



## **Social Capital and Violence across Racial and Ethnic Samples of Adolescents**

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### **ABSTRACT**

Using a national sample of adolescents, results of this study demonstrate the important role family and school social capital plays in protecting both White and selected non-White students against violent outcomes. For example, parent-child relationship was associated with reduced violence for Black and White adolescents but not for Hispanics. School affiliation was significant in models for Hispanic and White adolescents but not in models for Black students. Sports participation was associated with greater violence among Hispanics and Whites, but not Blacks. Interestingly, club participation was significant for Whites, but, like sports, it was associated with greater violence. Parental monitoring and religious participation were significant only for Whites while neighbor involvement was significant only for Blacks.

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### **INTRODUCTION**

Social interactions within family, school, and neighborhood domains influence adolescent socialization and are the principal pathways for health and behavioral effects, including violence. These domains are important sources of protection, providing social opportunities and resources for adolescent decision making. For example, adolescents from families that are invested in the school and neighborhood tend to place a higher value on education than those who are not invested (Israel, Beaulieu, and Hartless 2001; Marjoribanks 1998). In turn, they are more likely to

aspire to achievement in education and employment and less likely to engage in violent behaviors. Adolescents from social environments lacking opportunities and social capital may feel they have little or nothing to lose by engaging in health compromising behavior. Such youth are not invested in relationships with adults and cohorts in their families, schools, and neighborhoods and therefore are not as concerned about the potential risks associated with violent behaviors (Jessor 1998).

The degree of socially dysfunctional or nonsupportive aspects of an adolescent's family, school, and neighborhood interactions likewise has been shown to determine level or degree of violent behavior. An important mitigating effect in these domains involves the presence of "capable guardians" who protect and nurture the adolescent through warm, caring relationships (Finkelhor 1995: 180). Parents who are actively involved in local organizations and groups and are familiar with teachers and other parents capitalize themselves and their children by creating a source of social capital that extends from the home across the other domains. To demonstrate, knowing their child's friends, friend's parents, and teachers creates intragenerational closure between parents and teachers (Coleman 1988).

For adolescents, active participation in institutions and organizations reduces isolation and alienation and promotes feelings of affiliation in domains where the possibility of violent behavior exists. Such social bonds strengthen resolve and esteem and reduce the likelihood of violent resolution of conflict or stress (Jessor 1998; Teachman and Paasch 1996). Violent behavior is not only disruptive to an adolescent's current support and development but also jeopardizes optimal adult capacity for personal and professional success (Fitzpatrick 1997b; Lowry et al. 1998; Resnick et al. 1997; Windle 2000). This is especially true where violent behaviors are so intense as to result in interventions by medical personnel (injury), involvement of law enforcement (arrest), or both.

Adolescents can reduce susceptibility to violence-related outcomes through active, interpersonal strategies where the benefits are accrued from resources inherent in relationships that encourage communication, closeness, and confidence (Ensel and Lin 1991). These types of relationships offer trust and reciprocity as well as opportunities to collaborate with peers, teachers, parents, and other adults to hone talents and skills. The latter is particularly important in establishing ties for current and future educational and employment opportunities. At the same time, participation fosters feelings of integration, which may improve self-perceived coping and competence and reduce the likelihood of violent behaviors.

Domain-specific social capital such as satisfactory parent-child relationships, parental monitoring, school affiliation, sports and club participation, involvement with neighbors, and church or religious participation is often associated with lower rates of adverse adolescent outcomes such as violent behavior (e.g., Howard et al. 1999; King, Elder, and Whitbeck 1997; McNeal 1999a; Simon, Crosby, and Dahlberg 1999). Adolescents can access and use social capital through viable and constructive connections and ties to one another and to significant adults. The benefits of social capital are realized when interpersonal trust and social control become the mechanisms for successful adolescent developmental transitions that are free from physical and psychological complications arising from fighting and weapon use.

### **Effects of Domain-Specific Factors on Social Capital**

Domain-specific attained factors are more objective aspects of an adolescent's environment and include household and neighborhood income indicators, presence of biological father in the home, grade average, and years enrolled at present school as an indicator of mobility. By integrating or including the influences of social positions into a social capital model, we can account for factors that can contribute to social capital's availability.

Both attained factors and social capital present in social domains influence an adolescent's health and behavior (Aneshensel and Sucoff 1996; Ensel and Lin 1991; Lin 2001). Disadvantage with

respect to attained factors adversely affects behavioral outcomes, and curtails access to social capital by constraining or eliminating positive and productive interactions of adolescents with parents, teachers, and peers. Such disadvantage includes low income or other domain-specific situations (e.g., frequent mobility) where attained resources are spread too thin. Adolescents in less resourced domains often experience anxiety, fear, and anger as a result of isolation or withdrawal from local organizations and institutions; exposure to relatively high rates of local crime or violence; and apathy from peers, teachers, and other adults in the neighborhood. This stress, in turn, diminishes coping strategies and social support, which can result in greater incidence of violence perpetration due to increased tendencies for acting out, less anti-violence influence from peers, family, and community structure, and fewer constructive alternatives (Davis et al. 1999; Johnson and Johnson 1999; Kosterman et al. 2001; Malek, Chang, and Davis 1998).

Therefore, along with relational aspects of the social environment, there are opportunity structures that influence adolescent health and behavioral outcomes. For example, a productive school climate includes an academically and socially active and thriving student body. In this climate, perceptions of affiliation and freedom from fear of threat and injury are more likely. Conversely, adolescents from families with fewer economic resources, weak or no ties to others in the neighborhood or school, and less time and energy to invest into their children's social development are at greater risk for violent behavior (Blum et al. 2000; Foley, McCarthy, and Chaves 2001; Hoffman 2002; McNeal 2001; Rodney, Tachia, and Rodney 1999). Also, schools where students are not academically successful, established due to frequent relocation, or able to participate or connect to others in the environment are more likely to have a greater proportion of the student body at risk for violence outcomes (Davis et al. 1999; McNeely, Nonnemaker, and Blum 2002; Riner and Saywell 2002).

It is known that socioeconomic advantage or disadvantage and racial composition shape neighborhood locale. Disadvantaged neighborhoods with low levels of attained resources are associated with greater incidences of unhealthy behavioral outcomes among residents (Anderson 1990; Wilson 1987). Specifically, these factors contribute to weakened social relations and social control creating an ambience where deviant, local opportunity structures (e.g., gangs) can exploit to shape harmful beliefs and behaviors, thereby increasing susceptibility to violent behaviors by adolescent perpetrators (Kennedy et al. 1998; Peters and Mullis 1997; Sampson and Raudenbush 1999; Sanders-Phillips 1997; Stevenson 1998).

Since differences often exist between white and non-White communities in terms of objective, or attained, factors, it is important to include these effects in social capital models that contrast racially disparate groups. For example, attributes of neighborhood social structure, as represented by wealth and race indicators, precondition involvement with neighbors and participation in local institutions. For example, individuals living in geographic areas with lower socioeconomic indicators tend to have fewer constructive relationships from which to draw social capital (Wilson 1987).

Because social capital is a feature of social structure or organization, opportunity structures that include ascribed and attained factors influence its accessibility. It is therefore believed that objective features of the social environment can potentially influence the availability or viability of social capital resources for minority groups. Recent research seems to support the likelihood of differential effects of social capital factors across racial and ethnic groups. For example, generally, adolescents participating in collective activities have more extensive relationships with responsible adults and peers. It has also been shown that accumulation of social capital resources through investments in clubs, groups, and teams protects adolescents from violence-related outcomes (Mahoney and Stattin 2000; McNeal 1999b; McNeely et al. 2002). Alternatively, some research shows that sports participation may not be a resource for some racial subgroups of high school students (e.g., Pate et al. 2000).

This study intends to examine the degree of influence of factors in these domains on violence behaviors among minority adolescents using a series of multivariate models. These are integrated social capital models that also include the effects of attained social positions or roles. An integrated social capital model was developed by selecting explanatory variables known or hypothesized to be consistent with violence-related outcomes among youth. Variables or characteristics consistent with capital accumulation are expected to be associated with less adverse outcomes. Specifically, greater domain-specific resources, especially those embedded in social relationships or ties, are predicted to reduce the likelihood of incidence of violence. Similarly, fewer resources within a domain are expected to be associated with greater incidence of violence. Variables previously shown to be significant for minority adolescent health and behavioral outcomes, such as sports participation and neighborhood involvement, as well as those shown to be significant in general for adolescents are selected.

## METHODS

### Data

National Longitudinal Study of Adolescent Health (ADD Health) is an on-going prospective study with 1-year intervals between first and second interviews. The data thus were collected in two waves. Wave I was collected between September 1994 and December 1995, and Wave II was collected from April 1996 through August 1996.

The primary ADD Health sampling unit consisted of U.S. high schools. A high school was defined if it had an 11th grade and enrollment of greater than 30 students. More than 70% of originally sampled high schools were recruited for the study. If a selected high school did not include Grades 7-12, a junior high school that sent graduates to the high school was identified. From this sampling frame, 80 high schools with probability proportionate to enrollment size were recruited to participate. Additionally, 52 feeder middle schools were recruited with probability proportionate to their student contribution to the high school (i.e., the percent of the high school's freshman class coming from that feeder).

From the 132 participating schools, adolescents enrolled in Grades 7-12 were selected for interviews. For the in-school sample, self-administered surveys were given to students in attendance during one 45-60 minute class period. For the in-home interview, the sample included students who did and did not complete the in-school questionnaire, with the latter selected from a roster provided by the school. Students were stratified by grade and gender with 17 students randomly selected from 12 stratum. This resulted in a sample of about 200 adolescents from each of the schools.

For parent interview, the mother or other female head of household was asked to participate. If not available, the father, stepfather, or other male guardian living with student was selected. The in-home parent interview included household income; involvement in volunteer, civic, or school activities; neighborhood characteristics; and parent's familiarity with adolescent's friends and friend's parents. Finally, neighborhood block group data were derived from the 1990 U.S. Bureau of the Census STF-3A.

### Analysis

The analysis used models centered on testing if effects of domain-specific social capital factors differ across select racial/ethnic groups. The models were structured such that the first block represented domain-specific attained factors. Specifically, these were the more objective factors that differentially position adolescents in the social structure. It was expected that in the family domain, higher household income and the presence of the biological father should not only improve

resources available in ties and relationships (i.e., social capital) but also improve the likelihood of healthy behavioral outcomes (i.e., significantly lower reporting of violent behavior). In the school domain, higher grade average and greater number of years enrolled at current school represented investments expected to facilitate attachment and participation and reduce violent behavior. Finally, in the neighborhood domain, block groups that had higher median household income and less minority concentration were expected to be more likely to encourage connectedness among its residents and thereby result in reducing adolescents reporting violent behavior.

The next block of variables in the model represented social capital factors. The quality or quantity of relationships or ties an adolescent has with members of family, school, and neighborhood domains quantifies social capital. In the family domain, greater satisfaction with the parent-child relationship and extent of parental monitoring were expected to reduce the likelihood of violence outcomes for study adolescents. In the school domain, school affiliation as well as participation in sports and club activities were expected to decrease scores on the violence indices. Finally, in the neighborhood, involvement with neighbors and participation in local religious services and youth-group activities were expected to be associated with lower values on violence outcome indices.

### Measurement

This section provides descriptions of health risk, attained, and social capital variables used in this study as derived from the ADD Health questionnaire.

**Outcome variable.** Violent behavior was expressed as a 6-item index with two components: weapon use and fighting. Weapon use items were coded as 0 = not at all, 1 = 1 or 2 times, 2 = 3 or 4 times, 3 = five or more times. Aggression/fighting items were coded as 0 = never, 1 = once, 2 = more than once. This index measures the frequency with which the adolescent was in a physical fight, group fight, injured someone badly enough to require bandages or medical care, used or threatened to use a weapon to get something from someone, pulled a gun or knife, and/or shot or stabbed someone in the past 12 months. These items were summed to create a Violent Behavior composite measure, which was reliable with a Cronbach's alpha of .70. This index had a range of 0-15 ( $M = 1.11$ ;  $SD = 1.88$ ).

**Family attained factors.** Two family domain attained variables were used in the analysis: presence of biological father in the household (0 = no, 1 = yes) and annual family income as reported by parent. Income earned in 1994 (\$0-\$999,000) includes income of parent and everyone else in household and income from welfare benefits, dividends, and all other sources. Data for annual income initially were missing for 22% of the sample. Adolescents from homes not reporting income were not significantly different from other respondents on values for outcome variable. Mean substitution for missing cases were imputed prior to analyses using subgroup averages based on parent's education, race, and employment and marital status.

**Family social capital.** Two summary indices were analyzed as family domain social capital: Parent-Child Relationship Index and Parental Monitoring Index. Items for the Parent-Child Relationship Index assessed current relationship between adolescent and parents/family including respondent's belief that parents care and understand and family has fun and pays attention and were coded as 1 = not at all, 2 = very little, 3 = somewhat, 4 = quite a bit, 5 = very much. This index had a range of 1-20 ( $M = 15.98$ ;  $SD = 2.94$ ) and was reliable with a Cronbach's alpha of .80. Items for the Parental Monitoring Index measured the level of involvement and monitoring of parents including meeting their child's friends, friend's parents, and teachers and were coded as 0 = no and 1 = yes. This index had a range of 0-3 ( $M = 2.08$ ;  $SD = 0.81$ ) with a Cronbach's alpha of .66.

**School attained factors.** Two school domain attained variables were used in the analysis: current GPA and number of years a student has been enrolled in their current school. GPA measured the respondent's grade point average at most recent grading period in History, English/Language, Mathematics, and Science, with values of grades in subjects summed and divided by the number of subjects studied. The mean grade average for sample adolescents was 2.85 (SD = .79). The number of years respondent has been a student at their current respective school was an ordinal variable with 1 = first year, 2 = second year, 3 = third year, 4 = fourth year, 5 = fifth year, and 6 = more than five years.

**School social capital.** One summary index and two interval-level variables were analyzed as school domain social capital: School Affiliation Index and items related to school participation. The School Affiliation Index assessed level of attachment to school including feeling close to people, part of school, other students are prejudice, happy at school, teachers are fair, and safe at school. These six items were coded as 1 = strongly disagree to 5 = strongly agree. The index had a range of 1-30 (M = 20.48; SD = 4.97) with a Cronbach's alpha of .67. School participation consisted of both sports (basketball, baseball, football, hockey, swimming, wrestling, volleyball, track, tennis) and club/organization (book, language, computer, drama, honor society, debate, newspaper, chorus, student council, yearbook) membership. Items for these indices were coded as 0 = no and 1 = yes.

**Neighborhood attained factors.** Two neighborhood domain attained variables were used in the analysis: median household income and modal race. Median household income included 1989 income from \$4,999 to \$100,001. About 73% of block groups in the study had median household incomes between \$21,000 and \$50,000. Modal race status was a constructed measure representing statistical mode or the race occurring most frequently in a block group (1 = White, 2 = Black, 3 = Other). About 81% of the block groups were predominately White.

**Neighborhood social capital.** Two indices were analyzed as neighborhood domain social capital: Neighborhood Involvement Index and Religious Participation Index. Items in the Neighborhood Involvement Index asked if the adolescent a) knows people in the neighborhood, b) believes people in the neighborhood look out for each other, and c) had stopped on the street to talk with other residents (1 = False and 2 = True). This index had a range of 1-6 (M = 5.27; SD = 0.96) and a Cronbach's alpha of .55. The two items in the Religious Participation Index were how often adolescent attends church or religious services and related youth group activities (1 = never; 2 = less than once a month; 3 = once a month or less, but less than once a week; and 4 = once a week or more). This index had a range of 1-8 (M = 5.22; SD = 2.04) and was reliable with a Cronbach's alpha of .91.

## RESULTS

### One-Way ANOVA and Post Hoc Testing

Differences in means across the different levels for race and ethnicity were determined with one-way ANOVA and post hoc testing (Tukey's HSD). Table 1 presents mean levels for the Violent Behavior Summation Index by race and ethnicity. As expected, there were significant differences between racial groups Whites and Blacks, Whites and Hispanics ( $p < .01$ ), but no differences were found between Blacks and Hispanics.

**Table 1. Violence Summation by Race/ethnicity.**

Variable	Violence summation		
	<i>n</i>	<i>M</i>	<i>SD</i>
Race/ethnicity			
(a) White	2,832	.93**	1.70
(b) Black	1,114	1.41	2.05
(c) Hispanic	560	1.46	2.33

*Note.* Significant differences between groups: a,b = White vs. Black; a,c = White vs. Hispanic

\*\* $p < .01$  (one-tailed t-test).

### Multivariate Analysis

**Whites.** Table 2 presents standardized and unstandardized regression coefficients for the Violent Behavior Summation Index regressed on resource factors for White adolescents ( $N = 2,832$ ). In Model 1, both gender and age had significant negative associations with violence, suggesting that male ( $p < .01$ ) and younger ( $p < .05$ ) White adolescents reported higher scores on the violent behavior index. These coefficients were also significant in Model 2 where grade average was the only attained resource significantly related to violence for White adolescents ( $p < .01$ ).

In Model 3, White adolescents who were male, younger, and had lower self-reported grade averages continued to report higher values for the violent behavior index ( $p < .01$ ). Also in this model, higher values for parent-child relationship ( $p < .05$ ), parental monitoring ( $p < .05$ ), school affiliation ( $p < .01$ ), and religious participation ( $p < .05$ ) were significantly associated with lower scores on the violent behavior index. Conversely, higher values for sports and club participation were related to increased frequency of violence ( $p < .01$ ).

The overall model accounted for approximately 17% of variation in violent behavior for White adolescents. Interestingly, for White adolescents, neither family nor neighborhood attained variables reached significance.

**Blacks.** Table 3 presents standardized and unstandardized regression coefficients for the Violent Behavior Summation Index regressed on resource factors for Black adolescents ( $N = 1,114$ ). In Model 1, violent behavior scores were higher for males ( $p < .01$ ). Model 2 introduced attained resources. In this model, Black students with lower self-report grade averages reported greater violent behavior scores ( $p < .01$ ). The significant association for gender remained the same from the previous model.

In Model 3, Black adolescents who were male ( $p < .01$ ) and had lower grade averages ( $p < .05$ ) reported greater incidences of violence. In this model, the effects of age became significant ( $p < .05$ ), with younger Blacks reporting higher violence scores. In this model, each domain had at least one significant social capital coefficient, except for school. For the family, Black adolescents with more satisfactory parent-child relationships reported fewer incidences of violent behavior ( $p < .01$ ). For the neighborhood, involvement with neighbors decreased scores on the Violent Behavior Summation Index ( $p < .01$ ).

**Table 2. Unstandardized and Standardized Regression Coefficients for Violent Behavior Summation Index Regressed on Ascribed and Domain-specific Attained and Social Capital Factors among Whites (N=2,832).**

Variable	Model 1		Model 2		Model 3	
	b	$\beta$	b	$\beta$	b	$\beta$
<b>Ascribed</b>						
Sociodemographic						
Gender	-.830**	-.257	-.734**	-.227	-.711**	-.220
Age	-.064*	-.061	-.090**	-.084	-.095**	-.089
<b>Attained</b>						
Family						
Annual income			.001	.046	.001	.044
Biological father			-.127	-.036	-.064	-.018
School						
Grade average			-.445**	-.209	-.408**	-.192
Years enrolled at school			-.003	-.003	-.009	-.011
Neighborhood						
Median household income			-.001	-.033	-.001	-.039
Modal race			.123	.013	.085	.009
<b>Social capital</b>						
Family						
Parent-child relationship					-.033*	-.054
Parental monitoring					-.156*	-.065
School						
School affiliation					-.038**	-.111
Sports participation					.127**	.122
Club participation					.084**	.092
Neighborhood						
Neighbor involvement					.018	.006
Religious participation					-.057*	-.074
Constant	2.27		3.99		5.66	
$R^2$	.068		.115****		.168****	
Adjusted $R^2$	.066		.109		.158	

Note. b = value of the coefficient.

One-tail test; \* $p < .05$ . \*\* $p < .01$ . Unadjusted  $R^2$  change  $F$  test; \*\*\* $p < .05$ . \*\*\*\* $p < .01$ .

The final model accounted for approximately 17% of variation in violent behavior for Black adolescents. None of the coefficients for family or neighborhood attained variables reached significance in regression models for Black adolescents. Unlike the White subsample, the co-efficient for involvement with neighbors significantly contributed to the regression models for Blacks. At the same time, the coefficient for parental monitoring was significantly associated with lower reported violent behavior for Whites but not for Blacks. Finally, for the Black sample, neither club nor sports participation was a significant risk factor for violence; however, it was for the White subsample.

**Hispanics.** Table 4 presents standardized and unstandardized regression coefficients for the Violent Behavior Summation Index regressed on resource factors for Hispanic adolescents (N = 560). In Model 1, violent behavior scores were higher for males ( $p < .05$ ). Model 2 introduced attained resources. In this model, there were no significant effects among the attained resource variables. The significant association for gender remained the same from the previous model.



**Table 3. Unstandardized and Standardized Regression Coefficients for Violent Behavior Summation Index Regressed on Ascribed and Domain-specific Attained and Social Capital Factors among Blacks (N=1,114).**

Variable	Model 1		Model 2		Model 3	
	b	$\beta$	b	$\beta$	b	$\beta$
<b>Ascribed</b>						
Sociodemographic						
Gender	-.961**	-.278	-.907**	-.263	-.937**	-.271
Age	-.071	-.064	-.101	-.090	-.118*	-.106
<b>Attained</b>						
Family						
Annual income			.001	.021	.001	.026
Biological father			-.232	-.068	-.088	-.026
School						
Grade average			-.274*	-.121	-.239*	-.106
Years enrolled at school			.022	.018	.038	.031
Neighborhood						
Median household income			.001	.017	.001	.011
Modal race			-.017	-.005	.073	.022
<b>Social capital</b>						
Family						
Parent-child relationship					-.091**	-.157
Parental monitoring					-.126	-.064
School						
School affiliation					-.016	-.045
Sports participation					.102	.091
Club participation					.049	.043
Neighborhood						
Neighbor involvement					-.169**	-.150
Religious participation					-.049	-.053
Constant	2.79		3.94		7.08	
$R^2$	.080		.099		.167****	
Adjusted $R^2$	.076		.081		.135	

Note. b = value of the coefficient.

One-tail test; \* $p < .05$ . \*\* $p < .01$ . Unadjusted  $R^2$  change  $F$  test; \*\*\*\* $p < .01$ .

In Model 3, gender loses significance with the inclusion of social capital factors. In this model, only the school domain had significant social capital effects. For the school, Hispanic students with greater affiliation with respective schools reported fewer incidences of violent behavior ( $p < .05$ ). Also, greater sports participation was associated with greater violence index scores ( $p < .01$ ). Neither family nor neighborhood social capital factors reached significance for the Hispanic subsample.

The final model accounted for approximately 18% of variation in violent behavior for Hispanic adolescents. None of the coefficients for attained variables reached significance in regression models for Hispanic adolescents. Unlike the White and Black subsamples, the coefficient for grade average did not significantly contribute to the regression models for Hispanic. At the same time, the coefficient for parental-child relationship was significantly associated with lower reported violent behavior for Whites and Blacks but not for Hispanics. Finally, similar to the results for White adolescents, sports participation was a significant risk factor for violence.

**Table 4. Unstandardized and Standardized Regression Coefficients for Violent Behavior Summation Index Regressed on Ascribed and Domain-specific Attained and Social Capital Factors among Hispanics (N=560).**

Variable	Model 1		Model 2		Model 3	
	b	$\beta$	b	$\beta$	b	$\beta$
<b>Ascribed</b>						
Sociodemographic						
Gender	-.633*	-.183	-.615*	-.178	-.475	-.137
Age	.016	.013	-.036	-.028	.027	.021
<b>Attained</b>						
Family						
Annual income			-.004	-.077	-.003	-.059
Biological father			-.165	-.047	-.095	-.027
School						
Grade average			-.308	-.133	-.262	-.113
Years enrolled at school			.107	.088	.004	.003
Neighborhood						
Median household income			.001	.081	.001	.036
Modal race			.012	.005	.089	.036
<b>Social capital</b>						
Family						
Parent-child relationship					-.089	-.139
Parental monitoring					.124	.062
School						
School affiliation					-.055*	-.166
Sports participation					.281**	.271
Club participation					-.034	-.037
Neighborhood						
Neighbor involvement					.030	.028
Religious participation					-.099	-.117
Constant	1.23		2.53		3.90	
$R^2$	.034		.067		.184****	
Adjusted $R^2$	.022		.019		.101	

Note. b = value of the coefficient.

One-tail test; \* $p < .05$ . \*\* $p < .01$ . Unadjusted  $R^2$  change  $F$  test; \*\*\*\* $p < .01$ .

## DISCUSSION

For Black and White subsamples, students with lower grade averages were more likely to report incidents of violent behavior. Research showed that students who receive lower grades are at greater risk for violent behaviors (Malek et al. 1998; Resnick et al. 1997). Students struggling academically may have difficulty interrelating with teachers and cohorts, making violence a greater possibility by reducing the moderating effects of these positive influences. The results also seem to indicate that both White and Black adolescents, either actively or passively, accessed or used social capital from parent-child relationships with a salutary effect of reduced reported violence. This is partly because parents are better able to provide guidance with respect to safe and unsafe behaviors when relationships with adolescents are positive and consistent (Howard et al. 1999; Jackson and Foshee 1998). Adolescents with family social capital are more resilient to contextual stress and thus more resistant to violence-related outcomes. At the same time, both White and Hispanic students who reported social capital benefits from school affiliation were less likely to report violent behavior. Adolescents who feel disconnected or isolated may either act out violently or may purposively isolate themselves, making them more vulnerable to peer aggression. The inability to meet social challenges

at school diminishes or eliminates benefits that may be derived from social capital inherent in close, confiding, thriving relationships with teachers and peers (Simon et al. 1999).

The “dark side” of social capital was evident for Hispanic and White groups as well, with sports participation significantly and positively associated with reported violence (Portes 1998). Sports membership should be a source of both interpersonal trust and social control, but the results seem to refute that expectation. Based on past literature, the positive association between sports participation and violence was not too surprising (e.g., Pate et al. 2000). Some theories have been proposed to explain this result. For example, close, dense ties with team members may be detrimental or undermining as individual success, recognition, and autonomy are sacrificed for team unity (Portes 1998). Or, the density of these ties may be such that it sets team members apart from others, making them a relatively isolated collectivity with their own approved norms for behavior. Alternatively, there may be a self-selection bias at work wherein the more physically aggressive are drawn to sports.

Greater club participation and lower parental monitoring however were related to higher violence scores for White adolescents only. The direct positive association between academic or social clubs and violence outcomes for White adolescents was unexpected but supportive of some existing evidence (Roche 1999). Additional analysis (ANOVA) revealed significant differences between White and non-White adolescents for club membership, with Whites reporting a higher mean frequency of social and academic club participation ( $p < .01$ ). Perhaps fighting and weapon use may be a means of defense rather than perpetration for these students. Or, the significant association for White adolescents only may be due to confounders associated with differential social or cultural profiles for minority racial and ethnic groups.

Finally, results suggest that neighborhood social capital was differentially accessed and used across minority groups, because involvement with neighbors was significant for Blacks, whereas religious participation was significant for Whites. It is generally thought that religious authority and institutions are potent sources of social capital, providing social and moral development through the promotion of goodwill and good faith among adolescents. Thus, religious participation offers strong, protective networks that can foster a sense of resiliency, enabling an adolescent to walk away from or otherwise diffuse volatile or threatening situations. Post-hoc analysis (ANOVA) revealed that whites reported greater frequency of religious participation than non-Whites ( $p < .01$ ). Perhaps minority youth in the sample have yet to discover the expressive resources found in church or other religious organizations. Future research should test the effects of religion across race and ethnicity to see if this relationship is supported in different samples.

Involvement with neighbors was protective for Black adolescents in that this was associated with reduced violence. Minority families, especially Black youth, often rely on protective factors such as extended families and supportive kin and social networks to buffer them against threats to physical and emotional health and well being (e.g., Neighbors 1990; Rodney et al. 1999). Such extended and extrafamilial cooperation and support fosters a sense of community that is a framework for interpreting life experiences more positively, even in the context of poverty. This increases interpersonal trust and social control in the neighborhood, which, in turn, increases the likelihood that minority adolescents who know and talk to their neighbors and believe these neighbors look out for one another will be encouraged toward healthy pursuits over ones involving risk such as violent behaviors.

Adolescents investing in social ties where trust and social control are used to promote violence as a show of group solidarity will have access to “resources” that jeopardize existing health resources. Conversely, adolescents participating in social ties where trust and social control are used to discourage violence will have access to social capital that can be used to preserve other resources, especially those related to health and well-being.

## Study Limitations

Because of the cross-sectional design of this study causation cannot be established. Also, the potential for bias exists whenever adolescents self-report sensitive behaviors such as fighting or weapon use. The audio computer-assisted self-interview (audio-CASI) laptop however increases confidentiality thereby promoting more complete and accurate reporting of violent behavior. Another limitation involves the generalizability of the results. Add Health samples students from school rosters; therefore, adolescents not currently enrolled were not eligible for selection. Possibly, non-sampled youth have increased rates of risk behavior.

## CONCLUSIONS

Certain sociodemographic adolescent groups may be subject to different social processes and structures than other adolescent subsets. Specifically, certain minority adolescents were found to be more likely to have health and well-being compromised by violent behavior such as fighting and weapon use than their demographic opposites (e.g., White adolescents). This, in turn, suggests that the former may respond in a socially or culturally unique manner not only to the effects of social capital in relationships and ties but also to formal programs designed to supplement support networks.

Focusing exclusively on the person to the exclusion of social and group forces equates to blaming the victim. For example, there is a bias toward placing responsibility on the individual or groups of individuals for their own health and behavioral outcomes without recognizing the social structural limitations imposed on these groups. As such, classic ecological theory's modern utility for social capital comes from its conceptualization of space as both a territorial and a social and cultural arrangement (Eibl-Eibesfeldt 1989; Eyles 1985; Taylor 1988). Although individual behavioral factors contribute significantly to many psychosocial outcomes, such behavior takes place in an environmental and societal context. Therefore, a multidomain approach whereby both individual and social factors are considered in research and policy is recommended.

As the results of this study demonstrate, the value and effectiveness of certain social capital resources for reducing incidences of violent behaviors vary according to an adolescent's race/ethnicity. Future research efforts should continue to carefully examine these effects to clarify differential sociodemographic responses to the presumed benefits of social capital for behavioral outcomes.

## REFERENCES

- Anderson, Elijah. 1990. *Street Wise: Race, Class, and Change in an Urban Community*. Chicago: The University of Chicago Press.
- Aneshensel, Carol S., and Clea A. Sucoff. 1996. "The Neighborhood Context of Adolescent Mental Health." *Journal of Health and Social Behavior* **37**: 293-310.
- Blum, Robert W., Trisha Beuhring, Marcia L. Shew, Linda H. Bearinger, Renee E. Sieving, and Michael D. Resnick. 2000. "The Effects of Race/Ethnicity, Income, and Family Structure on Adolescent Risk Behaviors." *American Journal of Public Health* **90**: 1879-1884.
- Burton, Linda M., Kevin W. Allison, and Dawn Obeidallah. 1995. "Social Context and Adolescence: Perspectives on Development among Inner-City African-American Teens." Pp. 119-138 in *Pathways through Adolescence: Individual Development in Relation to Social Contexts*, edited by Lisa J. Crockett and Ann C. Crouter. Hillsdale, NJ: Erlbaum Associates.

- Coleman, James S. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94: S94-S120.
- Davis, Terry C., Robert S. Byrd, Connie L. Arnold, Peggy Auinger, and Joseph A. Bocchini, Jr. 1999. "Low Literacy and Violence among Adolescents in a Summer Sports Program." *Journal of Adolescent Health* 24: 403-411.
- Eibl-Eibesfeldt, Irenaus. 1989. *Human Ecology*. New York: Aldine de Gruyter.
- Ensel, Walter M., and Nan Lin. 1991. "The Life Stress Paradigm and Psychological Distress." *Journal of Health and Social Behavior* 32: 321-341.
- Eyles, John. 1985. *Senses of Place*. Cheshire, England: Silverbrook Press.
- Finkelhor, David. 1995. "The Victimization of Children: A Developmental Perspective." *American Journal of Orthopsychiatry* 65: 177-193.
- Fitzpatrick, Kevin M. 1997a. "Aggression and Environmental Risk among Low-Income African-American Youth." *Journal of Adolescent Health* 21: 172-178.
- 1997b. "Fighting among America's Youth: A Risk and Protective Factors Approach." *Journal of Health and Social Behavior* 38: 131-148.
- Foley, Michael W., John D. McCarthy, and Mark Chaves 2001. "Social Capital, Religious Institutions, and Poor Communities." Pp. 215-245 in *Social Capital and Poor Communities*, edited by Susan Saegert, J. Phillip Thompson, and Mark R. Warren. New York: Russell Sage Foundation.
- Hamilton, Stephen F. 1990. *Apprenticeship for Adulthood: Preparing Youth for the Future*. New York: Free Press.
- Hoffman, Kristi L. 2002. "Smoke and Mirrors: The Hidden Context of Violence in Schools and Society." *Contemporary Sociology* 31: 475-476.
- Howard, Donna E., Sheila I. Cross, Xiaoming Li, and Weihua Huang. 1999. "Parent-Youth Concordance Regarding Violence Exposure: Relationship to Youth Psychosocial Functioning." *Journal of Adolescent Health* 25: 396-406.
- Israel, Glenn D., Lionel J. Beaulieu, and Glen Hartless. 2001. "The Influence of Family and Community Social Capital on Educational Achievement." *Rural Sociology* 66: 43-68.
- Jackson, Christine, and Vangie A. Foshee. 1998. "Violence-Related Behaviors of Adolescents: Relations with Responsive and Demanding Parenting." *Journal of Adolescent Research* 13: 343-359.
- Jessor, Richard. (Ed). 1998. *New Perspectives on Adolescent Risk Behavior*. New York: Cambridge University Press.
- Johnson, Patrick B., and Helen L. Johnson. 1999. "Cultural and Familial Influences that Maintain the Negative Meaning of Alcohol." *Journal of Studies on Alcohol* 60: 79-83.
- Kennedy, Bruce P., Ichiro Kawachi, Deborah Prothrow-Stith, Kimberly Lochner, and Vanita Gupta. 1998. "Social Capital, Income Inequality, and Firearm Violent Crime." *Social Science and Medicine* 47: 7-17.
- King, Valarie, Glen H. Elder Jr., and Les B. Whitbeck. 1997. "Religious Involvement among Rural Youth: An Ecological and Life-Course Perspective." *Journal of Research on Adolescence* 7: 431-456.
- Kosterman, Rick, John W. Graham, J. David Hawkins, Richard F. Catalano, and Todd I. Herrenkohl. 2001. "Childhood Risk Factors for Persistence of Violence in the Transition to Adulthood: A Social Development Perspective." *Violence and Victims* 16: 355-369.

- Lin, Nan. 2001. *Social Capital: A Theory of Social Structure and Action*. New York: Cambridge University Press.
- Lowry, Richard, Kenneth E. Powell, Laura Kann, Janet L. Collins, and Lloyd J. Kolbe. 1998. "Weapon-Carrying, Physical Fighting, and Fight-Related Injury among U.S. Adolescents." *American Journal of Preventive Medicine* 14: 122-129.
- Mahoney, Joseph L., and Hakan Stattin. 2000. "Leisure Activities and Adolescent Antisocial Behavior: The Role of Structure and Social Context." *Journal of Adolescence* 23: 113-127.
- Malek, Marvin K., Bei-Hung Chang, and Terry C. Davis. 1998. "Self-Reported Characterization of Seventh-Grade Students' Fights." *Journal of Adolescent Health* 23: 103-109.
- Marjoribanks, Kevin. 1998. "Family Background, Social and Academic Capital, and Adolescents' Aspirations: A Mediation Analysis." *Social Psychology of Education* 2: 177-197.
- McLeod, Jane D., and James M. Nonnemaker. 2000. "Poverty and Child Emotional and Behavioral Problems: Racial/Ethnic Differences in Processes and Effects." *Journal of Health and Social Behavior* 41: 137-162.
- McNeal, Ralph B., Jr. 2001. "Differential Effects of Parental Involvement on Cognitive and Behavioral Outcomes by Socioeconomic Status." *Journal of Socio-Economics* 30: 171-179.
- . 1999a. "Parental Involvement as Social Capital: Differential Effectiveness on Science Achievement, Truancy, and Dropping Out." *Social Forces* 78: 117-144.
- . 1999b. Participation in High School Extracurricular Activities: Investigating School Effects. *Social Science Quarterly* 80: 291-309.
- McNeely, Clea A., James M. Nonnemaker, and Robert W. Blum. 2002. "Promoting School Connectedness: Evidence from the National Longitudinal Study of Adolescent Health." *Journal of School Health* 72: 138-146.
- Millstein, Susan G., Anne C. Petersen, and Elena O. Nightingale. 1993. *Promoting Health of Adolescents: New Directions for the Twenty-First Century*. New York: Oxford University Press.
- Neighbors, Harold. 1990. "The Prevention of Psychopathology in African Americans: An Epidemiological Perspective." *Community of Mental Health* 26: 167-179.
- Pate, Russell R., Stewart G. Trost, Sarah Levin, and Marsha Dowda. 2000. "Sports Participation and Health-Related Behaviors among U.S. Youth." *Archives of Pediatric and Adolescent Medicine* 154: 904-911.
- Peters, H. Elizabeth, and Natalie C. Mullis. 1997. "The Role of Family Income and Sources of Income in Adolescent Achievement." Pp. 340-381 in *Consequences of Growing up Poor*, edited by Greg J. Duncan and Jeanne Brooks-Gunn. New York: Russell Sage Foundation.
- Portes, Alejandro. 1998. "Social Capital: Its Origins and Applications in Modern Sociology." *Annual Review of Sociology* 24: 1-24.
- Rankin, Bruce H., and James M. Quane. 2002. "Social Contexts and Urban Adolescent Outcomes: The Interrelated Effects of Neighborhoods, Families, and Peers on African-American Youth." *Social Problems* 49: 79-100.
- Resnick, Michael D., Peter S. Bearman, Robert W. Blum, Karl E. Bauman, Kathleen M. Harris, Jo Jones, J. Tabor, Trisha Beuhring, Renee E. Sieving, Marcia Shew, Marjorie Ireland, Linda H. Bearinger, and J.R. Udry. 1997. "Protecting Adolescents from Harm: Findings from The National Longitudinal Study of Adolescent Health." *Journal of the American Medical Association* 278: 823-832.

- Riner, Mary E., and Robert M. Saywell. 2002. "Development of the Social Ecology Model of Adolescent Interpersonal Violence Prevention (SEMAIVP)." *Journal of School Health* 72: 65-70.
- Roche, Kathleen M. 1999. *Neighborhood Characteristics and Social Capital: Influences on the Association between Parenting and Fighting and Delinquency among Adolescent Males*. Ph.D. dissertation, Johns Hopkins University, Baltimore, MD.
- Rodney, H. Elaine., H. Richard Tachia, and Laxley W. Rodney. 1999. "The Home Environment and Delinquency: A Study of African American Adolescents." *Families in Society* 80: 551-559.
- Sampson, Robert J., and Stephen W. Raudenbush. 1999. "Systematic Social Observation of Public Spaces: A New Look at Disorder in Urban Neighborhoods." *American Journal of Sociology* 105: 603-651.
- Sanders-Phillips, Kathy. 1997. "Assaultive Violence in the Community: Psychological Responses of Adolescent Victims and Their Parents." *Journal of Adolescent Health* 21: 356-365.
- Satcher, David. 1999. "Unlearning Violence." *Public Health Reports* 114: 478-479.
- Simon, Thomas R., Alex E. Crosby, and Linda L. Dahlberg. 1999. "Students Who Carry Weapons to High School." *Journal of Adolescent Health* 24: 340-348.
- Stevenson, Howard C. 1998. "Raising Safe Villages: Cultural-Ecological Factors that Influence the Emotional Adjustment of Adolescents." *The Journal of Black Psychology* 24: 44-59.
- Taylor, Ralph B. 1988. *Human Territorial Functioning: An Empirical Evolutionary Perspective on Individual and Small Group Territorial Cognitions, Behaviors and Consequences*. New York: Cambridge University Press.
- Teachman, Jay D., Kathleen Paasch, and Karen Carver. 1996. "Social Capital and Dropping Out of School Early." *Journal of Marriage and the Family* 58: 773-784.
- Wilson, William. J. 1987. *The Truly Disadvantaged: The Inner City, the Underclass and Public Policy*. Chicago: University of Chicago Press.
- Windle, Michael. 2000. "Parental, Sibling, and Peer Influence on Adolescent Substance Use and Alcohol Problems." *Applied Developmental Science* 4: 98-110.
- World Health Organization. 2002. *The World Report on Violence and Health*. Geneva, Switzerland: World Health Organization.

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