

THE ANALYSIS OF EXTRACURRICULAR ACTIVITIES  
AND PARENTAL MONITORING AND THEIR RELATIONSHIP TO  
YOUTH VIOLENCE

By

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## ABSTRACT

The purpose of this study was to examine how extracurricular activities and parental monitoring relate to rural youth violence. Gender differences were examined across all of the study variables. Self-report data were collected from 235 teenagers from a rural, ethnically diverse, Virginia community.

Correlations revealed a significant inverse relationship between church activity as well as parental monitoring and weapon carrying. Significant mean level differences existed between males and females on the following variables: time spent in aerobic exercise activities, time spent in toning exercise activities, weapon carrying frequency, and level of parental monitoring. In addition, time in non-school clubs was the best predictor of sample youth classification in either the “violent” category or “nonviolent” category. Findings emphasize the importance of parental monitoring for youth as well as the need for more programs and after-school activities to meet the needs of all youth.

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## CHAPTER ONE

### INTRODUCTION

Two students, aged 13 and 11, set off the fire alarm at Westside Middle School in Jonesboro, Arkansas, and then ran to the trees near their school. As students and teachers filed out of the building, they opened fire killing a teacher and four students and wounding eleven others (Staff, 1998).

There has been a vast amount of research examining the prevalence of youth violence. Researchers' interest in studying this area has increased in the past decade following a string of tragic violent events that have refocused the American public's attention on school crime and safety (Kaufman, Chen, Choy, Chandler, Chapman, Rand, & Ringel, 1998). Given that youth violence has seemed to reach epidemic proportions in the last decade, it makes sense that it has gained recognition for being the most important public health and social problem facing the United States today (Cohall, Cohall, & Bannister, 1998; Dahlberg, 1998; Elliot, Hamburg, & Williams, 1998; Tolmas, 1998; & Fraser, 1996). A review of the literature reveals that violence has become an important area to study for three main reasons: an increase in violent events in the last decade, the high economic cost of these incidents to society, and students' perceived fear of violence in their school environments.

Adolescents only account for ten percent (10%) of the population but have become markedly more involved in violent acts<sup>1</sup> over the past decade (Snyder & Sickmund, 1995). Some studies on rates of violent incidents show that violence has become the leading cause of death in African-American and Hispanic adolescents as well as the second leading cause of death in all adolescents (Centers for Disease Control and Prevention, 2000; Youth Matters, 1999; Dahlberg, 1998; & Tolmas, 1998).

There is a contradiction across studies examining rates of youth violence. Many studies examining the prevalence of violence among youth have reported alarmingly high rates while others have shown a recent decline in the number of youth engaging in violent

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<sup>1</sup> Violent Act- engaging in a physical fight, injuring someone, group fight, threatening someone with a weapon, using a weapon in a fight, and shooting or stabbing someone

activity. For example, one study that did report high incidences of violence among youth found that thirty-eight percent (38%) of all homicides in the United States have occurred among individuals under age twenty-five (Dahlberg, 1998). The Center for the Study and Prevention of Violence (1999) reports that as levels of violence in the general society have risen sharply, the levels of violence in and around the schools have also increased. Similarly, other studies have shown that juvenile arrest rates for weapon law violations, the percentages of students reporting the presence of street gangs in their schools, and the number of overall violent crimes have increased substantially since 1989 (U.S. Department of Education, 1999; White House, 1998; & Youth Matters, 1998).

On the other hand, other studies have shown that violent rates among youth, although still at historically high levels, have moderately decreased in the last few years (Brenner, Simon, Krug, & Lowry, 1999; White House, 1998; The Institute for Youth Development, 1999; Cohall et al., 1998; & Dahlberg, 1998). The Institute on Youth Development (1999) analyzed data from the Youth Risk Behavior Surveys and found that between 1993 and 1997, students who carried a gun decreased by twenty-five percent (25%), students who were involved in a physical fight on school property decreased by nine percent (9%), and students who carried a weapon on school property decreased by twenty-eight percent (28%).

One reason these discrepancies exist could be due to the time span in which these studies were conducted. For example, studies conducted within the last five years found rates of violent incidents decreasing (9%-28%) although still remaining at high levels while studies that looked at rates over the entire decade found rates of violence to be at historically high levels. Therefore, incidences of violence may have increased since the 1980's but may have decreased in the last five years.

Youth violence is also important to examine because of its immense cost to society (Center for the Study and Prevention of Violence, 1999). Nationwide, the average cost of fatal and nonfatal injuries was \$44,000 in 1992 and the total medical cost of overall violence that occurred in the United States was 13.5 billion dollars in 1992 (Center for the Study and Prevention of Violence, 1999). Youth are disproportionately involved in intentional interpersonal violence as perpetrators and victims (Center for the

Study and Prevention of Violence, 1999). Therefore, a large portion of the economic cost to society can be attributed to youth violence.

Another reason that youth violence is an important area to study is students' perceived fear of violence in their schools. One study conducted by Kingery, McCoy-Simandle, and Clayton (1997) reported that students perceive violence within the schools as very common. Violent acts and threats of violence at school negatively affect students, school, staff, and the educational process. These feelings of fear can cause students to miss more classes and participate less while they are in class (Center for the Study and Prevention of Violence, 1999).

While there has been a vast amount of research on youth violence in general, little takes into consideration the joint effects of locality and gender. Additionally, more focus has been given to examining risk factors for violence and less to protective factors for youth violence (Hawkins, Herrenkohl, Farrington, Brewer, Catalano, & Harachi, 1998). This study will examine the relationship between participation in extracurricular activities and engaging in violent activities among a sample of rural youth. It will also examine the relationship between parental monitoring and participation in violent activity. Gender differences will be assessed for all of these variables.

## RATIONALE

Brener, et al. (1999) and Dahlberg (1998) acknowledge that the first step toward preventing violence is to identify and understand risk factors for youth violence and what can serve as a protective factor for youth against violence. This idea is congruent with the notion of resiliency. The concept of resiliency comes from the risk and protective factor paradigm. A risk factor is usually defined as a variable that increases the probability of a future negative outcome, and a protective factor is a variable that decreases such probability (Durlak, 1998).

Kingery, Mirzaee, Pruitt, Hurley, & Heuberger (1991) suggest that research needs to be implemented to describe violence as it pertains to all youth and that in past research, some systems/contexts surrounding violence have been neglected (i.e. rural communities; smaller schools). This knowledge of how violence affects all communities will allow communities and researchers to design programs that will address the needs of all youth surrounded by many different circumstances.

Additionally, few studies have examined the relationship between extracurricular activities and youth violence. Those that have examined this relationship have shown that participation in extracurricular activities can be a protective factor for youth against risky behaviors such as substance abuse and sexual activity (Savage & Holcomb, 1998 & Shilts, 1991). Additional studies suggest that other risky behaviors may be correlated with youth violence (Resnick, Bearman, Blum, Bauman, Harris, Jones, Tabor, Beuhring, Sieving, Shew, Ireland, Bearinger, & Udry, 1997; Jessor, Corbin, & Costa, 1998). Therefore, the next logical step is to study whether extracurricular activities relate to youth violence as they relate to other delinquent behaviors.

There have been many studies that have examined how different levels of parental monitoring effect adolescents' involvement in delinquent behaviors. These studies have reported that the more parents monitor their adolescents' activities, the less likely these adolescents are to get involved in delinquent behavior (Kim, Hetherington, & Reiss, 1999; Rodgers, 1999). Given these findings and the findings that have shown that other delinquent behaviors may be correlated with violent activity, the next logical step is to study how levels of parental monitoring relate to violent activity. In addition, the studies

that have examined how levels of parental monitoring relate to participation in delinquent activity have primarily utilized samples comprised of urban youth. Therefore, more studies need to be implemented to compare results of studies using samples of rural adolescents to the existing studies that sampled urban adolescents.

Given these findings, the present study attempts to contribute to the literature by examining the relationship between extracurricular activities and engagement in violent activities among a sample of rural youth. Specific extracurricular activities examined in this study include sports, exercise, religious activity, volunteer activities, and non-school clubs. This study will also examine the relationship between parental monitoring and involvement in violent activity. For the present study, violence will be operationalized as weapon carrying and physical fighting. Gender differences will be assessed for all variables in the study.

## CHAPTER TWO LITERATURE REVIEW

### Theoretical Framework

This study is guided by ecological theory. The basic assumption of ecological theory is that much of an individual's behavior can be accounted for by his or her environment (Thomas, 1992). Bronfenbrenner (1979) states that the ecology of human development is:

the scientific study of progressive, mutual accommodation between the active growing human being and the changing properties of the immediate setting in which the developing person lives, as this process is affected by relations between those settings, and by the larger contexts in which the settings are embedded (p.21).

The first level of the ecological system is the individual. Within an individual ecological system, the immediate setting in which the individual lives is known as the microsystem. Examples of microsystems are adolescents' school, home, or peer group. The next level of the system is the mesosystem, which is the relationship between the individual's microsystems. For example, the mesosystem includes the relations between school, home, and a neighborhood peer group. The larger context in which the settings are embedded is known as the exosystem. The exosystem refers to one or more settings that do not involve the developing person as an active participant, but in which events occur that affect, or are affected by, what happens in the setting containing the developing person. An example of an individual's exosystem is a school board decision that affects the child. Finally, the level of the system that has the least direct affect on the individual is the macrosystem. The macrosystem is the cultural milieu surrounding the individual including attitudes, practices, and convictions shared throughout society at large. An example of a macrosystem would be the media. While the individual may not be directly affected by his/her macrosystem, he/she may still be greatly influenced by this system.

It is logical to examine youth violence using ecological theory because research has demonstrated that community, media, schools, and family environments are related to violence (Diclemente, Hansen, & Ponton, 1996). Diclemente, Hansen, and Ponton (1996) state that violence should not be considered a problem of individual behavior or as only a social problem because violence is associated with an entire social and economic structure.

As ecological theory would suggest, violent acts do not occur in isolation. For this reason it is important to describe the relationship between systems and violence. There is a fair amount of research that has been conducted that has examined which systems are most affected by youth violence (Fraser, 1996; Puthrow-Stith, 1995). Specifically, data suggests that there are important differences by race/ethnicity, sex, region (including rural versus urban), and time of day that violent acts most often occur. It is the researcher's hope that the examination of individuals, individuals' microsystems, individuals' mesosystems, and individuals' ecosystems will contribute to the understanding of the larger ecological system surrounding youth violence.

When applied to the present study, four levels of the ecosystem are relevant. Specifically, the individual is studied through demographic data obtained. The microsystems being examined are the students' school environment, their participation or lack of in extracurricular activities, and their home environment as measured by parental monitoring variables. The relationship between the adolescents' microsystems of school and home create an examination of the individuals' mesosystem. Also, descriptive exosystem information (e.g. population size, poverty level, rural versus urban setting, etc.) will be examined since it provides important information about community context.

### Demographics and Youth Violence

Several studies have identified profiles of violent youth offenders across all contexts mentioned above. The U.S. Department of Education and the U.S. Department of Justice published a report on school safety in 1998 that stated that students are differentially affected by crime according to the systems that surround them. Researchers have also reported that perceptions of danger at school may be a particular issue for

males, students of color, middle school students, and students from lower socioeconomic homes (Gardner, 1995; Mikow, 1994; National Center for Education Statistics, 1994, 1995).

With respect to race/ethnicity, studies have reported that African-American and Hispanic youth are at particular risk for violence and homicide (Powell, 1997; Cohall, et al., 1998). Among African-American male youths, homicide is seven to eight times higher than among Caucasian males, and homicide rates for African-American female youths are three to four times higher than among Caucasian females (Cohall, et. al, 1998; Powell, 1997). Gabriel, Hopson, Haskins, & Powell (1996) reported that physical fighting is more prevalent among African Americans than other populations but that weapon carrying shows similar prevalence rates across all populations of youth.

Some studies have examined gender differences in the perpetration of violent acts. Findings suggest that although men and boys comprise eighty-five percent (85%) of violent crimes, female violent crimes are increasing (Cohall, et al., 1998; Dahlberg, 1998). In a study conducted by Kingery, et al. (1991), boys were reportedly involved in more physical fights, carried weapons to school more frequently, and more often put themselves in high risk situations than did girls. In addition, Kingery et al. (1991) report that boys anticipated fewer negative outcomes than girls, were less concerned about consequences of fighting, knew less about appropriate ways to avoid fights, and felt they should fight in response to more situations than girls. Although males are still committing more violent acts than females, there was an increase of one hundred and twenty-five percent (125%) between 1989 and 1994 in the amount of arrests for violent acts among females, while arrest rates for males only increased by sixty-seven percent (67%) (Dahlberg, 1998).

### Contexts of Youth Violence

Another important area to examine is the region in which violence most frequently occurs. There have been a number of studies that support the notion that urban areas of the country have greater incidences of youth violence (White House, 1998; U.S. Department of Education, 1998). However, some studies have also found that violence is

a significant problem for rural youth (Evans, Fitzgerald, Wiegel, & Chvilicek, 1999; Kingery et al., 1991). Specifically, findings from three different studies reveal an increase over the last decade in gang related activity among rural and suburban youth (Goldstein & Soriano, 1994; Hethorn, 1994; Martin, 1997). In one of these studies conducted by Kingery, et al. (1991), results demonstrated that violence is relatively common in rural schools on the periphery of large metropolitan areas. In addition, these researchers stated that since the assumption has been made by researchers that less populated areas have fewer problems with violence, rural areas have been neglected in studies and less often assisted in alleviating problems surrounding youth violence (Kingery, et al., 1991). However, in the studies that have examined youth violence among rural populations, high rates of violence have been reported. Such findings contradict other studies' findings which suggest that violence is not as much of a problem in non-urban settings (White House, 1998; U.S. Department of Education, 1998; & U.S. Department of Justice, 1998). This discrepancy illustrates the need for more research on youth violence among rural youth.

In addition to studies identifying profiles of violent youth, there have also been studies that address when violent acts most often occur. Zill, Nord, and Loomis (1995) analyzed national data on adolescent time, risky behavior, and outcomes and found that youth have five to seven hours of discretionary time available to them each day. For most, that time is being filled with activities that are not character building. The peak hours of juvenile violent crime are from 2:00p.m. to 8:00 p.m. and during the school breaks (Resources for Youth, 1999; Snyder & Sickmund, 1996). In fact, half of all juvenile crime occurs during this time period and two-thirds occurs between 2:00pm and 11:00pm (Resources for Youth, 1999). In other words, these studies suggest that during the after-school hours, many youth are choosing to participate in violent activities rather than productive activities.

### Parental Monitoring

There have been many studies that have examined how different levels of parental monitoring effect adolescents' involvement in delinquent behaviors. These studies have

reported that the more parents monitor their adolescents' activities, the less likely the adolescents are to be involved in delinquent behavior (Kim, et al., 1999; Rodgers, 1999; Flannery, Williams, & Vazsonyi, 1999, Spencer, Dupree, & Swanson, 1997). More specific to violence, two studies reported findings that increased parental monitoring accounted for decreased participation in violent or aggressive activities (Carlo, Raffaelli, Laible, & Meyer, 1999).

Most of these studies have included samples consisting of urban adolescents from one city. The only study found that does examine suburban, urban, and rural youth (Kim, et al., 1999). found that lower parental monitoring was significantly related to adolescent externalizing behaviors which included cruelty, aggression, noncompliant behaviors, school trouble, and poor peer relations. While these results are useful, more studies need to be conducted to test the validity of the findings in the study implemented by Kim, et al. (1999). Conducting other studies that examine how parental monitoring and violence relate across different settings will ensure that locality does not moderate the relationship between parental monitoring and youth participation in delinquent activity, specifically violent activity.

### Rates of Physical Fighting

There is a fair amount of research that examines how many youth are engaging in physical fights. Results of some studies have shown that over half (56%) of sample students had been in a physical fight while at school. In addition, findings show that between 10% to 40% of students had been in a physical fight in which an injury occurred (Gabriel, et al., 1996; Valois, McKeown, Garrison, & Vincent, 1995). Similarly, Kingery, et al. (1991) assessed rates of physical fighting in a sample of youth in a rural community and found that more than half of the boys (53.2%) and one fifth of the girls (20.5%) reported having been in at least one physical fight in the previous year. In addition they found that twenty percent (20%) of the boys and six percent (6%) of the girls had been in three or more physical fights.

Other studies that have looked at rates of physical fighting have found smaller percentages of students engaging in this type of risk behavior. Lockwood (1997)

conducted a study examining violence among middle school and high school students. He reported that an estimated sixteen percent (16%) of all high school students in the United States have been in one or more physical fight in the course of a year. Results from the Youth Risk Behavior Survey indicated that in the thirty days preceding the administration of the survey, eight percent (8%) of the sample youth had engaged in a physical fight that resulted in injury requiring medical treatment by either a nurse or physician (Valois, et al., 1995).

In addition, some studies have attempted to show trends in physical fighting rates so that researchers can know whether students are engaging in more or less physical fights in the present than in the past. For example, Brener, et al. (1999), found that between 1991 and 1997, the percentages of youth who engaged in a physical fight had actually decreased by fourteen percent (14%) and the percentage of students injured in a physical fight decreased twenty percent (20%). Kingery, Coggeshall, and Alford (1998) examined results from four national surveys on youth violence (the Youth Risk Behavior Survey, the Monitoring the Future Survey, the National Longitudinal Study of Adolescent Health, and the National Crime Victimization Survey School Crime Supplement) and found that students who were involved in a single fight in a given year had decreased in recent years while the prevalence of more frequent fighting had remained the same.

The discrepant findings across studies that examined rates of physical fights may be due to differences in whether or not they defined physical fighting by injury. For example, the studies that had higher rates of physical fighting across the sample did not differentiate between those who were injured and required medical treatment and those who were not injured. Whereas, in the studies showing lower rates of physical fighting the sample may have been asked whether they had received medical attention for their injuries. In other words, the lower rates of physical fighting might be attributed to the sample only answering that they had participated in physical fights if they had received or caused injury that required medical attention. In addition, just as with overall rates of violent acts, the time span that the studies were implemented may have played a role in percentages of physical fighting reported. For example, recent studies obtaining data

from the last few years may have lower rates of physical fighting than those that analyzed data obtained in the early 1990s.

### Risk and Protective Factors for Physical Fighting

With the exception of a few studies, there is little research conducted that identifies risk and protective factors specific to physical fighting. There are more studies implemented that look solely at risk factors for violence. Results of these studies have identified the following risk factors for youth violence: drug use, family of origin violence, early onset of aggressive behavior in childhood, social problem solving skill deficits, hyperactivity, concentration problems, negative peer influences, access to weapons, binge drinking, and sexual activity (Dahlberg, 1998; Hawkins, et al., 1998; Kingery, et al., 1997; Valois, et al., 1995).

In one study, researchers did examine risk and protective factors for youth violence. Results revealed the risk factors for being involved in more fights or being victims of violence were drug usage, risk taking behaviors, and carrying weapons more often (Kingery, et al., 1991). Cited protective factors included thoughts about fighting (52%), followed by concerns about getting into trouble in school (43%), getting hurt (25%), and what their friends will think of them (25%).

Hawkins, et al. (1998) suggest that most studies of risk and protective factors tend to focus on delinquency in general rather than on youth violence in particular. This lack of specificity related to youth violence makes it difficult to identify the risk and protective factors for youth being perpetrators or victims of violence. Researchers agree that more research in this area is needed (Hawkins, et al., 1998). In addition, it is important to study risk and protective factors across all settings, including rural settings. As mentioned earlier, rural populations have been neglected in the research on youth violence (Kingery, et al., 1991).

## Rates of weapon carrying

As with reports of percentages of youth that engage in physical fights, there are many studies that report rates of weapon carrying by youth in school and less that focus on risk and protective factors for weapon carrying. Studies have found that the prevalence of carrying weapons was greater among males than females, among middle adolescents than early and late adolescents, did not vary by race/ethnicity, and was greater among rural than urban or suburban youth. Unfortunately, it is unclear whether the students carrying weapons are intending to use them for violent acts or activities such as hunting and fishing. Results indicate that between thirty-eight percent (38%) and forty-one percent (41%) of males report carrying a weapon to school while between nine percent (9%) and eleven percent (11%) of females report weapon carrying (U.S. Department of Health and Human Services, 2000; Valois, et al., 1995; Kingery, et al., 1991). The percentage of weapon carrying among all students independent of gender ranges between fifteen percent (15%) and twenty-two percent (22%) according to recent studies (U.S. Department of Health and Human Services, 2000; Simon, Crosby, & Dahlberg, 1999). Handguns were most commonly carried among males, African American adolescents, and older adolescents.

Similar to rates of youth engaging in physical fights, some studies have shown a decrease in the frequency of youth that carry weapons. For instance, one study reported that between 1991 and 1997, the percentage of students who carried a weapon to school decreased by thirty percent (30%) during the twelve months preceding the survey (Brener, et al., 1999). Other studies have also supported that weapon carrying by U.S. adolescents have decreased in recent years (The White House, 1998; The Institute for Youth Development, 1999; Cohall, et al., 1998; Dahlberg, 1998).

## Risk and Protective Factors for Weapon Carrying

As stated earlier, there have been few studies that have identified risk and protective factors for violence, and there are fewer that have identified risk and protective

factors specifically for weapon carrying. The studies that do examine this issue fail to differentiate between rural and urban settings.

One study that did identify risk factors for weapon carrying reported the following risk factors: substance use, physical fighting, and exposure to school crime and violence were most significant in predicting students carrying weapons on school grounds (Simon, et al., 1999). In addition, students who had been threatened or injured with a weapon on school grounds, used substances, or had been a physical fight on school grounds were more likely to carry weapons to school (Simon, et. al, 1999). Further, the students who carried weapons on school ground were more likely to be male than female (Simon, et al., 1999).

Another recent study conducted by Kingery, et al. (1998) also identified risk factors specific to weapon carrying. The most significant risk factors that they identified were students' involvement with violence in a broader community as a perpetrator and a victim. In addition, having a highly disposable income, feeling distant from people in their school, feeling that people in their neighborhoods do not look out for them, and selling drugs were moderately significant risk factors for weapon carrying. This study did not differentiate risk factors between females and males. Given the lack of studies implemented to examine risk and protective factors for weapon carrying, it makes sense that more research needs to be conducted in this area.

### Extracurricular Activities

Few studies have directly examined the relationship between participation in specific extracurricular activities and violent activity. However, several researchers have examined the relationship between participation in extracurricular activities and both positive and negative outcomes. For example, Eccles and Barber (1999) found that adolescents who were involved in prosocial activities had the most consistently positive outcomes, which were high academic achievement and low rates of involvement in risky behaviors. Stevens and Peltier (1994) reported that extracurricular activities could aid in helping youth stay away from risky behaviors such as drug abuse, gang involvement, and destructive activities. Also, other studies have reported that extracurricular involvement

may be a protective factor for decreasing drug use and sexual activity among adolescents (Savage & Holcomb, 1998; Shilts, 1991).

In addition, there have been many studies that have shown that engaging in one risky behavior often leads to engaging in other types of risky behaviors (Resnick et al., 1997; Jessor, et al., 1998). Given the co-occurrence of risky behaviors and the results that show that participation in extracurricular activities may be a protective factor against participation in risky behaviors, it is logical to infer that there may also be a relationship between participation in extracurricular activities and involvement in violent activity.

The literature on extracurricular activities and their relationship to engaging in risky behaviors often does not consistently examine differences in specific types of extracurricular activities. For example, do playing basketball and non-school club participation provide similar “protective” effects? Or is participation in religious activities more or less beneficial than playing a team sport?

A few studies have examined participation in sports as well as religious activity as they relate to violence and other risky behaviors. Some of these studies have found that sports and religious activity can serve as a protective factor for violence and other risky behaviors whereas others have found them to make youth more vulnerable to these delinquent behaviors. These discrepant findings may be due to the type of sport and religious activity involvement.

Specifically, some studies have examined whether specific sports are related to a decrease or an increase in aggression and the results have been mixed. For example, there have been several studies that have reported that sports such as football, hockey, and boxing may be related to an increase in levels of aggression (Bennett, 1991; Rowe, 1998). However, other studies have reported that some sports like martial arts and noncompetitive-aggressive sports, such as running or swimming, may be related to a decrease in levels of aggression (Leith, 1990; Nosanchuk & MacNeil, 1990; Jorge, 1995; Lamre & Nosanchuk, 1999).

Other studies have only examined sports in general and their relationship to violent activity and other risky behaviors. Steptoe & Butler (1996) reported that sport and vigorous recreational activity were positively correlated with emotional well being independent of gender, social class, health status, and use of hospital services. Another

study examined sports activity in adolescence and its association with health perceptions and risk behaviors (Ferron, Narring, Cauderay, & Michaud, 1999). They found that athletic adolescents had fewer somatic complaints, more confidence in their future health, a better body image, less tendency to attempt suicide, a higher frequency car seat belt use, and lower substance use. Similarly, the President's Council on Physical Fitness and Sports (1997) reported that for girls, sport participation may be related to enhanced mental health and reduced symptoms of stress and depression. Lastly, Quick, Horn, and Quick (1987) found that aerobic exercise, weight training, and flexibility training may be correlated with reduced behavioral health problems such as substance abuse.

Another study conducted by Aaron, Dearwater, Anderson, Olsen, Kriska, & Laporte (1995) examined physical activity and the initiation of high-risk health behaviors in adolescents and found mixed findings on the relationship between physical activity and positive or negative outcomes. Specifically, the results showed that males who participated in competitive athletics were significantly more likely to engage in alcohol use. However, no association was found between physical activity and alcohol use in females. Females who were physically active were less likely to smoke cigarettes but there was no relationship for males between physical activity and cigarette smoking. Lastly, no relationship was found between physical activity and weapon carrying. Taken together, these findings suggest that some extracurricular sports may serve as a protective factor for risky behaviors while others may be related to an increase in youths' risk for engaging in delinquent behaviors.

As with physical exercise and sports, only a few studies have examined the relationship between religion and youth violence in adolescents. However, there have been more studies that have looked at this relationship among adults. These findings provide mixed results. Some researchers report that religion may be correlated with increasing likelihood for violence or justifying violence (Miles, 1999; Jorge, 1995; Lester, 1988) while others state that spirituality/religion can serve as a protective factor against becoming involved with violence (Edari & McManus 1998; Helminiak, 1997;).

Of the few studies that have been conducted with youth, some studies have shown religious involvement can serve as a protective factor against violence and other risky behaviors. For example, one study looking at risk and resiliency factors for violence

found that spiritual orientation, opportunities to participate in one's community, and high levels of recreation in the community were protective factors against violence (Edari & McManus, 1998). Another study reported that having a religion and perceived importance of that religion and prayer were protective factors for adolescent risky behaviors which included violence (Resnick, et al., 1997). Also, Benson, Donahue, and Erikson (1989) reported that religion could serve as a deterrent of deviant behaviors for adolescents. Lastly, another study implemented by Powell (1997) suggested that youth that viewed religion as important were less likely to be involved in violent behavior.

There have only been a few studies that have examined the relationship between extracurricular activities and violence and of these few studies, even fewer differentiated between different kinds of extracurricular activities. Furthermore, since some of the results of these studies contradict each other, more research needs to be implemented in this area to yield valid results.

### Summary

In summary, there has been a significant amount of research on youth violence in general but little that takes into consideration the joint effects of locality and gender on youth violence. Furthermore, more focus has been given to examining risk factors for violence and less that address protective factors for youth against violence (Hawkins, et al., 1998).

Additionally, very little research has been conducted that identifies the relationship between specific extracurricular activities and youth violence. Although few in number, several studies have shown that participation in extracurricular activities in general can serve as a protective factor for youth from risky behaviors and that some of these risky behaviors are correlated with youth violence. Therefore, the next logical step is to study whether participation in specific types of extracurricular activities can be correlated with a decrease in the likelihood of participation in violence. Also, many studies suggest that high levels of parental monitoring are related to decreased participation in violence and other delinquent activities. Unfortunately, the majority of

these studies gathered data from a sample of urban youth and therefore the results are not generalizable to rural youth.

The present study attempts to contribute to the literature by examining the relationship between participation in extracurricular activities, parental monitoring, and violent activity in a sample of rural youth. The extracurricular activities of interest in this study are sports, exercise, religious activity, volunteer activities, and non-school clubs. There are several variables that will be used to measure level of parental monitoring. The two measures for violence in this study are weapon carrying and physical fighting. Gender differences in the relationship between these extracurricular activities and measures of violence will also be examined.

## RESEARCH QUESTIONS

The primary purpose of the present study is to understand how participation in extracurricular activities and parental monitoring relate to youth violence among rural youth. A second purpose of this study is to assess gender differences in these relationships. Finally, a third purpose of this study is to examine the extent to which these variables can predict nonviolent versus violent youth. The present study will attempt to answer the following research questions:

- 1.) What is the relationship between student involvement in extracurricular activities and weapon carrying? Specifically:
  - a.) non-school clubs and weapon carrying
  - b.) volunteer work and weapon carrying
  - c.) church and religious related activity and weapon carrying
  - d.) sports teams and weapon carrying
  - e.) exercise and weapon carrying
- 2.) What is the relationship between extracurricular activities and physical fighting? Specifically:
  - a.) non-school clubs and physical fighting
  - b.) volunteer work and physical fighting
  - c.) church and religious related activity and physical fighting
  - d.) sports teams and physical fighting
  - e.) exercise and physical fighting
- 3.) What is the relationship between parental Monitoring, participation in weapon carrying and physical fighting?
- 4.) Are there gender differences for the study variables?
- 5.) What variables predict violent versus nonviolent youth?

## CHAPTER THREE

### METHODS

#### Participants and Selection Process

Data contributed by 235 teenagers from a southeastern rural, ethnically diverse, Virginia community were analyzed. Data for the present study were drawn from a larger study entitled the Virginia Adolescent Resiliency Assessment (V.A.R.A). All of the students in grades eighth through twelve were invited to participate in the V.A.R.A study. Two hundred and thirty-two students participated in survey out of three hundred and thirty-two possible participants, a seventy-one percent (71%) response rate. However, of the students who were present the day of survey administration, ninety-one percent (91%) completed the survey.

The participants consisted of one hundred twenty-four females and one hundred nine males. Twenty percent(20%)of the participants were in eighth grade, twenty-six percent (26%)of the participants were in ninth grade, twenty-six percent (26%)of the participants were in tenth grade, sixteen percent (16%)of the participants were in eleventh, and eleven percent (11%)of the participants were in twelfth grade. One hundred and fifteen of the participants (49%) were African-American, ninety (38%) White, nine (4%) Native American, six (3%) biracial, three (1%) Hispanic, one (.4%) Asian, and eight (3%) other ethnic backgrounds.

#### Procedure

The survey was conducted in December of 1999. All parents were notified about this study and its purpose through a passive consent form, which asked parents to contact the school if they did not want their children to participate. The surveys were anonymous to ensure accurate and honest responses. Students were told not to put their names on the surveys or on the computer answer forms, and each student was asked to place his or her answer form in an envelope. They were also informed that the survey was voluntary and that they could skip questions if they so chose.

A total of 242 completed computer answer forms were returned. Prior to analyses, the answer forms were examined for obvious patterns, scribbles, etc. that would make answers invalid. Three percent (3%) of the answer forms contained invalid responses and were removed from the sample. A total of 235 surveys were included in the analyses.

## Measurements

The measures for this study were derived from a larger survey entitled the Virginia Adolescent Resiliency Assessment. The Virginia Adolescent Resiliency Assessment consisted of 169-item survey, which was based on a survey process developed by Stephen Small from the University of Wisconsin-Madison/Extension (Small, 1995). This survey process was adapted to account for teen perceptions of their community and school, teen aspirations, concerns and attitudes about various aspects of their lives, teen mental and physical health, and the frequency that the teens report engaging in both dangerous and desirable behaviors. Some of the measures from the VARA survey used in this study originated from the 1998 Youth Risk Behavior Survey (Center for Disease Control). The Youth Risk Behavior Survey is a nationally recognized survey consisting of six categories of priority health-risk behaviors among youth and young adults.

The survey included basic demographic information, self-report measures of school violence and participation in extracurricular activities. Several researchers have illustrated the high validity of adolescent self-reports of delinquent behavior (Heatherington & Clingempeel, 1992).

School Violence Three items assessed school violence via weapon carrying frequency (WF), what type of weapon was being carried, and frequency of physical fighting (PF). One of these items asked, “during the past 30 days, on how many days did you carry something that could be used as a weapon such as a gun, knife, or club?” Response choices included 0=“0 days,” 1=“1 day”, 2=“2 or 3 days”, and 4=“6 or more days.” The second item asked participants “during the past 30 days, if you did carry

something that could be used as a weapon, what did you carry most often?" The response choices included 0="I did not carry a weapon during the past 30 days", 1="knife," "razor," or "scalpel," 2="club or bat", 3="mace or pepper spray", 4="gun", and 5="other". The third item asked participants "during the past 12 months, how many times were you in a physical fight?" The response choices included 0="0 days," 1="1 days, 2="2 or 3 days," 3="4 or 5 days," and 4="6 or more days."

Parental Monitoring Six items assessed perceived level of parental monitoring (PM). All six of these items asked participants how often their parents did the following: "knew where they were after school," "expected teen to call them if they were going to be late," "expected teen to tell them whom they would be with before going out," "expected to know where their teen was when out at night," "expected to know who teen's friends were," and "expected to know the parents of teen's friends." The response choices included 0="never," 1="rarely," 2="sometimes," 3="a lot of the time," and 4="always." Parental monitoring was measured on a six-item scale with a Cronbach's alpha of .82.

Extracurricular Activities Seven items assessed levels of participation in extracurricular activities. Four of these items asked "how often, on the average, do you spend time in each activity: after-school extracurricular activities (EA), in non-school clubs (NSC), doing volunteer work (VW), and church or other religious-related activity(CA)?" The response choices included 0="never," 1="a few times a year," 2="once a month," 3="once a week," 4="a few times a week," and 5="just about every day." Two items asked participants "how many times in the past seven days they participated in exercise that lasted for at least twenty minutes and made them sweat and breathe hard (EX), or that toned or strengthened their muscles (TE)?" The response choices included 0=0 days, 1="1 day," 2="2 days," 3="3 days," 4="4 days," 5="5 days," 6="6 days," and 7="7 days." The last item asked participants how many sport teams (ST) did they participate on. The response choices included 0="0 teams," 1="1 team," 2="2 teams," and 3="3 or more teams."

### Study Variables Used from Survey:

How often did you spend your time?

#19) In after-school activities (such as sports, clubs, academic challenges, etc.)

#21) In non-school clubs (such as Boy Scouts/Girl Scouts, 4-H, Intramural sports leagues)

#22) Doing volunteer work (for example: working with the elderly or disabled; helping with a political or environmental cause)

#23) Involved in church or other religious-related activities (like choir, usher)

Personal safety and violence

#44) During the past 30 days, on how many occasions did you carry something that could be used as a weapon such as a gun, knife, or club?

#47) During the past 12 months, how many times were you in a physical fight?

Diet and exercise

#95) On how many occasions in the past 7 days did you exercise or participate in physical activity for at least 20 minutes that made you sweat and breath hard?

#96) On how many occasions in the past 7 day did you do exercises to strengthen or tone your muscles, such as pushups, sit-ups, or weight lifting?

#97) During the past 12 months, how many sports teams did you play?

## Analysis

Data was analyzed using correlations, regressions, and standard T-tests. These statistical analyses were used in the following way for each research question.

1.) What is the relationship between student involvement in extracurricular activities and weapon carrying?

Correlational analyses were employed to examine weapon carrying as it relates to each specific extracurricular activity. Separate correlation matrices for males and females were presented.

2.) What is the relationship between extracurricular activities and physical fighting?

Correlational analyses were employed to examine physical fighting as it relates to each specific extracurricular activity. Separate correlation matrices for males and females were presented.

3.) What is the relationship between parental monitoring and participation in weapon carrying and physical fighting?

Correlational analyses were employed to examine parental monitoring as it relates to weapon carrying and physical fighting. Separate correlation matrices for males and females were presented.

4.) Are there gender differences for the study variables?

T-tests were conducted to compare the means of boys and girls on each variable.

5.) What variables predict violent versus nonviolent youth?

A step-wise discriminant analysis was used to predict violent versus nonviolent youth.

## CHAPTER FOUR

### RESULTS

Frequencies were employed to describe the percentages of participants participating in weapon carrying, physical fighting, and all of the extracurricular activities. Next, three sets of analyses were employed to answer the previously stated research questions: correlations, *t*-tests, and a discriminant analysis. It is important to note the range of responses on each of the study variables. Specifically, responses for all the extracurricular activity variables ranged from 0 to 5, with “5” indicating the highest level of involvement in each of the extracurricular activities. The responses for parental monitoring variables ranged from 0 to 5 with “0” indicating no parental monitoring and “4” indicating high parental monitoring.

Descriptive analyses are presented in tables 1, 2, 3, 4, and 5. Seventy-two percent of sample youth reported that they did not carry a weapon in the thirty days prior to taking the survey and 66% of sample youth had not been in any physical fights in the twelve months prior to taking the survey. Of the participants that did report carrying a weapon in the past thirty days, 12% carried a knife/razor/scapel, 7% carried a gun, 6% carried a weapon that was not listed, 2% carried a club/bat, and 1% carried mace/pepper spray.

Twenty-six percent (26%) of participants reported never engaging in extracurricular activities while 17% of participants reported engaging in extracurricular activities a few time a week. Seventy-four percent (74%) of participants never engaged in non-school clubs while 52% reported never engaging in volunteer activities. Lastly, 31% of participants never participated in church related activity and 40% reported engaging in church activity one or more times a week.

The frequencies employed to understand how many participants are engaging in physical activities revealed that 20% of participants never participated in aerobic activity while 28% reported that they engaged in physical activities one to three times a week. Thirty-six percent of participants never engaged in toning exercises while 28% engaged in toning exercises one to three times a week. Finally, 43% of sample youth were not

involved in any sport teams, 25% were involved on one sport team, 15% were involved on two teams, and 15% were involved in three or more sport teams.

Table 1

Percentage of participants engaging in violent activities

TYPE OF ACTIVITY	N	0 DAYS	1 DAY	2-3 DAYS	4-5 DAYS	6+ DAYS
Weapon Carrying (in past 30 days)	233	72%	5%	5%	5%	13%
Physical Fighting (in past 12 months)	233	66%	16%	11%	2%	5%

Table 2

Percentage of participants carrying each type of weapon listed

WEAPON TYPE	N	Knife/razor/scapel	Club/bat	Mace/pepper spray	Gun
PERCENT	232	12%	2%	1%	7%

Table 3

Percentage of participants engaging in extracurricular activities

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<b>TYPE OF ACTIVITY</b>	<b>N</b>	<b>NEVER</b>	<b>FEWX YEAR</b>	<b>1X MONTH</b>	<b>1X WEEK</b>	<b>FEWX WEEK</b>	<b>DAILY</b>
Extracurricular Activities	233	26%	19%	3%	6%	17%	28%
Non-school Clubs	232	74%	12%	3%	4%	5%	2%
Volunteer Activity	233	52%	27%	8%	6%	3%	4%
Church Activity	233	31%	14%	9%	23%	17%	5%

---

Table 4

Percentage of participants engaging in physical activities

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<b>TYPE OF ACTIVITY</b>	<b>N</b>	<b>0 DAYS</b>	<b>1 DAY</b>	<b>2 DAYS</b>	<b>3 DAYS</b>	<b>4 DAYS</b>	<b>5 DAYS</b>	<b>6 DAYS</b>	<b>7 DAYS</b>
Aerobic Exercise	232	20%	9%	10%	9%	14%	17%	6%	13%
Toning Exercise	232	36%	10%	9%	9%	9%	10%	1%	14%

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Table 5

Percentage of participants involved in team sports

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<b># OF TEAMS</b>	<b>N</b>	<b>0 TEAMS</b>	<b>1 TEAM</b>	<b>2 TEAMS</b>	<b>3 + TEAMS</b>
<b>PERCENT</b>	232	43%	25%	15%	15%

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## Correlations

Table 6 presents the correlation matrix for all the variables in the sample. Table 7 presents the correlation matrix for all the study variables by gender. Correlations for the female participants are above the diagonal while the correlations for the male participants are below the diagonal. Pearson's correlations are reported for all of the study variables.

There was a significant positive relationship between participation in non-school clubs and physical fighting frequency ( $r = .246, n = 231, p \leq .05$ ) as well as between participation in volunteer activities and physical fighting frequency across the entire sample ( $r = .160, n = 232, p \leq .05$ ). The entire sample also demonstrated a significant positive relationship between weapon carrying frequency and involvement in physical fighting ( $r = .364, n = 233, p \leq .05$ ). Finally, there was a significant inverse relationship between weapon carrying and parental monitoring for all participants ( $r = -.262, n = 226, p \leq .05$ ).

When separated by gender, the significant relationships founded were very similar as those found across the entire sample. Female respondents demonstrated a positive relationship between participation in non-school clubs and physical fighting frequency ( $r = .206, n = 122, p \leq .05$ ) as well as between participation in volunteer activities and physical fighting frequency ( $r = .262, n = 123, p \leq .05$ ). For females, no other significant relationships were found between the specific extracurricular activities and violence variables.

An inverse relationship was found between parental monitoring and weapon carrying frequency for female participants ( $r = -.302, n = 118, p \leq .001$ ). There was no significant relationship between parental monitoring and frequency of physical fighting.

For male respondents, there was also a positive relationship between participation in non-school clubs and physical fighting frequency ( $r = .297, n = 108, p \leq .05$ ). There was an inverse relationship between participation in church activity and weapon carrying frequency ( $r = -.279, n = 109, p \leq .05$ ).

Partial correlations were employed for both males and females to control for the effect of parental monitoring on the correlation between participation in non-school clubs

and fighting frequency. No significant difference between the partial correlation scores and the original correlation scores were revealed.

**Table 6**

**Correlation matrix of all study variables for entire sample<sup>a</sup>**

	EA	NSC	VA	CA	WF	PF	EX	TE	ST	PM
EA										
NSC	.078									
VA	.015	.222**								
CA	.256**	.106	.244**							
WF	-.027	.121	-.049	-.122						
PF	-.076	.246**	.160*	.002	.364**					
EX	.249**	.032	.072	-.054	.088	-.006				
TE	.126	.072	.097	-.048	.108	.116	.589**			
ST	.488**	.130*	.187**	.103	.079	.142*	.256**	.160*		
PM	.029	-.042	.123	.164*	-.262**	-.107	.069	.045	.007	

Note:

\* significant at  $p \leq .05$

\*\* significant at  $p \leq .001$

a EA= Time spent in extracurricular activities

NSC= Time spent in non-school clubs

VA= Time spent in volunteer activities

CA= Time spent in church activities

WF= Frequency of weapon carrying

PF= Frequency of physical fighting

EX= Frequency of aerobic exercise involvement

TE= Frequency of toning exercise involvement

ST= The number of sport teams that participants are involved

PM= Percieved levels of parental monitoring

Table 7

Correlations between extracurricular activities, parental monitoring, weapon carrying and physical fighting for by gender<sup>a</sup>

	EA	NSC	VA	CA	WF	PF	EX	TE	ST	PM
EA	1.000	.034	.257**	.304**	-.008	-.122	.314**	.170	.520**	.163
NSC	.132	1.000	.259**	.157	.026	.206*	.075	.103	.078	.108
VA	.014	.190*	1.000	.309**	.114	.262*	.177	.225*	.204*	.119
CA	.196*	.061	.163	1.000	.107	.032	-.057	-.043	.112	.213*
WF	-.066	.189	-.152	-.279**	1.000	.385**	.003	.131	.168	-.302**
PF	-.008	.297**	.034	-.029	.386**	1.000	-.093	.100	.121	-.154
EX	.185	-.018	-.023	-.023	.054	.084	1.000	.580**	.277**	.098
TE	.082	.038	-.014	-.023	-.002	.118	.556**	1.000	.229*	.032
ST	.466**	.174	.183	.113	-.030	.161	.200*	.052	1.000	-.111
PM	-.097	-0.120	.126	.105	-.171	-.023	.140	.148	.158	1.000

Note:

\* significant at  $p \leq .05$

\*\* significant at  $p \leq .001$

Correlations for the female respondents are above the diagonal while correlations for the male respondents are below the diagonal.

a EA= Time spent in extracurricular activities

NSC= Time spent in non-school clubs

VA= Time spent in volunteer activities

CA= Time spent in church activities

WF= Frequency of weapon carrying

PF= Frequency of physical fighting

EX= Frequency of aerobic exercise involvement

TE= Frequency of toning exercise involvement

ST= The number of sport teams that participants are involved

PM= Perceived levels of parental monitoring

Mean Level Differences

T-tests were conducted to examine mean differences between male and female reports of participation in extracurricular activity, parental monitoring, grades, and participation in violent activity. Table 8 presents the t-test scores.

Males reported higher levels of exercise frequency than females:  $\underline{M}$ = 3.91 and  $\underline{M}$ = 2.87, respectively, with a mean difference of  $\underline{M}$ = -1.04. Males also reported carrying weapons more frequently than females,  $\underline{M}$ = 1.25 and  $\underline{M}$ = .43, respectively, with a mean difference of  $\underline{M}$ = -.82. In addition, males reported higher levels of participation in toning exercises with a mean difference of  $\underline{M}$ = -1.12. Females reported higher levels of parental monitoring,  $\underline{M}$ = 3.15 and  $\underline{M}$ = 2.87, respectively with a mean difference of  $\underline{M}$ = .015. All of the reported mean differences were significant ( $p \leq .05$ ). No other significant mean differences between males and females on the study variables of extracurricular activities, non-school clubs, volunteer activities, church activity, physical fighting frequency, sport teams, or grades were revealed.

Table 8

T-tests for gender differences on time in extracurricular activities, weapon frequency, exercise frequency, toning exercise frequency, and parental monitoring variables.

	N	Mean	Std. Deviation	Mean Diff.	Sig. (2-tailed)
TIMEACT (M)	108	2.57	2.01	-.11	.697
TIMEACT (F)	124	2.47	2.12	-.11	.696
TIMECLUB (M)	108	.62	1.34	-4.31E-02	.796
TIMECLUB (F)	123	.58	1.17	-4.31E-02	.794
TIMEVOL (M)	108	.88	1.37	.12	.500
TIMEVOL (F)	124	1.00	1.34	.12	.500
TIMECHRC (M)	109	1.85	1.64	.22	.316
TIMECHRC (F)	123	2.07	1.69	.22	.317
FIGHTFRQ (M)	109	.75	1.16	-.12	.485
FIGHTFRQ (F)	123	.63	1.38	-.12	.480
WPNFRQ (M)	109	1.25	1.68	-0.82	.000**
WPNFRQ (F)	123	0.43	1.10	-0.82	.000**
EXERFRQ (M)	108	3.91	2.35	-1.04	.001**
EXERFRQ (F)	123	2.87	2.34	-1.04	.001**
TONEFRQ (M)	109	3.11	2.57	-1.12	.001**
TONEFRQ (F)	122	1.99	2.42	-1.12	.001**
TEAMS (M)	109	1.21	1.22	-.28	.070
TEAMS (F)	122	.93	1.09	-.28	.072
PARMON (M)	104	2.87	.95	.28	.015*
PARMON (F)	122	3.15	.73	.28	.015*

Note:

\* significant at  $p \leq .05$

\*\* significant at  $p \leq .001$

## Step-wise Discriminant Analysis

A step-wise discriminant analysis was employed to determine how well all of the variables in the study could predict whether or not participants would be in the “violent” or “nonviolent category.” The fighting frequency variable was recoded as “violence” and the sample youth who reported participation in one or more physical fights in the twelve months prior to completing the survey were classified as “violent.” The sample youth who reported no physical fights in the last twelve months were classified as nonviolent.

Given the exploratory nature of the study, a step-wise discriminant analysis was employed to determine whether the study variables were equally able to classify group membership as “violent” or nonviolent.” The stepwise discriminant analysis revealed that of all the study variables time in non-school clubs was the best predictor of whether sample youth would be classified in the “violent” versus “nonviolent” group. Time in non-school clubs correctly classified 67.1% of the original sample.

Discriminant analysis chooses the set of independent variables that discriminates between the discrete groups (i.e., Violent versus Nonviolent). Several statistics are used to depict a discriminant analysis. The canonical correlation signifies the relationship between the discriminant function and group membership. The canonical correlation squared can be interpreted as the proportion of variance in the discriminant function explained by the two groups (violent and nonviolent), and is an indicator of the explanatory ability of the discriminant function.

## Secondary Analyses

Given the results of the correlation analysis and the step-wise discriminant analyses, several more statistical tests were implemented to understand why the findings did not support existing evidence suggesting that participation in extracurricular activities decreased the likelihood of involvement in violence and other risky behaviors (Eccles & Barber, 1999). These statistical tests were conducted to further examine the positive relationship between physical fighting frequency and participation in non-school clubs.

Specifically, a second correlational analysis was conducted only with youth who reported both participation in non-school clubs and physical fighting (N=31). This analysis revealed no significant relationship between participation in non-school clubs and frequency of physical fighting. This suggests that the positive relationship founded when utilizing the entire sample was a Type I error since the majority of youth were not involved in physical fighting or in non-school clubs.

A second set of t-tests was also employed to examine the mean differences between non-school club involvement for sample youth reporting involvement in physical fights in the twelve months prior to taking the survey and those who had not been in a physical fight ( $M = -.69$ ). Table 9 suggests that the majority (66%) of sample youth were neither in a physical fight nor involved in non-school clubs.

Finally, cross tabulations by grade and gender were implemented to examine the occurrence of physical fighting among sample youth (Figures 1, 2, 3, 4, and 5). Specifically, in eighth grade, 80% of the females and 53% of the males did not report involvement in a physical fight during the twelve months prior to completing the survey. In ninth grade, 65% of the females and 45% of the males reported they had not been in a physical fight during the last twelve months. In tenth grade, 77% of the females and 57% of the males reported they had not engaged in any physical fights in the twelve months prior to participating in the survey. In eleventh grade, 63% of the females and 89% of the males reported they had not been in any physical fights in the last twelve months before taking the survey. Finally, in twelfth grade, 58% of females and 64% of the males reported they had not been in any physical fights in the twelve months prior to completing the survey.

Table 9

T-tests showing mean differences on level of participation in non-school clubs for sample youth who are “ violent” as compared to sample youth who are “nonviolent.”

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CLUBINV	N	MEAN	STD. DEVIATION	SIG. (2-TAILED)
VIOLENT	32	1.28	1.53	.005*
NONVIOLENT	199	0.59	1.22	.005*

---

Note:

\* significant at  $p \leq .05$

Figure 1. Physical fighting among youth in 8<sup>th</sup> grade

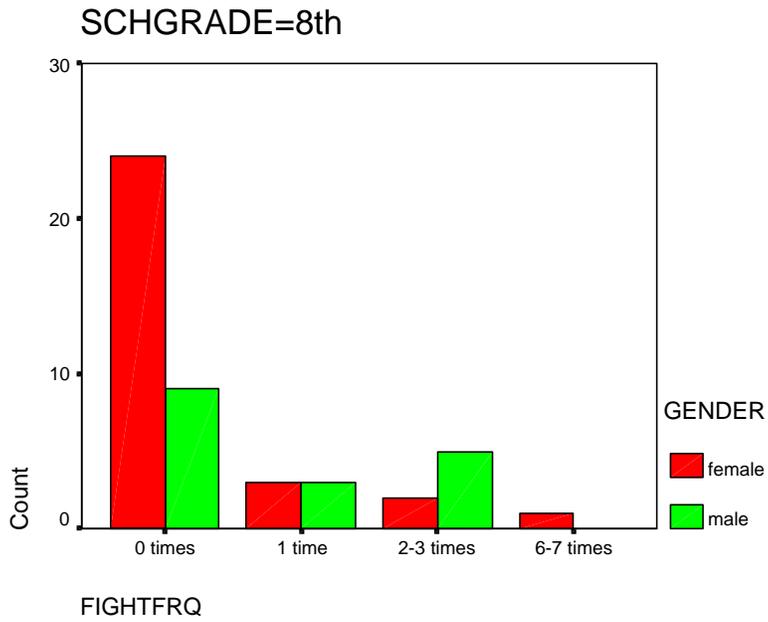


Figure 2. Physical fighting among youth in 9<sup>th</sup> grade

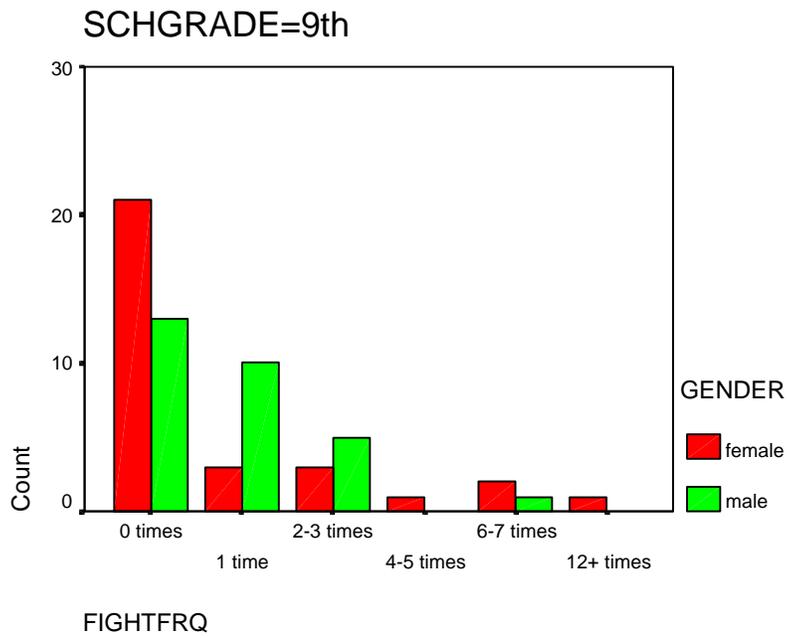


Figure 3. Physical fighting among youth in 10<sup>th</sup> grade

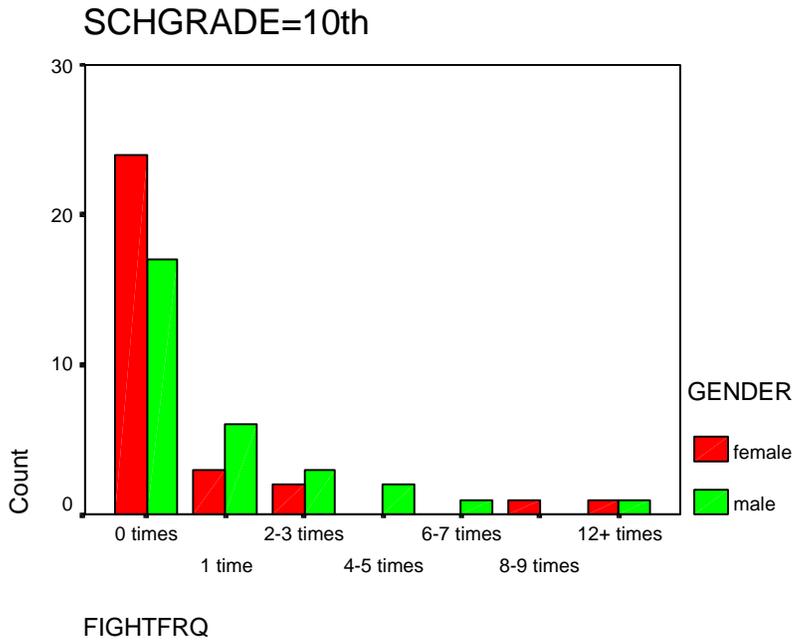


Figure 4. Physical fighting among youth in 11<sup>th</sup> grade

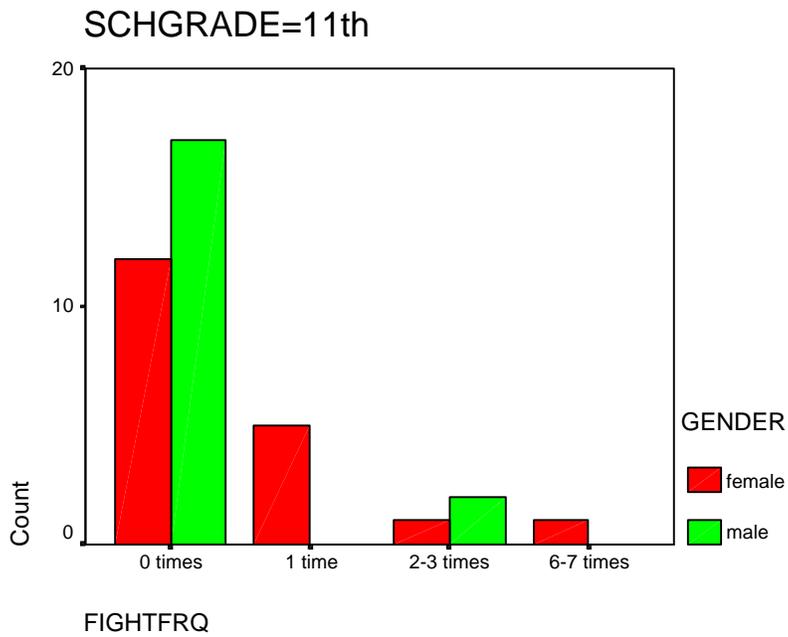
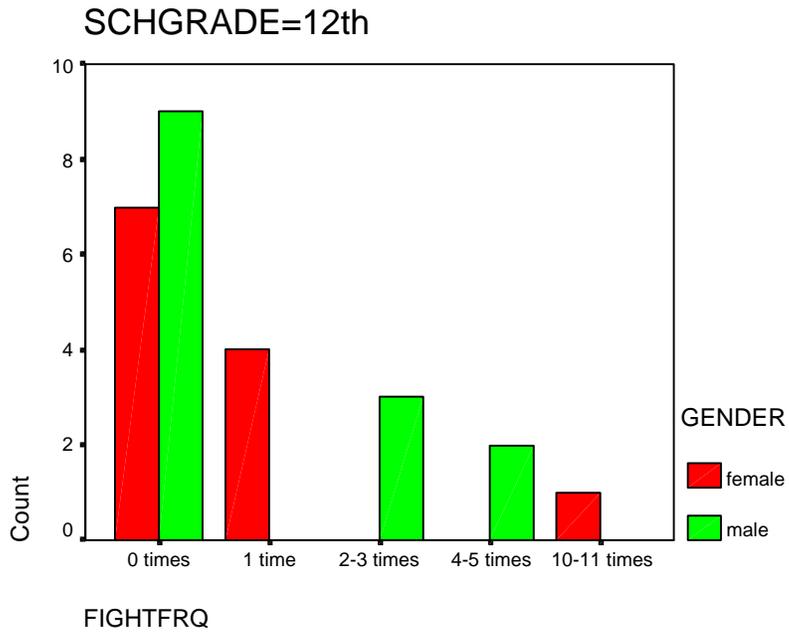


Figure 5. Physical fighting among youth in 12<sup>th</sup> grade



## CHAPTER FIVE

### DISCUSSION

The purpose of this study was threefold: 1) to examine the relationship between specific extracurricular activities and levels of violent activity among rural youth; 2) to examine the relationship between parental monitoring and levels of violent activity among rural youth; and 3) to assess gender differences for all of the study variables.

#### Sample Youth Compared to Past Literature

Youth in this study engaged in less physical fighting and more weapon carrying than youth studied in previous literature. Only thirty-three percent of sample youth engaged in one or more physical fight in the last 12 months prior to taking the survey whereas other studies showed that 56% of youth were engaging in physical fighting (1998; Gabriel, et al., 1996). However, twenty-eight percent of sample youth reported carrying a weapon while past literature has reported that between fifteen percent 15% and twenty-two percent 22% of adolescents carry weapons (U.S. Department of Health and Human Services, 2000; Simon, Crosby, & Dahlberg, 1999).

#### Relationship Between Extracurricular Activities and Weapon Carrying

The finding of an inverse relationship between participation in church activities and weapon carrying is consistent with the research that has shown church involvement as a protective factor for youth against violence (Edari & McManus, 1998; Helminiak, 1997). Although other studies have also found religion to be a protective factor against violence among urban populations, this study supported the finding while using a rural population. Church involvement may serve as a protective factor for several reasons. One reason might be that it gives youth a place to go during the potentially dangerous hours after school. In addition, involvement in religious activity may provide a positive

support network, peer and adult role models, as well as provide an avenue for faith and hope for youth.

The finding in this study is inconsistent with results of other studies that have reported church involvement may increase the likelihood for violence (Miles, 1999; Jorge, 1995; Lester, 1988). However, it is important to note that these studies only utilized adult samples, limiting generalizability for youth. It may be that some aspects of church involvement can serve as a protective factor while others may serve as a risk factor.

### Relationship Between Extracurricular Activities and Physical Fighting

Although initial correlations found that a positive relationship existed for females and males between participation in non-school clubs and physical fighting frequency, secondary analyses found no significant relationship between these variables. Previous studies have shown that involvement in prosocial activities may decrease the likelihood that youth will be involved in delinquent behavior (Eccles & Barber, 1999). There are several possible reasons for the discrepancy between the present findings and previous research. One reason may be that among youth in the present study, only a small proportion were involved in both non-school clubs and physical fights (N=31). It is also important to note that the survey question categories asked about non-school clubs, sport teams, aerobic exercises, toning exercises, volunteer activities, and church related activity, but were not specific about types of clubs or sport teams. For example, are youth involved in boxing or yoga? Were they involved in gangs or Girls Scouts? Therefore, it is difficult to draw conclusions about which specific types of extracurricular activities youth were involved. In fact, seventy percent (70%) of surveyed youth reported that there were “not many” fun things for them to do in their community. Anecdotal evidence from a sample community member suggests a lack of organized out-of-school club activities for adolescents in this community. Despite the fact that there appears to be little for sample youth to do in the after-school hours, it does not appear that they are choosing to engage in physical fights to occupy their time.

## Relationship Between Parental Monitoring and Weapon Carrying/Physical Fighting

The finding of a significant inverse relationship between parental monitoring and weapon carrying is consistent with other studies that found decreased levels of participation in violent activities may be related to increased levels of parental monitoring (Carlo, et al., 1999; Dutra, et al., 1997). These results are also consistent with other studies that have reported that increased levels of parental monitoring may be related to a decrease in the likelihood that adolescents will engage in delinquent behavior in general (Kim, et al., 1999; Rodgers, 1999; Flannery, et al., 1999). There were no significant relationships between parental monitoring and physical fighting. Parental monitoring may have deterred sample youth from carrying weapons but not from engaging in physical fights because the parents may have a greater ability to monitor what their children take with them when they leave the house than what they are doing when they are gone. In addition, a low percentage of sample youth were involved in physical fights on a regular basis.

## Gender Differences for Study Variables

There were four significant mean differences between males and females on the variables utilized in this study. Two significant mean differences were that males exercised more frequently and were more likely to participate in toning exercises than females. This is consistent with research stating that males are more likely to engage in physical activity than females (Rahn, 1997; Shaw, Kleiber, & Caldwell, 1995). One reason for this may be that society still puts male connotations rather than female or gender neutral connotations on sport, exercise, athletic involvement (Shaw, et al., 1995). In other words, males receive messages from society that an important part of their identity is to engage in athletics whereas females may receive more praise for non-athletic achievements (Rahn, 1997). This finding lends support for communities to get more females involved with athletics and exercise activities since research has reported

that participation in physical activity may help both males and females be more physically and mentally healthy (Kientzler, 1999).

Another significant mean difference in this study was that males were carrying weapons more frequently than females. This is also consistent with the research. The 1999 Annual Report on School Safety stated that males are continuing to engage in more violent activities including weapon carrying and physical fighting than females. It is possible that since males may choose to handle their conflicts by using more external methods, they may also live with more fear of retaliation than females and feel it necessary to carry a weapon for protection. Males may feel that a weapon serves as a sign of their strength and machismo. It is also possible that more males are carrying weapons because they are using the weapons for activities other than violence such as hunting or fishing. The most frequently carried weapon among sample youth was knives/razors/scalpels (12%). It is possible that sample youth carried this kind of weapon to aid them with other recreational activities or because it may be easier for them to conceal a knife than it would be to conceal a gun.

An interesting finding in this study was that females reported greater levels of parental monitoring than males. There have been many studies that have examined the different way in which parents monitor their sons and daughters; all have found that females are monitored more than males (Levine & Silverberg, 1997; Fridrich, 1993; Singer & Levine, 1988, Gove & Crutchfield, 1982). These differing levels of parental monitoring may be due to several factors. One factor may be the societal view that females are more fragile than males, making them more likely to be victims of crime and negative influence. Another factor may be that females tend to welcome more parental monitoring than males because they are more accustomed to it; parent may received this message that their daughters are less apt to mind their monitoring. More research should be implemented which examines reasons that parents monitor their male and female children differently.

## Variables That Best Predict Violent vs. Nonviolent Youth

The step-wise analysis attempted to answer the research question of which variables were the best predictors of whether sample youth would be in the “violent” category or the “nonviolent” category. Non-school clubs was the best predictor of whether youth were engaging in physical fights. Although there has not been much research implemented that specifically examines which extracurricular activities best predict whether youth will be violent or not, there has been research implemented that examines after-school activities and their relationship to violent activity. These studies suggest that involvement in extracurricular activities may decrease the likelihood of involvement in violence and other delinquent behaviors (Eccles & Barber, 1999; Stevens & Peltier, 1994). As stated earlier, there was a small proportion of sample youth that were involved in non-school clubs and physical fighting. Therefore, it is an interesting finding that non-school clubs was the best predictor of membership in the violent or nonviolent category. One possible explanation may be that since there are very few clubs made available to sample teens, it is hard to assume that they put the same meaning on “club” as the researchers did. For instance, it is possible that sample youth may have considered themselves a member of a non-school club because they were a member of a gang. In other words, it is hard to understand if sample youth were putting a positive or a negative connotation on the word “club.”

### Clinical Implications

Several clinical implications became apparent when examining the results of this study. First, the results indicated that participation in non-school clubs correctly classified youth into the violent or nonviolent category. This finding lend support for a marriage and family therapist to encourage parents whom they are working with to closely monitor the activities in which their children are involved. For instance, the parents may need to know whom the other children are that are involved in the activity,

who the activity leaders are, and what takes place during the time their child is participating in the activity.

Secondly, results also indicated that parental monitoring was inversely related to weapon carrying among females who participated in the study. Again, this finding lends support to it being useful for marriage and family therapists who work with parents to find techniques to monitor their children in effective ways. This monitoring may be in the form of asking questions about what their children are taking with them when they go out of the house. It may mean that the parents are at home when their child leaves so they can visually observe what their child is carrying with them. It may be important for parents to know who their children's friends are and know the parents of their friends. In addition, it might be necessary for parents to monitor what their children are doing during their free time and to ensure that they know not only their children's values but also the values of their children's friends.

Thirdly, as the mean differences found in this study indicate, males are participating in more violent activity, specifically weapon carrying and physical fighting than females. It is important for a marriage and family therapist to understand that males may anticipate fewer consequences for fighting or use violence as a response to more situations than females (Kingery, et al., 1991). Therefore, males may need help in learning alternative methods for dealing with conflict. However, as research has indicated, rates of violent activity among females are increasing which makes it a source of concern for both genders (Cohall, et al., 1998; Dahlberg, 1998).

Finally, it is important to discuss the finding that although there are not many, if any, after-school activities available to sample youth, the majority are still choosing not to engage in physical fights. Although this is an encouraging finding, it is also necessary to note that the present study only focused on one risk behavior. Responses to other survey questions revealed a high incidence of alcohol use and sexual activity among sample youth. Therefore, there is a strong need for after-school activities because even though sample youth are choosing not to engage in physical fighting, they are still engaging in other risk behaviors. It is important that communities build programs and after-school activities that are interesting to youth so that, through participation, they are less likely to engage in risk behaviors. Developing programs that meet the needs of each

population of adolescents may not only serve as protective factor against violence and other delinquent activities, but may also help youth to develop more self-confidence (Stevens & Peltier, 1994). In addition, as more studies are implemented that examine how involvement in different after-school activities affect youth positively or negatively, clinicians will have more information as to which activities may be best suited to meet their clients' individual and familial needs.

### Limitations and Future Directions

Several limitations of the present study need to be acknowledged. First, the data was collected via self-reports from adolescents. As with any self-report measure, validity of the responses could be questionable. Some of the questions might be considered sensitive subject matter to some or all adolescents. However, the high validity of adolescent self-reports of delinquent behaviors has been documented (Heatherington & Clingempeel, 1992). In addition, adolescents were assured that their responses would be confidential and surveys were discarded that appeared invalid due to inconsistent data or incomplete surveys. Future studies could attempt to increase the validity of responses by using a multi-method approach to obtaining data. For instance, upon gathering data through a survey, the researcher could conduct qualitative interviews with the sample to understand how they interpreted the questions and answer responses.

Although this study is unique in that it did delineate between different kinds of extracurricular activities, a limitation is that it did not specify extracurricular activities to a great enough degree. Therefore, it would be useful in future studies for researchers to better delineate between types of extracurricular activities and to gather an understanding of which extracurricular activities are available for sample youth.

Another potential limitation of this study is that the study variables did not specify between dating violence among intimate partners and violence among friends/peers. It would be useful for future studies to ask separate questions that pertain to both areas: dating violence and peer violence. In addition, the researcher is unable to conclude whether those participants reporting involvement in violent activities were the perpetrators, victims, or both of the violence.

Finally, several findings in this study were inconsistent with other research that has been implemented on this topic area. One reason for this may be because the survey was implemented at one time period. It would be useful to gather data longitudinally and conduct follow-up studies at different stages of the adolescents' development.

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- Education 1997 – 2000 Virginia Tech Northern Virginia Center  
Masters program for Marriage and Family Therapy  
Overall GPA: 3.9
- 1993 - 1997 Virginia Tech, Bachelor of Science  
Majors: Psychology, Family/Child Development  
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Family and Child Development GPA: 3.9
- Clinical  
Experience 1999 - 2000, Church Street Center, Vienna, VA  
Therapist intern working with families in a private practice setting under the supervision of an AAMFT approved supervisor. Had the opportunity to work with families and individuals dealing with a multitude of problems.
- 1998 - 2000, Center for Family Services, Falls Church, VA  
Therapist intern working with families, individuals, and couples struggling with a variety of issues including; domestic violence, child abuse, truancy, parent-child conflicts, separation and divorce, drug and alcohol abuse, eating disorders, and anger management.

1998 - 2000, Kaleidoscope, Falls Church, VA  
Relief counselor in a shelter for abused and neglected children.

1998 – 2000, Alternative House, Vienna, VA  
Relief counselor in a teen shelter.

1998 - 1999, Alternative House, Vienna, VA  
Therapist intern working with troubled adolescents and their families as part of a temporary residential program under the supervision of an AAMFT approved supervisor.

1998 – 1999, Virginia Tech, Falls Church, VA  
Co-Facilitator of a 12-week psycho-educational group for court ordered and self referred male perpetrators of domestic violence.

Work  
Experience

1999 – 2000, Virginia Tech, Falls Church, VA  
Travel coordinator for research faculty members located around the United States.

1997 - 1999, Virginia Tech, Falls Church, VA  
Graduate assistant working for the Director of the Family & Child Development department and the Director of Public Affairs at the Northern Virginia Graduate Center. Included various responsibilities such as coordinating the alumni conference, working on grant funded projects, organizing interviews of incoming students, coordinating graduation, and recruiting students to the university.

1996-1999, Shady Acres Recreation Association, Richmond, VA

Summer swim team head coach for seventy children of all ages. Taught children to swim all four competitive strokes, organized and ran swim meets, and served as a mentor and guide to all of the swimmers. Also manager of the pool in which I regulated pool chemicals and machinery as well as managed members and staff.

Research

Experience

2000 – Present, Dr. Federici and Associates, Alexandria, VA  
Research assistant for a project studying internationally adopted children and their families.

1999 – 2000, Virginia Tech, Falls Church, VA  
Research assistant to Dr. Angela Huebner - Working with Virginia Adolescent Resilience Assessment Project.

1999 – 2000, Virginia Tech, Falls Church, VA.  
Masters Thesis implementing a study on the effects of extracurricular activities and parental monitoring on rates of school violence.

1997 – 1999, Virginia Tech, Falls Church, VA.  
Coded quantitative data for a grant through the National Institute of Mental Health to help develop a conjoint couples therapy model for couples experiencing mild to moderate levels of domestic violence.

1996 – 1997, Virginia Tech, Blacksburg, VA  
Research assistant to Dr. Bud Protinsky – Researched eating disorders among college students.

1995 –1997, Virginia Tech, Blacksburg, VA

Research assistant to Dr. Jack Finney - Worked on a study with teenage single mothers.

Volunteer Positions 1997-1998, George Mason High School, Falls Church, VA  
Key player in development and presentation of a training program for high school mentors of middle school students.

1995-1997, RAFT Crisis Hotline, Blacksburg, VA  
Paraprofessional counselor providing immediate emergency crisis intervention to callers, including problem identification and referrals.

1995-1997, Montgomery County Schools, Blacksburg, VA  
Volunteer for Big Brother/Big Sisters Program. Served as a mentor and tutor for a third and fourth grade student.

Awards and Honors	1996-1997	Psi Chi Honor Society
	1994-1997	Dean's List
	1994-1997	Athletic Director's Honor Roll
	1993, 1995-96	Varsity Cross Country and Track Teams
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	1993	Virginia Leadership Award

