# Violent, Delinquent, and Aggressive Behaviors of Rural High School Athletes and Non-Athletes

by Deborah J. Rhea and Christopher D. Lantz

#### Abstract

The purpose of this study was to explore the relationship between sports participation and self-reported violent, delinquent, and aggressive behaviors in rural high school populations. Three-hundred and thirty-eight athletes and nonathletes from four rural high schools completed the YRBSS and the Conflict Behavior Scale (CBS). The results indicated that: (a) males demonstrated similar violent and delinquent behaviors to other urban and suburban populations, (b) male non-athletes reported significantly more assaults, trouble at school, drinking while driving, trouble with the police, and marijuana use than male athletes, and (c) female athletes reported significantly less and male athletes reported significantly more aggressive behaviors than their non-athlete counterparts on the CBS. These data illustrate that violent, delinquent, and aggressive behaviors do exist in rural populations, but that sports participation does not necessarily influence higher rates of these behaviors.

The escalating rate of high school violence is of particular concern in our society today (Page & Hammermeister, 1997; Sondik, 1999). Homicide is currently the second leading cause of death for American adolescents between the ages of 10 and 19 (Barrios, 2000; Hoyert, Kochanek, & Murphy, 1999; Marsh, 1993) and the existence of drugs and weapons in our schools is staggering (US Dept. of Education, 1997). Although violent crime in U.S. schools is down, adolescents between the ages of 12 and 19 years remain at highest risk for victimization by violent crime (Ellickson & McGuigan, 2000). In the past three

years alone, high school shootings resulting in deaths (i.e., Columbine H.S., Santana H.S.) have been on the rise and in turn, have increased public attention to school violence. Several factors including community size, gender, and athletic involvement have been examined, but much of the recent school violent and delinquent research (Sondik, 1999; U.S. Dept. of Education, 1997) has focused on non-athletes from urban and suburban populations with little attention having been paid to athletes or to persons from rural settings. A limitation of this research is the generalizablity to all types of communities and whether athletes participate in violent and delinquent behavior as often as non-athletes.

About 5.2 million young adults in the United States participate in over 30 sports at the high school level (Sage, 1998). Researchers have argued (Beller & Stoll, 1995; Berlant, 1996) that high school sport participation builds basic values of American life: character, self-esteem, confidence, respect for others, fair play and competition. Indeed, there is evidence to suggest that high school athletics can enhance physical, psychological, and social development of adolescent boys and girls (Feigin, 1994; Larson, 1994; Marsh, 1993). Unfortunately, due to increased pressure on coaches and young adults to win, and the influence of questionable role models, the behaviors learned by young athletes in sports may not always reflect the positive values our society purports to endorse outside of sport (Bredemeier, 1994; Rees, Howell, & Miracle, 1994). These questionable behaviors often center around or are often associated with violence, physical aggression, and delinquency.

Earlier research (Bredemeier & Shields, 1985, 1986; Segrave and Hastad, 1984; Shields & Bredemeier, 1995) has shown contradictory findings related to rates of aggression, delinquency, and violence among high school athletes. Ample support exists identifying an in-sport socialization process that seems to legitimize aggressive acts. and sometimes violence and delinquency, particularly in contact sports (Coakley, 1998; Sage, 1998). More recently, the relationship between delinquency and sports participation was examined in an urban population indicating that highly active athletes (participation in two or more school or community run sports) drank more than their non-athlete counterparts (Faulkner & Slattery, 1990; Rainey, McKeown, Sargent, & Valois, 1996). Further, Levin and associates (1995), also examining an urban population found that the nature of the sport in which a high school student participated may have a stronger impact on violent and delinquent behaviors outside of the sport environment. Specifically, non-contact sport participants showed significantly lower percentages when compared to either non-athletes or contact sport athletes for such behaviors as getting into trouble at school (15.7% vs. 26.3% and 27%), assaulting others (7.3% vs. 20.5% and 16%), and carrying weapons (20.8% vs. 28.7% and 26.6%). Based on these findings and limited research examining the effects of athletic populations, the major concern of this paper was to examine the role athletics played in aggressive, violent, and delinquent behaviors in high school populations.

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Further, an important demographic characteristic that has received limited consideration is the environment in which the adolescent is raised. Previous studies have investigated urban populations almost exclusively, while paying little attention to the relationship between sport participation and violent/delinquent behavior in rural areas. The consideration of this geographic variable is warranted on at least two points. First, research indicates that patterns of certain delinquent behaviors may differ between rural and

urban teenage populations. Napier, Carter, and Pratt (1981) found a lower level of alcohol and drug use and abuse in rural populations compared to urban populations. More recently, research contradicted those findings with reports of rural youth generally drinking more and drinking while driving more often than their urban counterparts (Gibbons, Wylie, Echterling, & French, 1986; Sarvela, Pape, Odulana, & Bajracharya, 1990). Although a consistent pattern of delinquent behavior (at least with respect to alcohol and drug use) remains elusive, research does seem to suggest that these types of behaviors may be moderated by the youth's environment. Second, in rural high schools, sports teams often serve as a focal point for the entire community with team members being accorded special status and special emphasis placed on their success. High school sports programs in urban settings must compete with numerous other entertainment options and are often not the focus of the community. While we are not aware of empirical research examining this issue, the influence of sport teams in rural communities has been captured anecdotally through movies such as Hoosiers and Varsity Blues. Therefore, the purpose of this study was to examine the relationship between sports participation and self-reported violent, physically aggressive, and delinquent behaviors in rural high school populations.

#### Method

**Participants** 

Participants were 234 high school athletes (137 males/97 females) and 104 non-athletes (64 males/40 females) attending four rural high schools in the Midwest. A rural school was defined as a school with no more than 300 total students derived from at least two communities consolidated into one school building. The sample ranged in age from 14-18 years (M = 15.67, SD = 1.26). Ninety-three percent were non-Hispanic white, 2% were African-American, 1% Hispanic, 1% Asian, and .5% Native American which reflects the ethnic make-up of the area. Due to the

low representation of African-American, Hispanic, Asian, and Native American youth in this rural sample, ethnic differences were not considered. The male athletes represented football, basketball, soccer, baseball, wrestling, tennis, cross-country, swimming, and golf. The female athletes represented basketball, soccer, softball, volleyball, track, swimming, tennis, cross-country, golf, and cheerleading. Some of the more recent research would suggest that contact sports should be separated from non-contact sports when examining delinquent behaviors since contact sports are identified more closely with actions of non-athletes (Levin et al., 1995). However, the decision was made to keep athletes together because over 80% of the athletes participated in both contact and non-contact sports.

#### Measures

Demographic Questions. Several variables were assessed including age, gender, grade, race, sports participation, and types of organized sports played. Sports participation was measured by the students' responses (yes or no) to participation in organized sports sponsored by their schools in the past two years. Students were then classified by gender as either athletes or non-athletes.

Youth Risk Behavior Surveillance Survey (YRBSS). Violent and delinquent behaviors were assessed using closed-ended standardized items from the Center for Disease Control's (CDC) Youth Risk Behavior Surveillance Survey (Kann et al., 1996). Delinquent behaviors were measured using six questions, each measuring different aspects of problem behaviors (trouble at school, trouble with police, drinking while driving, damaging property, cocaine, and marijuana use in the last 30 days). Violent behavior was measured using one question assessing how many times physical assault was committed in an offensive and antagonistic manner. Each question was answered using a scale ranging from 1 (0 times engaged in the behavior over the past 12 months) to 5 (9 or more times of engaging in the behavior over the past 12 months). Consistent with the

recommendation made by Levin and associates (1995), participation in violence and delinquency was limited to those who engaged in the various behaviors three or more times in the past 12 months. This approach was taken to avoid including those who only occasionally participated in these antisocial acts, thus attempting to capture those who had a more violent or delinquent lifestyle.

Conflict Behavior Scale. This scale assessed direct aggression which was defined as the open expression of feelings, needs, wants and ideas at the expense of others (Rosenfeld & Richman, 1995). Aggressive behaviors were assessed using the five standardized items labeled as the aggressive subscale from the Conflict Behavior Scale (Rosenfeld & Richman, 1995). Each question was answered using a scale ranging from 1 (never) to 7 (always). Sample questions included "I insist on my position being accepted during an argument," or "I threaten people to reach a settlement that helps me satisfy my needs." The sum of the item scores derived a total aggressive score. A score of 29 or above indicated that these individuals perceived themselves to use an aggressive style of behavior (Rosenfeld & Richman, 1995). The reliability (Cronbach alpha) of this scale for the current study was .86.

#### **Procedures**

Informed consent was secured from the University, school principals, parent or legal guardian, coach, and all student participants from the four rural high schools. No schools were eliminated from the project for reasons of insufficient consent and less than one percent of the students excluded themselves from the study due to lack of parental consent. The researcher administered the questionnaires to the athletes either after school before athletic practices began or during physical education classes. The non-athletes completed the questionnaires only during physical education classes. Upon completion of the survey, all students placed their surveys in an envelope to secure anonymity of their responses.

## Results

Given the ordinal nature of the data, the percentage distribution of the eight items representing aggressive, delinquent, and violent behaviors for male and female athletes and non-athletes are presented in Table 1. Based on the approach utilized by Levin et al. (1995), males typically report higher rates of violent and delinquent behaviors than females, therefore analyzing them collectively does not give the researcher much new information. Consequently, a similar pattern was chosen for this study and the groups were analyzed separately. In order to determine whether the frequency of responses differed between athletes and non-athletes, a chisquare test was used. Among the males, a comparison of athletes (n = 137) and non-athletes (n = 64) indicated significant differences with violence, X<sup>2</sup> (1, 202) = 11.40, p < .001, and five of the six delinquent behaviors, drinking while driving, X<sup>2</sup> (1, 202) = 14.74, p < .0001, marijuana use,  $X^2$  (1, 202) = 13.53, p < .0001, cocaine use,  $X^2$  (1, 202) = 4.20, p < .05, trouble in school,  $X^2$  (1, 202) = 5.27, p < .03, and trouble with police,  $X^2$  (1, 202) = 7.74, p < .01 (Table 1). In all cases, non-athletes reported higher levels of problematic behaviors. No differences were found for males reporting property damage (p > .05) (Table 1). Among the females, a comparison of athletes (n = 96) and non-athletes (n = 40) indicated significant differences with drinking while driving,  $\underline{F}$  (1, 123) = 4.05, p < .05 (Table 1). No significant differences were found between female athletes and non-athletes for any of the other violent or delinquent variables (p > .05).

In order to determine differences with direct aggressive acts, an analysis of variance (ANOVA) was calculated based on the continuous nature of the variable. Significant differences were found for males,  $\underline{F}(1, 188) = 8.56$ ,  $\underline{p} < .01$  and females,  $\underline{F}(1, 135) = 6.15$ ,  $\underline{p} < .01$ . Male athletes reported higher aggressive responses than male nonathletes and female non-athletes reported higher aggressive responses than female athletes.

## Discussion

The purpose of this study was to examine whether rural athletes had a higher propensity to participate in violent and delinquent behaviors than rural non-athletes. While the results from this study suggest that sports participation for males in rural populations has similar associations with problem behaviors as other studies have reported from urban and suburban populations (Levin et al., 1995; Snyder et al., 1997; Sondik, 1999), these reported problem behavior percentages are significantly lower than the non-athletes reports in this study. While some have questioned the value of sport participation based on the premise that aggression is directly taught in specific sports leading to more violent behavior apart from athletic events (Bredemeier, 1994; Rees, Howell, & Miracle, 1994), the results of this study suggest that sports participation does not necessarily influence more violent or delinquent behavior apart from athletics in these rural settings.

As for alcohol and drug use, male athletes reported significantly less use of marijuana and cocaine, as well as less propensity to drink and drive than male non-athletes. These behaviors have been shown to have a positive relation with violence in other studies related to community settings (Lowry et al., 1999; Sondik, 1999); however, in the rural population used in this study, drug and alcohol use seemed to be inversely related to violence. Conversely, female athletes reported higher incidence of drinking while driving than female non-athletes, though no differences were found for drug use (less than 2% each). These findings were inconsistent with earlier self-report urban and suburban research on alcohol and drug use which found that athletes were more likely than non-athletes to report consumption of alcohol and drugs (Faulkner & Slattery, 1990; Jessor, 1991; Rainey et al., 1996). These findings show a more positive image of male and female athletes in a rural setting than previous studies have reflected with regard to drug and alcohol use in urban and suburban settings. It could be that the athletic programs in

these particular schools helped to educate rural youth that drinking alcohol and using drugs were detrimental to athletic performance and, more importantly, may be harmful to overall health (Fejgin, 1994). Another plausible explanation is that these rural athletes might be less likely to indulge in these behaviors due to a close connection with their coaches (Whitson, 1986). In these rural settings, coaches often serve a variety of roles in the student athletes' lives (teacher, coach in another sport, family, friend) thus allowing them to more effectively monitor the student's behaviors. Many coaches impose strict rules regarding conduct that may decrease the desire to engage in delinquent behaviors. Finally, it may be that rural athletes do not feel the pressures to drink and do drugs as a symbol of group acceptance as urban and suburban youth do. To this point, it should be mentioned that these explanations are purely speculative and future empirical research should explore the true relationships of these findings.

Of concern in this study is that one-fourth of the rural male population (athletes and nonathletes) reported damaging property (24%) and were in trouble at school (27%) and with the police (20%). It is worth noting that these self-report percentages were validated through documented school and police report percentages. Interestingly, these percentages were similar to other urban and suburban male populations. It seems irrelevant where one lives or how well word travels in smaller communities. This research supports some of the sociologists contentions (Coakley, 1998; Eder, Evans, & Parker, 1995) that high school males are more concerned with social acceptance and "growing up" into adults than how much trouble they get into. Adolescent males who do not act tough are often marginalized in student culture, so they put a premium on acting tough and being physically aggressive (Eder et al., 1995).

Another finding in this study, consistent with previous research regarding females, was that female athletes reported significantly less

aggression on the Conflict Behavior Scale (CBS) than the female non-athletes. Currently, much of the research shows that female athletes seem to prefer an emphasis on supportive connections between teammates and opponents, and on pleasure and participation in sports (Coakley, 1998). Since this study did not examine contact and noncontact sports because most of the athletes participated in multiple sports, it could not be identified whether contact sport participation had any affect on these results. One can only speculate that since the female athletes reported low aggression scores and engaged in contact and noncontact sports, the type of sport would not have made much difference in the outcome of the results.

While this research has provided some initial insights as to the existence of violent, delinquent, and aggressive behavior in rural athletes of specific rural locations, these data must be interpreted with some caution. The sample for this study was derived from four, predominantly Caucasian, rural communities in the Midwest. Therefore the results may not be generalizable to rural settings elsewhere in the United States or to settings that are ethnically diverse. Future research in this area should focus on expanding the number of male and female athletes and nonathletes in rural populations due to the dearth of information in the literature. A diverse sample is needed to identify greater percentages of Hispanic, Asian, and African-American individuals to determine if delinquent and violent behaviors are concentrated more in Caucasians or if other ethnic groups are also affected as in previous urban research. Another plausible consideration is to determine whether specific psychological variables, i.e., self-esteem, self-confidence, might actually play a role in less aggressive, delinquent, and violent behaviors in rural youth. Finally, one should consider other potential salient variables such as socio-economic status and parent education. Any study that attempts to consider ethnicity or gender without consideration of such variables is in danger of perpetuating stereotypes.

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