; Orlando, FL; Will County, IL; Providence, RI; Pocatello, ID; and Torrance, CA.[6] Within each of the 11 sites, schools that offered GREAT during the past 2 years were selected.[7]

These sites provide a diverse sample. One or more of the selected sites can be described by the following characteristics: large urban area, small city, racially and ethnically homogeneous, racially and ethnically heterogeneous, East Coast, West Coast, Mid-west, inner-city, working class, and

[3]This was done to allow for a 1-year follow-up, since the GREAT program is taught to seventh-grade students while, at the same time, guaranteeing that none of the sample was currently enrolled in the program.

[4]Another part of the study was a process evaluation of the training and implementation of the program. The third component of the evaluation that includes an experimental design with longitudinal follow-up in six sites is currently under way.

[5]With the program's origin in Phoenix, cities in Arizona and New Mexico were overrepresented in the early stages of the GREAT program. Thus, cities such as Albuquerque, Tucson, Scottsdale, and other smaller cities in the Southwest were excluded from the eligible pool of potential sites.

[6]Reasons for exclusion included the following: a number of the cities had not yet implemented the program; not all the sites had processed enough students through the program the prior year to allow for the retrospective data collection planned; and in some situations the police had instructed all seventh graders, making it impossible to construct a comparison group of students who had not received the GREAT training.

[7]At most sites it was possible to identify schools in which the GREAT program had been taught to some but not all of the students as seventh graders. In Will County and Milwaukee, it was necessary to select entire schools to serve as the treatment and control groups because GREAT instruction had been delivered to or withheld from all seventh graders in those schools.

middle class. Because this is a diverse sample, there are certain advantages and limitations. First, the geographic distribution and variety provide an opportunity to get a more global picture of the problem of gangs using standardized measurements—something that previous research that has focused primarily on one location has not been able to do.[8] A disadvantage of this study population, however, is the fact that it may differ in important respects from those in which gangs usually arise. The sample is not drawn from an underclass population or areas of concentrated poverty. Consequently, if the results of our study differ from those of prior researchers, it may be due to the site selection. A second important feature of this study is the fact that eighth-grade school students were surveyed. Obviously this sample does not represent those gang members who are no longer in school. Given the significant differences between dropouts and school students in prior research by Fagan and associates (1986; Fagan and Pabon, 1991), our study may have underrepresented the more serious gang members. In addition, the study population is much younger than samples used in most prior research. This may result in a higher proportion of female gang members, since they tend to mature out of gangs (Esbensen and Huizinga, 1993), and a higher proportion of male gang members who are still in school. In addition, the younger sample will likely have lower rates of serious crime since the age–crime curve tends to peak at age 16–17 for those offenses (Blumstein, 1995).

3.2. Data Collection

This study uses data collected using a cross-sectional design.[9] Passive consent procedures (i.e., a procedure that requires parents to respond only if they do not want their child to participate in a research project) were approved in all but one site.[10] The number of parental refusals at each school ranged from zero at slightly more than half of the schools (approximately 23 of 38 schools) to a high of 2% at one school. Group-administered questionnaires were conducted with all eighth graders in attendance on the

[8]Some studies have compared two to four sites, but most have focused on inner-city or urban areas.

[9]The cross-sectional design does limit the robustness of the findings as we are unable to specify the causal time order. However, the present analysis was designed as a preliminary investigation of the correlates of violence. Further analyses will be conducted with the longitudinal data that are being collected in six sites.

[10]Due to the differences in consent procedures, which resulted in lower participation rates, the responses of this site may differ from those of others. Nonetheless, given that this site represents less than 10% of the data, there should be no concern with the aggregate data.

specified day.[11] This resulted in a final sample of 5935 eighth-grade students from 315 classrooms in 42 schools. Of course the sample is not representative of those gang members who have dropped out or are not attending school. Thus, the results of our study may differ from those of other studies that have concentrated on inner-city youth and/or included snowball sampling of dropouts (see, e.g., Fagan, 1990; Decker and VanWinkle, 1996).

The student self-report survey was administered in a group setting in individual classrooms during a 50-min class period. In order to increase the reliability of responses, one researcher read the questions out loud to the students, while one or two other research staff walked around the room to monitor students and answer any questions.[12]

3.3. Measures

Measures included in the student questionnaires can be divided into three main categories: demographic, attitudinal and behavioral. Demographic data include gender, age, parental educational attainment, race/ethnicity and family composition. Attitudinal measures used in these analyses are representative of social learning theory, social-control or social bond theory, and self-control theory. The attitudinal measures included perceptions of school environment, maternal attachment, parental monitoring, impulsivity, risk-taking, commitment to negative peers, commitment to positive peers, neutralization, guilt, self-esteem, school commitment, prosocial peer behavior, and peer violence. Behavioral measures consist of self-reported delinquency, victimization, and self-reported gang membership. Unless otherwise indicated, the scales (which are described in more detail in the Appendix) were adapted from the National Youth Survey (Elliott *et al.*, 1985) or the Denver Youth Survey (Huizinga *et al.*, 1991a).

Self-reported delinquency, victimization, and gang affiliation were asked of respondents toward the end of the questionnaire. This technique has been used widely during the past 40 years and provides a good measure of actual behavior rather than a reactive measure of police response to behavior (e.g., Hindelang *et al.*, 1981; Huizinga and Elliott, 1987; Huizinga, 1991). Respondents were asked if they had ever done each of these things (ever prevalence). Those students indicating that they had engaged in these

[11]Attendance rates varied from a low of 75% at one Kansas City middle school to a high of 93% at several schools in Will County and Pocatello. Thus, participation rates (the percentage of students in attendance on the day of administration actually completing questionnaires) varied between 98 and 100% at the passive consent sites. Participation rates in the site where active consent procedures were required ranged from 53 to 75% of all eighth-grade students in each of the four schools.

[12]As necessary, Spanish instruments were provided to students.

behaviors were then asked to indicate how many times during the past 12 months they had committed each offense (e.g., frequency).

For the purposes of this study, we defined violent crime to include the following behaviors.

1. Carried a hidden weapon for protection.
2. Hit someone with the idea of hurting them.
3. Attacked someone with a weapon.
4. Used a weapon or force to get money or things from people.
5. Been involved in gang fights.
6. Shot at someone because you were told to by someone else.

While there may be some overlap in some of these behaviors (e.g., gang fighting and hitting someone), these activities cover a broader range than the more traditional definition of person offense.

The same self-report procedure was used to measure victimization. Thus, both measures of ever prevalence of victimization and last year frequency of victimization were obtained. The victimization measure included the following:

1. Been hit by someone trying to hurt you.
2. Had someone use a weapon or force to get money or things from you.
3. Been attacked by someone with a weapon or by someone trying to seriously hurt or kill you.
4. Had some of your things stolen from you.

Gang membership was determined through self-identification. As with most social phenomenon, definitional issues arise.[13] By relying on self-definition, we are adhering to law enforcement's primary criteria for identifying "official" gang members. In the current research, two filter questions introduced the gang-specific section of the questionnaire: "Have you ever been a gang member?" and "Are you now in a gang?" Given the current sample, with almost all the respondents under the age of 15, even affirmative responses to the first question followed by a negative response to the second may still indicate a recent gang affiliation. In order to limit our sample of gang members to "delinquent gangs," we employed a restrictive definition of gang status. Thus, only those youth who reported ever having been in a gang and who reported that their gangs engaged in at least one type of delinquent behavior (fighting other gangs, stealing cars, stealing in general,

[13]For further discussion of this definitional issue, see Winfree *et al*. (1992) and Maxson and Klein (1990).

or robbing people) were classified as gang members.[14] This strategy resulted in identification of 623 gang members, representing 10.6% of the sample.

3.4. Analyses

In order to examine gender differences in demographic, attitudinal, and behavioral measures, either *t* tests of means or measures of association (chi-square and phi) were used. Two-way analysis of variance was used for the more complex models involving gender differences by gang membership.

Multiple regression was used to examine the relationship between the attitudinal and theoretical predictor variables and the dependent variable, total number of violent offenses. Due to the fact that the distribution of the dependent variable was highly skewed, with 40% of respondents reporting no prior criminal involvement and about one-third committing one or more offenses, a log transformation was computed for the dependent variable.[15]

Before running the multiple regression, we examined the correlations between independent variables to determine whether there would be any problems with multicollinearity. We found one moderate correlation (a correlation of 0.50 or above) between the attitudinal and the cognitive measures, but several less significant correlations (a correlation of 0.3 or 0.4). School commitment was related to having prosocial peers.[16] Consequently, we decided to use both a theoretical approach and a stepwise procedure in

[14]It is possible that some youths who report current or prior gang affiliation may be "wannabes" rather than actual gang members. In another study the impact of variations in gang definition was examined (Esbensen *et al*., 1997). Definitions ranged from self-nomination of ever belonging to a gang and having some sort of formal organization to identifiable as a core member (by graphically indicating one's position in the innermost circle of a diagram). The results of this study indicated that the most restrictive definition (being a core member) was limited to 2.3% of the students in comparison to 9.2% of the students who admitted they were current gang members. Regardless of the variation in self-reported membership, no statistically significant differences were found between groups by demographic characteristics. Approximately the same proportions of gang members were male and minority. The impact of using varying definitions of gang membership was found in differences in the attitudes and behaviors of gang and nongang youths as the definition became more restrictive. Similarly, in the current study a less restrictive definition was used when gang vs nongang differences were examined. Thus, any differences we find in the current study would only be more pronounced if a more restrictive definition of gang membership were applied.

[15]The log transform results in a more normal distribution and makes it possible to use multiple regression rather than logistic regression or probit modeling techniques.

[16]There were also moderate correlations between guilt expected for potential deviance and several variables including neutralization, risk-seeking, school commitment, and negative peer commitment as well as between neutralization and risk-seeking and school commitment. Therefore in the regression models we used the more specific variables of guilt expected for violent behavior and neutralization about fighting.

testing and building regression models.[17] In addition, we decided not to include a measure of peer delinquency in the models because it was correlated with gang membership and we were more interested in the effects of gang membership.

To test for gender differences in the theoretical models, we first used a block stepwise procedure and examined the relative importance of social bonding, self-control, and social learning theory variables for the full sample. Similar to the prior study by Farnworth (1984), we then used the Chow test to compare the regression coefficients for identically specified equations for males and females. This allows us to determine whether the same theoretical model could be applied to both males and females. The null hypothesis is that every regression coefficient in the equation for males equals the corresponding coefficient in the equation for females. If a statistically significant difference is found using the Chow test, it implies that one or more of the coefficients are not equal (Knoke and Bohrnstedt, 1994). These results were not included in the current paper because significant gender differences were found. The second approach was to use a backward stepwise procedure, eliminating those variables that were not significant at the $\alpha = 0.1$ level, to examine the relative strength of the various factors in separate models for males and females.

4. FINDINGS

The demographic characteristics of study participants (shown in the Appendix, Table AI) were categorized by gender, controlling for gang membership.[18] Overall, slightly over half of the respondents were females, 92% of the youths were born in the United States, and the majority, 60%, were 14 years of age at the time of the survey. On average, males were slightly older than females. One-third of the sample reported their race as white, about 25% replied African-American, nearly 20% were Hispanics, only 6% were Asian-American, and 8% were categorized as Other,[19] with 2% missing data. About 60% of students reported that they lived with both parents and almost 30% reported that they lived with only their mothers. Another 4% reported that they lived with their father only; and 3% with some other relative. Parents' education was missing for 14% of the students,

[17]We tested for multicollinearity by running the collinearity diagnostics in SPSS, examining the variance inflation factor (VIF) and tolerances for individual variables as well as the eigenvalues of the scaled and uncentered cross-products matrix for each regression model.

[18]Statistical analyses comparing gang and nongang members are presented by Esbensen and Winfree (1998).

[19]Other includes persons of mixed race, e.g., Hispanic and African-American, as well as persons reporting race as a type of religion or nationality.

but among those who reported, very few (less than 20%) reported that either parent had less than a high-school degree.[20] Roughly 30% of mothers or fathers had completed high school. Over half of the students reported that their mother and father had some college.

There were some statistically significant differences between males and females in background characteristics. For example, females were less likely than males to live with both parents, more likely to live with their mothers or another person, and less likely to live with their fathers only. The average age of females in the sample was slightly younger than males. The mothers of the females in the sample were more likely to have less than a high-school education and less likely to have some college than the mothers of the males in the sample. Most of these differences were not significant after controlling for gang membership. Among nongang youth, females were more likely to live with only their mother and less likely to live with only their father, but there was no gender difference among gang members, who were much more likely than nongang members to live with only their mother. The educational level of the parents of the female nongang members was slightly lower than that of the male nongang members, yet overall the educational level of the parents of gang members, regardless of gender, was lower than that of nongang members. One difference that persisted across all comparisons (gender and gang membership) was age. On average, the males in the sample were older than the females. This was true for nongang and gang members alike. On the other hand, gang members tended to be significantly older than nongang members. Gang members were also more likely than nongang members to live in single-parent homes (Esbensen and Winfree, 1998).

4.1. Prevalence and Frequency of Violent Behavior

Students were asked if they had ever engaged in various criminal activities and how many times they had done so in the past 12 months. For those items relating to violent behavior, we examined the proportion who reported involvement (prevalence) and the average number of times (frequency) engaging in the behavior.[21] Tables I and II present the results of

[20]This is about the same as the national averages from 1977 to 1990 (Smith *et al*., 1995, pp. 72, 73). However, when gang and nongang youth were compared we found some significant differences, with gang youth more likely than nongang youth to come from families with less than a high-school education and without college, but with similar proportions completing high school.

[21]Individual offending rates were also calculated but were not included in this paper since we were interested in predicting the frequency levels of involvement for the complete study group rather than the offending rates for those engaged in a specific behavior.

Table I. Prevalence Rates of Violent Behavior and Weapon Use by Gender and Gang Membership (Individual Items and Overall Scale)

	Total			Nongang			Gang		
Have you ever	Male	Female	ϕ	Male	Female	ϕ	Male	Female	ϕ
Carried a hidden weapon for protection?	39.4*	20.0	−0.21	32.0*	16.1	−0.19	82.0*	64.7	−0.21
Hit someone with the idea of hurting them?	59.4*	46.2	−0.13	55.2*	43.1	−0.12	84.2	81.1	−0.04
Attacked someone with a weapon?	18.0*	10.1	−0.11	11.7*	7.6	−0.07	56.5*	38.9	−0.17
Used a weapon or force to get money or things from people?	9.0*	3.0	−0.13	4.9*	1.7	−0.09	33.9*	17.4	−0.18
Been involved in gang fights?	23.6*	15.1	−0.11	13.5*	9.6	−0.06	84.9*	77.8	−0.09
Shot at someone because you were told to by someone else?	7.7*	2.3	−0.13	3.2*	0.8	−0.09	34.1*	21.1	−0.14
Any violent offense	71.1*	53.8	−0.18	66.4*	50.0	−0.16	99.2	95.7	−0.12

*Significant differences between males and females within each subgroup, $P < 0.05$, using χ-square measures of association.

Table II. Frequency Rates of Violent Behavior and Weapon Use by Gender and Gang Membership (Individual Items and Overall Scale)[a]

	Total		Nongang		Gang		Sig.	η	
How many times in past 12 months	Male	Female	Male	Female	Male	Female	diff.	Sex	Gang
Carried a hidden weapon for protection?	11.45	3.38	5.49	2.16	58.35	19.85	s, g, s * g	0.095	0.264
Hit someone with the idea of hurting them?	8.89	4.34	6.67	3.89	24.58	10.10	s, g, s * g	0.076	0.136
Attacked someone with a weapon?	2.13	0.53	0.87	0.35	10.60	2.68	s, g, s * g	0.057	0.149
Used a weapon or force to get money or things from people?	1.49	0.15	0.73	0.05	6.47	1.41	s, g, s * g	0.056	0.106
Been involved in gang fights?	3.09	1.15	0.81	0.42	19.38	11.02	s, g, s * g	0.052	0.245
Shot at someone because you were told to by someone else?	0.79	0.13	0.24	0.03	4.37	1.27	s, g, s * g	0.043	0.119
Overall scale	1.25	0.67	0.89	0.52	3.88	2.66	s, g, s * g	0.180	0.493

[a] Frequencies for individual items were truncated at 365 times per year prior to calculating means; in calculating the scale score, frequencies were truncated at 12 times per year and then averaged. Analyses were run using two-way analysis of variance: s, significant main effect of gender; g, significant main effect of gang membership; s * g, significant interaction effect of gender and gang membership.

our analysis of gender differences in prevalence and frequency of violent behavior, controlling for gang membership.

Individual items relating to violent behavior were also examined. For each of the items we found significantly lower involvement by females in comparison to males. Twenty percent of females and 39% of males reported ever carrying a hidden weapon. Ten percent of females and 18% of males reported attacking someone with a weapon. Even though the type of weapon was unspecified, since only 2% of females and 8% of males reported ever having shot at someone, it seems likely that the weapons included knives and blunt instruments. Only a small proportion of students (3% of females and 9% of males) reported ever committing an armed robbery. Thus, in all instances except hitting someone, we found significantly lower prevalence rates for females in comparison to males, although the phi coefficients indicate that most of these relationships were weak associations. Overall, the prevalence rates for committing a violent offense in the past year (any of the above individual offenses) differed significantly by gender, with half of the females and two-thirds of the males reporting involvement in the past 12 months.

Significant differences were found between gang and nongang members, with a higher proportion of gang members involved in violent crimes, for each category. Even after controlling for gang membership, almost all of the gender differences remained significant, with the exception of hitting someone, with higher prevalence rates for males than females. Over 90% of males and females who were gang members had engaged in violent behavior.

Overall we also found that frequency rates for males were higher than for females and gang members reported higher crime rates than nongang members, as shown in Table II. For all items we also found significant interaction effects. Female gang members reported higher frequency rates of violent behavior than male nongang members. Gang membership was the stronger of the two main effects.[22]

4.2. Factors Explaining Involvement in Violent Behavior

In building the theoretical models, we included many concepts from prior research on gender differences in delinquency and violent crime, such as parental monitoring, victimization, and impulsivity. However, we did not

[22]This finding is consistent with results from the longitudinal studies conducted by the Office of Juvenile Justice and Delinquency Prevention Study Group on Serious and Violent Juvenile Offenders that indicate that gang girls account for more violent offenses than do nongang males, as reported by Huizinga (1997).

have comparable measures for all of the concepts. For example, neighborhood violence was shown to be an important predictor of female involvement in violent crime (Baskin and Sommers, 1993), but our study had measured only school violence.

As indicated previously, the regression models were first run using a stepwise block procedure, adding groups of variables based on their theoretical importance in an integrated social development model (Fagan and Jones, 1984). As shown in the "Total" columns in Table III, the amount of explained variance attributed to the demographic factors of gender and age was small (0.05), even though gender was a significant factor in the equation. The largest increase in explanation (change in R^2) was due to the social bonding variables, whereas the self-control measures added little to the model. The addition of the social learning constructs of neutralization and perceived guilt to the social bonding and self-control measures significantly increased the ability to explain the frequency of violent behavior. Gang membership had very little impact, with only a slight increase in the adjusted R^2. The environmental variables added significantly to the model, with the final amount of variation explained reaching 40%.

A very different picture emerged, on the other hand, when the standardized beta coefficients and tests of significance were examined. The strongest correlate of violent offending appears to be victimization in the past year, followed by ability to neutralize social norms against fighting and lack of perceived guilt. Gang membership was fourth in relative strength. Only one of the social bonding measures was statistically significant. Having prosocial peers appears to be an insulator against violent offending. Two of the three measures of self-control, risk-seeking and self-esteem, increased the frequency of violence. Overall, the relative strengths of the significant variables suggest that the proximity of the factors to the behavior increase the likelihood of violent behavior. Since the measure of violent behavior includes "hitting someone," it may be that the events were precipitated by the victimization in the past year, but we could not test that hypothesis with our cross-sectional data.

In order to test for significant gender differences, the block stepwise model was run separately for males and females and differences in the coefficients examined using the Chow test (see the Appendix, Table AII). In general, we found that the separate models were similar in terms of the amount of variance explained by each of the subsets of theoretical variables, but the overall adjusted R^2 was higher for females than males (41% vs 36% of the variance explained). The calculated value of the Chow test was small (7.39), yet it was statistically significant, indicating that the model coefficients were not the same for males and females.

Table III. Gender Differences in Explaining the Frequency of Violent Offenses[a]

	Total (5067)[b]			Male (2383)[b]			Female (2684)[b]		
	b (*F*)	*β* (df)	*t* (adj. R^2)	*b* (*F*)	*β* (df)	*t* (adj. R^2)	*b* (*F*)	*β* (df)	*t* (adj. R^2)
Demographic	(136.5)	(2)	(0.051)						
Gender (1 = male)	0.362	0.052	4.478*						
Age	0.008	0.017	1.545						
Social bond	(173.5)	(8)	(0.214)						
Maternal attachment	–0.005	–0.018	–1.375						
Parental monitoring	–0.007	–0.015	–1.143	–0.135	–0.033	–1.664			
School commitment	–0.009	–0.020	–1.299				–0.315	–0.067	–3.384*
Peer commitment									
Positive	0.000	0.001	0.080						
Negative	0.008	0.025	1.885	0.155	0.052	2.580*			
Prosocial peers	–0.340	–0.078	–5.563*	–0.289	–0.069	–3.359*	–0.403	–0.092	–4.999*
Self-control	(144.1)	(11)	(0.237)						
Impulsivity	–0.004	–0.008	–0.614						
Risk-seeking	0.286	0.077	5.382*	0.322	0.091	4.451*	0.245	0.065	3.665*
Self-esteem	0.222	0.045	3.532*	0.185	0.037	2.060*	0.259	0.055	3.240*
Social learning	(185.4)	(13)	(0.321)						
Neutralization—fighting	0.631	0.179	13.902*	0.595	0.157	8.461*	0.605	0.181	10.177*
Guilt toward violence	–1.135	–0.190	–13.795*	–1.011	–0.186	–9.156*	–1.336	–0.201	–11.344*
Gang	(186.2)	(14)	(0.340)						
Gang membership (1 = gang)	1.377	0.115	9.635*	1.231	0.118	6.439*	1.723	0.128	8.145*
Environmental	(215.2)	(16)	(0.403)						
School violence	0.009	0.015	1.315						
Victimization	1.778	0.269	23.067*	1.567	0.261	15.042*	2.105	0.294	18.935*
Intercept	–5.327		–5.761*	–4.272		–6.513*	–2.954		–4.757*
Adjusted R^2		0.403			0.356			0.406	
F test		215.60			147.22			230.68	
df		16			9			8	
Residual sum of squares		36,325.044			17,363.529			18,704.165	

[a] Analysis of full model done using block stepwise regression; models for males and females done using backward elimination.
[b] Sample size.

Comparing both the unstandardized and the standardized coefficients in the separate models (see the Appendix, Table AII) to determine the relative strength and weight of each of the factors, it is clear that for both males and females the four most important variables were, in order, victimization, perceived guilt, neutralization, and gang membership.[23] All of these variables led to a greater increase (or decrease) in violence among females in contrast to males. For example, victimization increased violence by a factor of 2.1 for females and a factor of 1.6 for males, whereas perceived guilt decreased violence by a factor of 1.3 for females and 1.0 for males. There were several other differences in the models worth noting. Self-esteem was more important in explaining violence among females than males. Risk-seeking increased violence by a factor of 0.33 for males, in comparison to 0.26 for females. Having prosocial peers was a greater deterrent for violence among females than males (0.37 in comparison to 0.31). Commitment to negative peers was significant only for males, increasing the rate of violent offending. In comparison, school commitment was important only for females, significantly reducing the rate of violent crime.

Due to the fact that we found different variables to be important in explaining male and female involvement in violent crime, we decided to examine further the models using backward stepwise regression (see "Male" and "Female" columns in Table III). The elimination of some variables that were not significant in the earlier model changed the model slightly, since there was minor multicollinearity in the earlier theoretically based model. Nonetheless, the overall patterns remained basically the same in the relative strength of the variables for both males and females. The same four variables—victimization, lack of perceived guilt about engaging in violent behavior, neutralization against fighting, and gang membership—were the strongest factors. For males, risk-seeking, having prosocial peers, and negative peer commitment were next in importance, as in the original model. However, two new variables became significant. Self-esteem appears to increase violence slightly, and parental monitoring to decrease violence slightly. For females, no new variables were significant to the explanation of violent behavior. However, the relative strengths of risk-seeking and school commitment were reversed in comparison to those in the earlier model. Overall, the differences between the models for males and females seem to be consistent with developmental theories of adolescence which suggest that, among males, the peer group is extremely important, whereas for females school achievement and commitment provide a strong bond.

[23]To compare within each equation, the standardized beta weights should be used, whereas to compare between males and females, the unstandardized coefficients should be examined.

Table IV. Neutralization and Feelings of Guilt Regarding Violent Behavior and Weapon Use by Gender and Gang Membership (Individual Items)

	Total		Nongang		Gang	
	Male	Female	Male	Female	Male	Female
Okay to fight if hit first	*	(0.12)[a]	*	(0.11)	*	(0.14)
Disagree	11.9	19.3	13.3	20.8	3.7	1.7
Neutral	12.8	16.2	14.5	17.0	2.4	7.6
Agree	75.3	64.5	72.2	62.2	93.9	90.7
Okay to fight if protect rights	*	(0.15)	*	(0.15)		(0.07)
Disagree	6.0	12.3	6.5	13.3	2.9	1.3
Neutral	13.4	20.1	15.1	21.3	4.0	6.0
Agree	80.5	67.6	78.4	65.5	93.1	92.8
Okay to fight if threat family/friends	*	(0.20)	*	(0.20)		(0.10)
Disagree	6.2	12.4	6.8	13.3	2.9	2.1
Neutral	13.3	25.5	14.8	27.0	3.7	8.1
Agree	80.5	62.2	78.4	59.7	93.4	89.8
Feel guilty about hitting someone	*	(0.16)	*	(0.14)	*	(0.14)
Not guilty	32.2	19.2	27.0	16.4	63.5	50.5
Somewhat guilty	36.9	37.5	38.7	37.9	26.5	32.6
Very guilty	30.9	43.3	34.4	45.7	9.6	16.9
Feel guilty attacking with weapon	*	(0.18)	*	(0.15)	*	(0.20)
Not guilty	22.0	11.3	16.6	9.3	53.2	34.9
Somewhat guilty	26.1	20.4	25.3	18.9	30.9	34.9
Very guilty	52.0	68.3	58.1	71.8	16.0	30.2
Feel guilty armed robbery	*	(0.19)	*	(0.16)	*	(0.26)
Not guilty	12.9	5.3	9.1	3.8	34.9	22.6
Somewhat guilty	20.7	12.2	18.1	10.9	37.3	23.5
Very guilty	66.3	82.6	72.8	85.3	27.9	53.8

[a]Cramer's V given in parentheses.

*Significant differences between males and females within each subgroup, $P < 0.05$, using χ-square measures of association.

4.3. Feelings of Guilt and Neutralization

In view of the fact that the social learning variables were significant correlates of violent offending, we examined the varying perceptions of males, females, and gang members in our sample. Few adolescents approve of violence, but many youths accept the use of violent behavior in specific situations. Agnew (1994) suggests that adolescents use techniques of neutralization to justify violent behavior. Our findings in Table IV show that a majority of students see hitting someone as justifiable if (1) one is hit first,

(2) it is necessary to protect your rights, or (3) there is a threat to family or friends. However, significant gender differences were found in the neutralization of violence. Males were more likely than females to accept physical fighting. When this relationship was examined for gang and nongang members there were no longer significant differences between male and female gang members, except if one was hit first. Moreover, the differences between gang and nongang members were striking—virtually all gang members, both male and female, indicated approval of physical violence.

Females were more likely to feel guilty about committing crime than males, for all types of violent offenses (see Table IV). For example, 43% of females reported that they would feel very guilty and 19% not guilty about hitting someone, in comparison to 31% and 32% of males (respectively). Even for those violent behaviors where the majority of both groups reported that they would feel very guilty (attacking someone with a weapon or committing armed robbery), the proportion of females reporting higher levels of guilty (very guilty as opposed to somewhat or not guilty) was greater than the proportion of males. These differences remained when controlling for gang membership, yet gang members were more likely to report less guilt than nongang members were. Slightly less than half of female nongang members reported that they would feel very guilty about hitting someone, in comparison to roughly one-third of male nongang members, 17% of female gang members, and 10% of male gang members. For the more serious offenses (attacking with a weapon or armed robbery), the majority of nongang members reported they would feel very guilty, whereas 30% of female and 16% of male gang members reported that they would feel very guilty about attacking with a weapon. Female gang members were more likely than male gang members were (54 to 28%) to feel guilty about armed robbery. Once again, the gang/nongang differences appear to outweigh the gender differences, yet there were more gender differences for guilt in comparison to neutralization after controlling for gang membership.

5. DISCUSSION AND CONCLUSIONS

Significant gender differences were found for most of the relationships we tested. As expected, females were more likely to feel guilty about committing a crime than males, even among gang members. On the other hand, males were more likely to neutralize acts of physical violence than females, except there were fewer differences among gang members. Significantly higher levels of involvement in violent crime were found for males than females. These differences were explained in terms of prior victimization, neutralization of fighting, and perceived guilt, but there were slight differences in the models for males and females.

The results of our study are similar to prior research comparing delinquency rates of gang and nongang youth (Esbensen *et al*., 1993; Thornberry *et al*., 1993). First, as measured by self-report, both male and female gang members appear to be equally involved in violence, and more so than nongang members, among whom there continues to be a gender difference (e.g., male violence is greater than female). However, when investigated in closer detail, we found that the primary reason was that both boys and girls reported hitting someone in the past. On the other hand, in all instances of more serious violent behavior (being involved in gang fights, carrying weapons, using weapons), male gang members had higher prevalence rates than female gang members.

Second, even though we found significant differences between males and females in the frequency of offending, even controlling for gang membership, gender was relatively unimportant to the explanation of this variation in comparison to other factors. The finding that victimization was the strongest predictor of violent behavior in the past year suggests some of the violence may be reciprocal fighting among youth. Given the age of the sample, it is possible this is somewhat minor behavior.

Our findings regarding factors important to the prediction of violent behavior were similar to those of Thornberry *et al*. (1994) as well as Saner and Ellickson (1996). For example, poor parental monitoring, low commitment to school, and peer delinquency (or in our study gang membership) were related to violence. However, in comparison to the research by Baskin and Sommers (1993), who found neighborhood violence to be an important predictor of female violence, we did not find school violence to be related. Since we did not include substance use as a predictor in our models, we cannot support or refute the relative importance of this variable for predicting female crime given by Baskin and Sommers or violence by males by Saner and Ellickson (1996). The differences between the models for males and females seem to be consistent with Weis and Hawkins' social developmental theory in that the influence of prosocial peers was more salient for girls. The role of the peer group or gang remains important for males' involvement in violent behavior, as shown in prior studies (Callaghan and Rivera, 1992; Webster *et al*., 1993; Esbensen and Huizinga, 1993; Huizinga *et al*., 1991a; Shelden *et al*., 1993), but it is not the primary factor.

Thus, from a policy perspective, our study suggests that gang prevention programs should focus on the role of peers in juvenile behavior, in terms of both commitment and involvement with prosocial peers. Since there are important differences between gang and nongang members, decreasing gang affiliation should reduce not only attitudes and opinions favorable to violence but also the related behaviors.

Another important finding in this study, which supports prior work by Jensen (1996), was that engaging more frequently in violence was correlated with one's attitudes toward violence and lack of guilt, regardless of gender. Few studies have examined these social learning variables even though they are implicit in Sutherland's theory of differential association and Agnew (1994) found youths tend to neutralize violent behavior. Differences in perceptions of guilt and the ability to neutralize violent behavior are particularly important when looking at gang vs nongang youths. Gang membership appears to be significantly related to neutralization of violence and lack of guilt, for both males and females. Thus, efforts should be made to reduce the neutralization of violence, which would in turn help to reduce crime. From a policy standpoint, the lack of perceived guilt among those who commit crimes suggests a need for greater accountability and victim awareness in delinquency prevention and intervention.

Our results provide preliminary evidence that different theoretical models need to be tested to explain gender variation. Violent crime by females cannot be attributed to gang membership by itself or to just those explanatory factors used in the study of violence by males. As the findings of this study appear to differ slightly from those of studies using samples of older youths, it is important to explore the interactions among age, gender, and gang membership as these variables relate to violent behavior. There are significant differences in the social and psychological development of males vs females that need to be examined using longitudinal data. Even without this gender-specific knowledge, the results of this study confirm the importance of focusing prevention programs on both males and females in an effort to reduce gang association and violence among younger juveniles. However, the significant gender differences in this multisite sample of gang members, along with the evidence from other studies of female delinquents and gang members (Chesney-Lind *et al.*, 1996; Miller, 1997; Owen *et al.*, 1998; Rosenbaum, 1991), imply the need for special prevention and intervention efforts aimed specifically at females.

APPENDIX

Description of Measures

The attitudinal measures included perceptions of school environment, maternal attachment, parental monitoring, impulsivity, risk-taking, commitment to negative peers, commitment to positive peers, neutralization, guilt, self-esteem, school commitment, prosocial peer behavior, peer violence. Behavioral measures consist of self-reported delinquency, victimization, and self-reported gang membership.

Table AI. Demographic Characteristics of Study Participants by Gender, Controlling for Gang Membership[a]

	Total		Nongang		Gang	
	Male	Female	Male	Female	Male	Female
N	2792	3030	2412	2793	380	237
Percentage	48.1	51.9	86.4	92.2	13.6	7.8
Where born						
In U.S.	91.9	91.6	92.0	91.8	91.5	89.8
Outside U.S.	8.1	9.4	8.0	8.2	8.5	10.2
Live with	*		*			
Mother only	26.1	28.9	24.5	28.4	34.6	35.4
Father only	4.2	3.1	4.0	2.9	5.3	5.9
Both parents	63.9	59.8	66.3	61.2	49.6	42.6
Other	5.9	8.2	5.2	7.5	10.6	16.0
Race						
White	41.5	39.5	44.2	41.0	26.1	22.0
African-American	26.3	26.6	25.1	26.7	32.8	27.1
Hispanic	19.3	18.4	18.6	17.3	22.9	28.4
American Indian	1.9	2.6	1.8	2.5	3.2	3.4
Asian	5.5	6.3	5.8	6.5	4.0	5.1
Other	1.7	1.6	1.5	1.5	2.4	3.0
Mixed	3.7	5.0	3.0	4.5	8.5	11.0
Age	*		*		*	
Average	13.9	13.7	13.8	13.7	14.2	13.9
% 13 and under	25.8	32.2	27.8	33.2	13.8	21.4
% 14	60.4	60.4	60.5	60.1	58.9	62.8
% 15 and over	13.8	7.4	11.7	6.7	27.3	15.8
Father's education			*			
Less than high school	14.7	17.1	12.8	15.9	25.9	31.5
Completed high school	28.9	27.8	28.5	27.4	32.7	31.5
Some college	56.4	55.1	58.7	56.8	41.4	36.9
Mother's education	*		*			
Less than high school	11.8	16.5	10.3	15.5	20.5	27.2
Completed high school	30.6	29.8	30.8	30.2	29.2	25.6
Some college	57.6	53.7	58.9	54.3	50.3	47.2

[a] Missing data were not included in calculations of column percentages; each variable has different sample size *N*'s.

*Significant difference between males and females, $P < 0.05$ using a χ-square test or a difference of means *t* test.

School Environment: This is a nine-item scale measuring safety in the schools, e.g., "There are gang fights at my school." Higher scores on this 5-point Likert scale indicate greater perceived violence and gang activity at school.

Table AII. Test of Gender Differences in Explaining Frequency of Violent Offenses

	Total (5067)[a]			Male (2383)			Female (2684)		
	b (*F*)	*β* (df)	*t* (adj. R^2)	*b* (*F*)	*β* (df)	*t* (adj. R^2)	*b* (*F*)	*β* (df)	*t* (adj. R^2)
Demographic	(82.4)	(1)	(0.016)	(37.2)	(1)	(0.015)	(25.0)	(1)	(0.009)
Age	0.009	0.020	1.811	0.000	0.020	1.204	0.000	0.015	0.994
Social bond	(172.6)	(7)	(0.192)	(74.0)	(7)	(0.177)	(90.3)	(7)	(0.189)
Maternal attachment	–0.003	–0.015	–1.131	–0.000	–0.014	–0.676	–0.000	–0.022	–1.203
Parental monitoring	–0.009	–0.023	–1.706	–0.127	–0.031	–1.488	–0.000	–0.001	–0.030
School commitment	–0.104	–0.023	–1.484	0.102	0.023	1.025	–0.309	–0.065	–3.167*
Peer commitment									
Positive	–0.006	–0.002	–0.147	0.000	0.019	0.995	–0.000	–0.016	–0.953
Negative	0.006	0.021	1.577	0.166	0.055	2.702*	–0.000	–0.004	–0.217
Prosocial peers	–0.310	–0.071	–5.120*	–0.309	–0.074	–3.445*	–0.373	–0.086	–4.500*
Self control	(145.1)	(10)	(0.221)	(62.0)	(10)	(0.204)	(72.4)	(10)	(0.210)
Impulsivity	–0.004	–0.009	–0.710	0.000	0.009	0.478	–0.132	–0.028	–1.570
Risk-seeking	0.301	0.081	5.673*	0.330	0.093	4.264*	0.261	0.069	3.582*
Self-esteem	0.245	0.050	3.922*	0.173	0.035	1.795	0.280	0.059	3.380*
Social learning	(197.3)	(12)	(0.317)	(76.6)	(12)	(0.276)	(102.5)	(12)	(0.312)
Neutralization—fighting	0.661	0.188	14.686*	0.594	0.157	8.437*	0.609	0.182	10.143*
Guilt toward violence	–1.167	–0.195	–14.255*	–1.028	–0.190	–9.002*	–1.306	–0.197	–10.906*
Gang	(197.3)	(13)	(0.334)	(77.8)	(13)	(0.295)	(102.9)	(13)	(0.330)
Gang membership (1 = gang)	1.372	0.115	9.596*	1.219	0.117	6.323*	1.695	0.126	7.898*
Environmental	(228.4)	(15)	(0.402)	(88.6)	(15)	(0.355)	(123.7)	(15)	(0.407)
School violence	0.007	0.012	1.000	0.000	0.007	0.374	0.143	0.024	1.530
Victimization	1.808	0.274	23.589*	1.557	0.259	14.720*	2.057	0.288	18.192*
Intercept	–5.375		–5.808*	–6.086		–4.585*	–3.774		–2.925*
Adjusted R^2		0.402			0.355			0.407	
F test		228.38			88.6			123.66	
df		15			15			15	
Residual sum of squares		36,564.93			17,331.155			18,645.446	
Chow test		7.39							

[a]Sample size.
*t test of parameter significant at $P < 0.05$.

Maternal Attachment: Higher scores on this 7-point semantic differential scale represent closer attachment to the child's mother or mother figure. Items include opposing statements, such as "can talk about anything" and "can't talk about anything."

Parental Monitoring: This four-item scale measures the extent to which parents and children communicate about their activities, e.g., "My parents know who I am with if I am not at home."

Impulsivity (Grasmick *et al.*, 1993): Four items measure impulsive behavior, such as "I often act on the spur of the moment without stopping to think."

Risk-Taking (Grasmick *et al.*, 1993): This four-item scale taps risk-taking behavior, such as, "Sometimes I will take a risk just for the fun of it."

Commitment to Negative Peers: Students were asked three separate questions about how likely it is that they would still hang out with their friends if their friends were getting them in trouble at home, at school, or with the police.

Commitment to Positive Peers: These two questions asked students how likely it would be for them to listen to their friends if these friends told them not to do something because it was wrong or because it was against the law.

Neutralization: Three items tap the respondent's belief that it is okay to fight if extenuating factors are present. For instance, "It's okay to get in a physical fight with someone if they hit you first."

Guilt: These three questions ask how guilty the youth would feel if they did such things as "hit someone with the idea of hurting them."

Self-Esteem: This six-item scale consists of statements such as "I am a useful person to have around."

School Commitment: These seven questions tap the youth's desire to succeed in school, e.g., "I try hard in school."

Prosocial Peer Behavior: These eight items provide information about the kinds of prosocial things in which friends are involved. The questions ask how many of their friends have done a number of things, including being involved in school activities or school athletics.

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