COMMUNITY ORGANIZATIONS’ INVOLVEMENT IN SCHOOL SAFETY PLANNING: DOES IT MAKE A DIFFERENCE IN SCHOOL VIOLENCE?

by

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ABSTRACT

COMMUNITY ORGANIZATIONS’ INVOLVEMENT IN SCHOOL SAFETY PLANNING: DOES IT MAKE A DIFFERENCE IN SCHOOL VIOLENCE?

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The University of Texas at Arlington, 2008

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It is highly suggested by researchers, authors and government entities that schools involve community organizations in school safety planning and the development of safety strategies. However, there are no known studies suggesting the effectiveness of this involvement.

This study investigated community organizations involvement in school safety planning as a predictor of serious violent incidents using a regression analysis. In block one, law enforcement involvement in school safety planning was the only significant predictor of serious violent incidents (p < .05). Law enforcement organizations had showed a negative relationship with serious violent incidents (t= -2.994). When law enforcement organizations were involved in school safety planning, there were lower numbers of serious violent incidents.
In block two, when adding school characteristics (size, location and racial distribution) to the model, law enforcement involvement continues to be a significant predictor of serious violent incidents \( (p < .05) \) and still having a negative relationship \( (t = -2.058) \). School size \( (t = 7.736, p < .01) \), school location \( (t = -3.386, p < .01) \) and racial distribution \( (t = 4.125, p < .01) \) were also significant predictors of serious violent incidents.

In block three of the regression model, violence prevention and intervention variables were added. The results of this analysis shows that law enforcement is no longer a significant predictor of violence \( (t = -1.829, p > .05) \). In this model it can be seen that prevention variables related to student surveillance was a significant predictor of serious violence incidents with a negative relationship \( (t = -2.240, p < .05) \).

Although the variables of law enforcement, school characteristics and prevention are significant, the percent of variance in each block is small. In block one only 0.7% of the variance is explained, in block two only 5.2% of the variance is explained and in block three only 5.3% of the variance is explained.
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CHAPTER 1
INTRODUCTION

When thinking about school violence, a common perception is that, on the whole, schools are free and safe from violence, with the exception of the occasional fatal rampage by a mentally disturbed and/or revenge seeking student. This is most likely due to the constant and insistent media coverage of those isolated events and less publicized knowledge of the everyday violence found in schools across the United States (Boothe, Bradley, Flick, Keough & Kirk, 1993; Center For The Prevention Of School Violence, 2002; Johnson et al., 2002). Nonetheless, while these infrequent rampages are tragic, much work still needs to be done in order to understand and reduce the everyday violence that youth in America face while in school.

According to Moore, Petrie, Braga and McLaughlin (2003), “the prevalence of violent victimizations in schools has more than doubled since 1989: 3 percent of youths reported violent victimizations at school then, compared with 8 percent today” (p. 9). Data from the Add Health Survey in 2001 showed that as many as 33% of high school students had been involved in at least one physical fight and 7.5% of these fights resulted in injury (Marcus, 2005). Also, data collected through the Center for Disease Control (2002) showed that, of those students who were involved in at least one physical fight in the 12 months prior to the survey, 54% had also been involved in fights
in two or more instances, and of the students who had reported being injured during a fight, 37% also reported that they had been injured in fights in two or more instances.

In the 2003-04 school year, it was reported that 18 percent of all schools in the United States experienced one or more incidents of serious violent incidents (Sable & Garofano, 2007). Serious violent incidents include rape, sexual battery other than rape, physical attack or fight with a weapon, threat of a physical attack with a weapon and robbery with or without a weapon. Additionally, 46 percent of schools experienced one or more incidents of theft and 64 percent experienced other incidents of crime.

Furthermore, it is estimated that in the school year 2005-06, there were approximately 49 million students enrolled in public schools, pre-kindergarten through grade 12 in the United States (Sable & Garofano, 2007). In this same time period, approximately 1.5 million students in grades 8 through 12 reported being victims of nonfatal incidents at school. Of these 1.5 million students, 863,000 experienced theft, 583,000 experienced violent incidents (i.e. simple assault) and 107,000 experienced serious violent incidents (i.e. rape, sexual assault, aggravated assault and robbery; Dinkes, Cataldi, Kena, & Baum, 2006).

These statistics provide evidence that occasional fatal rampages are not the only type of violence youth face at school. However, it is not enough to just know that everyday violence occurs in schools but it is equally important to understand the factors that help promote a safe school environment. It is important to understand factors that increase the safety of youth at school because outside the immediate family, the school
setting has been identified as the most consistent institution in the lives of children and youth (Cicchetti, Toth, & Maughan, 2000).

1.1 School Violence Research

School violence research is not a recent phenomenon. Research in the area of school violence had its beginnings in the early 1940s and has grown immensely since that time (Furlong & Morrison, 2000; Johnson, Naumann, Steed & Hennessey, 2002). The onset of this research appears to be the result of general increases in juvenile crime in the 1980s when youth violence, especially homicide, was climbing at an alarming rate (Eisenbraun, 2007; Furlong & Morrison, 2000; Johnson et al., 2002). It has since become apparent that “youth and school violence are having an increasingly greater impact on overall crime levels in the United States” (Eisenbraun, 2007, p. 460).

For example, juvenile justice research shows that violent adolescent crimes increased significantly from the 1980s to the mid 1990s, reaching its peak in 1994 (Snyder, 2002). However, some youth violence rates remain above the 1980s rates. For example, Snyder (2000) reports the following:

- Rates for weapons violations for juveniles are still 50 percent above the 1980s rates
- Youth arrests for aggravated assault are still 69 percent above the 1980s arrests
- Simple assault arrests for youth are twice as high as arrests in the 1980s

In 2000, there were over two million arrests of adolescents under the age of 18, and of those arrests, nearly 100,000 were for violent offenses (Snyder, 2002). By 2001,
“juveniles accounted for 17% of all arrests and 15% of all violent crime arrests”
(Snyder, 2003, p.1).

Even though youth violence and school violence, and the research of these two types of violence in adolescents, can overlap, there has been research that specifically examined school violence. The following table provides a summary of these studies. The table does not provide an exhaustive list of research in school violence but highlights large scale and influential studies.

<table>
<thead>
<tr>
<th>Year/Year Range</th>
<th>Source</th>
<th>Types of and/or Frequency of Offenses</th>
</tr>
</thead>
</table>
| 1949            | Independent Study (Hennings, 1949) Survey of High School Principals | » no problems with interpersonal violence or destruction  
» most serious problems -lying, running in the halls, and disrespectfulness |
| 1956            | National Education Association Study | » most serious problem -violence against teachers |
| 1960s           | Independent Research (Jaslow, 1978) | » violence against teachers in inner city schools  
» most serious problem -racially motivated interpersonal violence |
| 1970-1973       | Bayh Report | » documented increases in crime in schools -weapon carrying, homicide, and attempted rapes  
» documented increases in other areas related to violence and poor educational outcomes -drug/alcohol use and dropping out of school |
| 1978            | Safe School Study National Institute of Education | » documented the following reported incidents of school crime -approximately 13,000 incidents of theft  
-37.6% of junior high schools  
-35.8% of senior high schools |
Table 1.1  Continued

<table>
<thead>
<tr>
<th>Year</th>
<th>Study</th>
<th>Incidents at School</th>
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<tr>
<td>1993</td>
<td>National Household Education Survey</td>
<td>6th through 12th graders reported the following incidents at school</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Bullying</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-56% knew of others being bullied, 42% witnessed others being bullied, and 8% had</td>
</tr>
<tr>
<td></td>
<td></td>
<td>been bullied</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Physical Attacks</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-43% knew of others being physically attacked, 33% witnessed others being</td>
</tr>
<tr>
<td></td>
<td></td>
<td>physically attacked, and 4% had been physically attacked</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Robbery</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-12% knew of others being robbed, 6% witnessed others being robbed, and 1% had</td>
</tr>
<tr>
<td></td>
<td></td>
<td>been robbed</td>
</tr>
<tr>
<td>2005-2006</td>
<td>Independent Research (Dinkes, Cataldi, Kena, &amp; Baum, 2006)</td>
<td>the following were reported incidents experienced by 8th through 12th graders at</td>
</tr>
<tr>
<td></td>
<td></td>
<td>school</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-1.5 million youth reported being a victim of a nonfatal crime</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-863,000 thefts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-583,000 violent crimes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-107,000 serious violent crimes</td>
</tr>
</tbody>
</table>

Sources: Bayh, 1975; Dinkes et al., 2006; Hennings, 1949; Jaslow, 1978; National Education Association, 1956; Rubel, 1978; Volokh & Snell, 1998

Even though administrators in educational institutions initially resisted school systems for research settings, they have become one of the most logical places to conduct research on youth and school violence. As a result, medical professionals,
psychologists and educators have turned to the school systems as a convenient place to observe youth and their interactions (Eisenbraun, 2007).

1.1.1. Definitions of School Violence

The term school violence was not an established and widely used research term until around 1992 (Johnson et al., 2002; Eisenbraun, 2007). As a result, a clear-cut and stable definition of school violence has not been established to date, as definitions still tend to be reflective of the interest, proficiency and academic discipline of the researcher (Johnson et al., 2002).

Definitions of school violence seem to range from very broad to very specific. For example, a very broad definition of school violence includes: threat of physical force with intent to cause injury or intimidation (Berg, 2000), intentional and negligent acts that cause physical or psychological injury and/or property damage (Astor & Meyer, 2001) and aggression or criminal behavior that hinders learning and damages the climate of the school (Furlong & Morrison, 2000). Examples of very specific definitions of school violence include: behaviors and emotions that include harmful interpersonal acts, suicide, drug use, physical attacks and life-threatening aggression (Dwyer, Osher, & Warger, 1998) and specific behaviors such as the intentional use of force to harm or intimidate another including homicide, aggravated assault, forcible rape, armed robbery but also throwing objects, hitting, pushing or shoving (Danner & Carmody, 2001).
Since definitions of school violence are varied, for the purposes of this study, school violence is defined as “any behavior that violates a school’s educational mission or climate of respect or jeopardizes the intent of the school to be free of aggression against persons or property, drugs, weapons, disruptions and disorder” (Center for the Prevention Of School Violence, 2002, Para 3). This definition has been created by the Center for the Prevention of School Violence, a nationally recognized resource center and think tank on the issue of school violence and also has been recognized for research purposes by the National Criminal Justice Reference Service (Center for the Prevention of School Violence, 2002). This definition was chosen because it encompasses a full-range of behaviors that help describe school violence.

1.1.2 School Violence Continuum

Research has shown that violent behavior is not a sudden occurrence but rather tends to progress along a continuum (Bryngelson, 2001; Byrnes, 2003; Center for the Prevention of School Violence, 2002; Morrison & Furlong, 1994; Skiba & Peterson, 2000). On the youth violence continuum, violence actually begins with much more subtle acts and continues to increase, over time, ending with much more aggressive acts (see Figure 1). On the lower end of the continuum, behaviors such as put downs, insults, threats, and trash talk are found. These are much more common signs of aggression at the elementary age. If aggression continues, violence can involve behaviors like fighting, sexual harassment, and stealing. Finally, if violence persists past the mid-range
of the continuum, behaviors could materialize into carrying a weapon, hate crimes, gangs, hostages, murder, and suicide.

Figure 1.1 Youth Violence Continuum

Source: Center for the Prevention of School Violence, 2002

Although the order of behavior on the continuum may differ from youth to youth, there appears to be a progressively destructive pattern beginning with milder aggressive behaviors and moving toward more serious violent behaviors (Center for the Prevention of School Violence, 2002).

Additionally, Skiba and Peterson (2000) report that the behaviors associated with increasing violence at school, and which appear to be a precursor to more severe forms of violence, are those behaviors that encourage incivility between students like rumors, pushing and shoving, verbal intimidation and threats. Overall, this continuum
shows that “the progressively destructive nature of the named behaviors evidences that violent incidents occur at the end of a journey that starts with much milder behavioral concerns” (Center for the Prevention of School Violence, 2002, Para 4).

1.1.3 Effects of School Violence on Youth

The effects of school violence on youth, either experiencing the violence or witnessing the violence, can have devastating and long lasting effects. Abraham Maslow’s hierarchy of needs indicates that safety is one of the most basic human needs that must be met in order for an individual to obtain self-actualization. Morrison and Furlong (1994) further purport that safety is a basic need that must be met in order for youth to accomplish the cognitive outcomes that are sought after in school. If safe environments enhance creativity, exploration, and risk-taking (Morrison & Furlong, 1994), then where does that leave youth who do not have a safe environment in which to attend school? According to Lines and Court (2007), “there is considerable evidence that adolescents exposed to violence are at an increased risk of a range of psychosocial problems, including reduced academic performance, substance abuse, developmental disturbance and impaired moral development” (p. 14).

Not only are youth at risk for psychosocial problems, it has been found that exposure to violence also places youth at risk for future participation in violent behaviors (Farrell & Flannery, 2006). Singer, Miller, Guo, Flannery, Frierson and Slovak (1999) conducted a study with more than 2,000 elementary students and found that the most significant contributing factor that predicted violent behavior in the future
was exposure to violence at a young age. This was true even after Singer and his colleagues controlled for child demographics, parenting style and television viewing habits (watching violence). Furthermore, it has been found that exposure to violence and symptoms of psychological trauma together explains more than 50% of the variance for self-reported violence in male and female youths (Song, Singer, & Anglin, 1998). Lastly, of those youth who are dangerously violent, higher levels of violence exposure and victimization were found when compared to a matched control group (Flannery, Singer, & Wester, 2001).

1.2 Community Organizations’ Involvement in School Safety Planning

Several researchers, authors and government entities have discussed the need for community organizations to be involved in the planning and development of school safety plans (Bear, Cavalier & Manning, 2002; Bucher & Manning, 2003; Larson, Smith, & Furlong, 2002; Lenhardt & Willert, 2002; Stader, 2000; U. S. Department of Education, 1996). The types of community organizations suggested for involvement are varied and include: law enforcement, juvenile justice agencies, social services, medical and mental health agencies, business leaders, community foundations, youth support groups and family service organizations. The U.S. Department of Education (1996) purports that “making schools safe, orderly and drug-free requires the support and cooperation of the entire community…it is essential that community groups and businesses provide students with the assistance and support needed to live in a community and go to school without the fear or threat of violence” (p. 15). Among
many action steps listed for community groups and businesses to take, the first action step was to participate on a school’s Safe School Plan committee.

The reasoning behind involvement of community organizations in school safety planning is from an intervention/prevention perspective. In other words, these community organizations have knowledge and skills needed to help guide school personnel in developing interventions and implementing preventative measures in order to decrease school violence (Reno, Marcus, Leary & Samuels, 2000). Since it is believed and suggested by many that community organizations be involved in developing their school district’s school safety plan, this study attempts to look at the effectiveness of community organizations’ involvement in school safety planning in decreasing school violence.

1.2.1 Problem Statement

According to the Goals 2000: Educate America Act passed by Congress in 1994, by the year 2000 “all schools in America will be free from drugs and violence and the unauthorized presence of firearms and alcohol, and offer a disciplined environment that is conducive to learning” (Schugurensky, 2000, Para 9). One of the objectives written in the Act to meet this goal was “parents, businesses, governmental and community organizations will work together to ensure the rights of students to study in a safe and secure environment that is free of drugs and crime, and that schools provide a healthy environment and are a safe haven for all children” (Schugurensky, 2000, Para 9). In 2007, this goal has not yet been realized.
While there are many studies and articles written about the risk and protective factors of both youth and schools and school violence as well as the effects of a school’s organization and physical and organizational cultural environment, there is very little work on the effectiveness of school safety plans in general in decreasing school violence. Furthermore, it is highly suggested that schools involve community organizations in school safety planning and the development of safety strategies, yet there are no known studies suggesting the effectiveness of this involvement.

This study will address this gap in research and increase the knowledge base of the literature in this area. The focus of this study is to determine the extent to which community organizations’ involvement in school safety planning helps reduce school violence. It is hypothesized that schools that include community organizations in developing their school safety plan will have less violence than those schools that do not include community organizations in developing their school safety plans.

1.2.2 Study Justification

In a nation wide study of schools of social work investigating social work faculty and administration’s perception of adolescent violence, it was found that 50% indicated they recognized youth violence (average to major problem) to be an issue of concern (Hughes, 2004). In acknowledgement of this finding, research in school violence needs to continue in order to help equip social work students, who become school social workers, with the most pertinent information that will aid them in guiding
schools beyond the reduction of violence at school and into building more nurturing, positive and safe environments for youth.

Additionally, school violence is an issue that impacts all aspects of the school system: students, teachers and administrators as well as the families and communities at large. School social workers play a key role in providing developmentally appropriate experiences that assist students and families in coping with multiple social issues, especially as they surface in the school environment. Thus in order for school social workers to take a lead role in helping their schools develop a comprehensive plan for a safe and nurturing environment, more research into the factors that promote this type of environment is needed.
CHAPTER 2
THEORETICAL REVIEW

This section will present a review of theories and perspectives used to explain school violence that take into consideration individual and environmental factors. Theories and perspectives chosen for review include Social Control Theory, Social Learning Theory and individual-environment interaction perspective as it relates to school violence.

The theories and perspectives reviewed each play a part in explaining only particular facets of school violence, however together these theories help explain school violence more comprehensively. Although research has been inconclusive in identifying one major theory for use in explaining school violence, the theories and perspectives reviewed are combined to provide a framework that addresses important factors; youth, schools and community.

2.1 Social Control Theory

Social control theorists assert that youth violence is a result of weak or weakening esteemed social and cultural mores, especially when these weakened values are conveyed through social institutions such as schools. This implies then that effective controls are learned through social interactions and bonding (Welsh, 2001). Social bonding has four major fundamental aspects: (a) the degree in which a youth is committed to conventional goals, (b) the extent a youth attaches to peers who display
prosocial behaviors and to the degree in which a youth is influenced by their peer’s expectations and opinions, (c) the extent to which a youth is involved in conventional activities versus delinquent activities and (d) the degree in which a youth adheres to the conventional rules (Hirschi, 1969).

From social control theory, as it relates to school violence, it can be ascertained that youth who have strong attachments to school are less likely to diverge from the conventional norms and are more likely to follow the rules set forth by the school in order to avoid punishment. This theory purports that youth who have poor academic and/or interpersonal skills are more likely to feel alienated and not become attached to their school because the social interactions are not rewarding, they may not be committed to the goals of education put forth by the school because it’s too difficult of a task to obtain, they may not be involved in conventional activities which presents the opportunity to be more involved in delinquent activities and they may not follow the conventional rules because they do not perceive the conventional rules as rewarding (Welsh, 2001).

2.2 Social Learning Theory

The basic proposal asserted by social learning theory is, “the strength of the deviant behavior is a direct function of the amount, frequency and probability of its reinforcements” (Rudolph & Langford, 1992, p. 114). According to Akers (1985), the deviant behavior comes from interacting with or being under the influence of those that have control over the reinforcement or punishments. There are four factors that explain
a youth’s deviant behavior: (a) how much a youth admires the role model and seeks to imitate the behavior, (b) the degree to which the a youth defines the behavior as deviant, (c) how much a youth feels connected to a group that controls the major source of reinforcement and (d) the extent to which a youth’s deviant behavior becomes dominant over conventional behavior (Rudolph & Langford, 1992).

If those youth who are violent at school are admired by peers or exert power over others, and, if school staff inconsistently implement consequences for violent behavior, then youth are more likely to engage in deviant behavior. Social learning theory, as it relates to school violence, suggests that school administrators, teachers and staff who do not clearly communicate school rules, do not clearly communicate consequences and who do not consistently follow through with the consequences for rule breaking, increase the risk for youth to be violent at school (Mayer & Leone, 1999).

2.3 Individual – Environment Perspective

The individual-environment perspective is a biopsychosocial perspective that suggests multiple pathways to youth violence. This framework is useful in explaining school violence in that it takes into consideration more than one influence. This perspective takes into consideration the following factors on youth who are aggressive and/or violent: (a) biological factors that influence youth, (b) close interpersonal relationships (i.e. family, peers), (c) proximal social context (i.e. school, community) and (d) school macro systems (Tolan, & Guerra, 1994).
The most common view of the individual-environment perspective in regards to school violence is that “the organization of the school environment plays a critical role as either a facilitator or inhibitor of violence and disruption” (Mayer & Leone, 1999, p. 334). The physical layout, schedules, curriculum, social interactions between students and between students, teachers and administrators, classroom movement, teacher style and organizational methods and a climate of safety and feeling welcomed are all a part of the school’s organizational environment that can either facilitate or inhibit school violence (Conroy & Fox, 1994).
CHAPTER 3
EMPIRICAL REVIEW

The factors associated with school violence are complex and can have a tremendous impact on youth, schools and the community. Previous research has identified risk and protective factors related to school violence, not only in regards to youth as individuals but also in regards to proximal societal contexts and school macro systems. While the focus of this study is on community involvement, it is impossible to study macro system risk factors separately from individual risk factors.

This next section will briefly review risk factors of individual youth as it relates to school violence. The individual risk factors discussed are not comprehensive or exhaustive but rather representative of the most commonly studied individual risk factors relating to school violence today.

3.1 Risk Factors for Individual Youth

It is important to understand individual risk factors related to school violence because individual factors can work together with environmental factors that result in violence. These risk factors can also be viewed as a result of joining the individual with the environmental context (Elliott & Tolan, 1999). Youth have a compilation of life experiences that are shaped by his or her surrounding environment; family, school, peers, community and culture. The behavior a youth exhibits at school is affected by the complete array of experiences and influences both past and present.
One risk factor alone cannot predict violence, however multiple risk factors increases the probability that a youth will become violent (Farrell & Flannery, 2006). On the other hand, while only one risk factor cannot be decisive in determining potential violent behavior, having just one risk factor cannot be completely without effect (O’Toole, 1999).

3.1.1. Age Related Factors

As mentioned earlier, the violence continuum offers a suggestion into how youth might continue along a path of violence, beginning with subtle overt acts and progressing toward more serious violent behaviors. Similarly, research studies have shown that the earlier youth begin participating in violent behaviors, the longer the youth tends to continue to be violent. This in turn leads to being a chronic offender with violent and aggressive tendencies that extends into adulthood (Kethini, Blimling, Madden-Bozarth & Gaines, 2004; Singer & Flannery, 2000; Stoolmiller, Eddy, & Reid, 2000; U.S. Department of Health and Human Services, 2001).

In a longitudinal study conducted by Nagin, Farrington and Moffitt (1995), it was found that youth in the middle adolescent stage who unremittingly and repeatedly engaged in violent behavior were highly likely to have begun this behavior in the pre-adolescence stage. Engaging in violent behaviors at an early age has also been connected to a higher risk of developing secondary problems such as poor academic achievement, substance abuse and mental health issues like depression (Capaldi & Patterson 1996).
3.1.2 Substance Abuse

Research has long since shown the association between substance abuse and school and youth violence to be highly correlated (Furlong, Casa, Corral, Chung & Bates, 1997) as well as substance abuse and being an aggressor or victim of school violence (Eisenbraun, 2007). Furthermore, Buss, Abdu and Walker (1995) found that students who are more likely to take risks, become involved in fights and are more likely to be behind the violence at school also used alcohol and drugs.

Likewise, drug use was found to be a predictor of future violence for youth (Sussman, Simon, Dent, Steinberg, & Stacy, 1999). In a meta-analysis of 66 longitudinal studies on violent behavior, previous general offenses (including status offenses and property crimes) and substance use, it was found that the strongest association with future offending in youth was substance use (Lipsey & Derzon, 1998). Additionally, youth who are violent are ten times more likely to sell drugs and two to three times more likely to use alcohol, cigarettes or marijuana on a weekly basis than nonviolent youth (Ellickson et al., 1997).

3.1.3 Bullying

Bullying is a critical issue and risk factor that has gained recent attention, mainly because it has been found that victims of bullying are more likely to take part in future violent behaviors (Osofsky & Osofsky, 2001) than those who have not been a victim of bullying. Additionally, “bullying is extremely detrimental to school environments
because it is a physical and emotional form of violence that is directed toward weaker students and is perpetuated by social norms” (Osofsky & Osofsky, 2001, p. 288).

Bradshaw, Sawyer and O’Brennan (2007), conducted a study on bullying that included 15,185 students in 75 elementary, 20 junior high and 14 high schools. They found that overall, 49% of the students reported being bullied by other students at school at least once during the past month and nearly 31% reported bullying other students at least once during the past month. Moreover, approximately 41% of the students reported frequent involvement (two or more incidents of bullying in the last month) with 23% reporting they were frequent victims of bullying.

Sometimes youth think that when their peers are picked on or bullied for some behavior that is deemed socially unacceptable by others, the bullying can serve as a form of social teaching for the student being bullied. Therefore, youth can be reluctant to intervene when their peers are being bullied (Oliver & Hoover, 1994). Bradshaw et al. (2007) found that almost 36% of junior high students and nearly 41% of high school students ignored it or did nothing when someone was being bullied and 12% of junior high students and 13% of high school students reported they joined in the bullying when they witnessed someone being bullied.

3.1.4 Dating Violence

Dating violence is defined as physical, sexual or emotional violence within a dating relationship (Centers for Disease Control, 2006). According to data from the Youth Risk Behavior Survey (2003), physical dating violence among high school males
(8.9%) and females (8.8%) occurs more often than other violent victimizations for males and females combined (8.0%). Additionally, it was found that physical dating violence was associated with at least four risk behaviors, (1) early sexual intercourse, (2) attempted suicide, (3) episodic heavy drinking and (4) physical fighting (CDC, 2006). With physical fighting being associated with dating violence, the carry-over into school violence is highly likely.

Schnurr and Lohman (2008) conducted a study in which they sought to understand how school factors might influence adolescents’ likelihood to engage in dating violence. These researchers found a number of school factors that were associated with the perpetration of dating violence. For example, it was found that early contact in an unsafe school environment worsened the effects of dating violence perpetration for African American males. Also, academic difficulties exacerbated the effects of dating violence perpetration for Hispanic males. Lastly, for both males and females, early and increased involvement with antisocial peers was linked to the perpetration of dating violence. What is not known is if the relationship between dating violence and school factors such as an unsafe environment and involvement with antisocial peers increases school violence.

3.2 Risk Factors for Schools

While research on factors that are likely to increase violent behaviors in youth have been widely researched, risk factors associated with the school that are likely to increase violence at school have not been so widely researched. However, there are a
few studies that have found factors such as policies and/or procedures as well as school characteristics that can place schools at a higher risk for violence. This section will discuss how factors associated the school can increase the likelihood of violence in school.

3.2.1 Policies and Procedures

The very policies and procedures schools establish in an effort to decrease school violence can actually place the school at risk for increased violence. There are two areas in particular that are of concern. First, in an effort to avoid what is known as labeling and in an effort to protect a student’s privacy, “disciplinary records and other vital information are simply discarded when students move across institutional boundaries or from middle school to high school…But we pay a high price for clearing the slate… [when] we strip information from the system that might yield clues to an unraveling mind” (Newman, 2007, p. B22). When considering the violence continuum discussed earlier, not having information on the types and levels of aggression committed by students could be disabling for a school in determining what precautions and actions should be taken to help a student before the aggression progresses to a serious violent incident.

Although there were no research studies found to either support or dispute the need to retain records across school districts and/or from middle school to high school, a report from the National Center for the Analysis of Violent Crime (NCAVC) was found in which the Critical Incident Response Group (CIRG) completed a case analysis
to develop an assessment model that would help schools identify the level of threat a youth displayed for committing violent behaviors (O’Toole, 1999).

The case analysis was completed by closely examining 18 school shootings. The CIRG established a list of warning signs from behaviors shown in previously violent youth. First, the list of behaviors was separated into four categories: youth’s personality traits and behaviors, family dynamics, school dynamics and social dynamics. From this list of behaviors, three other categories of behaviors were formed, drawing from each of the four original categories of behaviors. The three new categories consisted of threat levels; low level threat, medium level threat and high level threat. The recommendation of NCAVC was that a threat management coordinator quickly assess the four areas of a youth’s background in order to determine the level of threat in carrying out violence. From identifying the level of threat a youth is, action can be taken to circumvent future violent behaviors.

This sort of threat level analysis indirectly supports the reasoning that a youth’s records of behavior and conduct follow him or her across school districts and/or from middle school to high school. If records and other crucial background information do not follow the youth across school districts and from middle to high school, this quick assessment is then made more difficult, if not impossible, to obtain.

A limitation with the NCAVC case analysis is that it only involved 18 cases of the most severe type of violence at school, mass deadly shootings. This does not capture...
the thoughts, feelings and actions of youth who commit the everyday serious violent crimes such as rape, sexual assault, aggravated assault and robbery.

Also, the case study involves retrospective reports from other individuals connected to the youth after a fatal rampage has occurred. The retrospective reports could be somewhat inaccurate or exaggerated due to trying to recall specific behaviors after an extremely stressful and emotional event.

Furthermore, from school records and retrospective reports, connections and conclusions have to be drawn about what thoughts, feelings and behaviors led up to the fatal incident. If past school records are not available, then the information was drawn from retrospective reports only. These reports usually do not involve speaking directly to the youth who committed the violent offense as the youth who carried out the offense has usually committed suicide after the rampage.

A second concern, that is also a risk factor, has to do with a school’s data collection and reporting of violence procedure. According to Rich, Finn and Ward, (2001) “few schools systematically collect comprehensive data on these [violent] incidents” (p. 8). Schools most typically record only violent incidents if the student’s disciplinary action involves suspension, expulsion or referral to alternative sanctions.

Under the Safe and Drug-Free Schools and Communities Act, the federal government requires schools across the nation to report crimes and violent incidents committed at school in order to receive federal funding. Although several states have passed laws requiring reporting of crimes and violent incidents at school, in 1998 it was
reported that only approximately half of the states collected some type of crime report from schools (Office of Justice Programs, 2002).

Additionally, the laws vary on data collection and reporting from state to state. Some states like Minnesota have very comprehensive data collection and reporting laws for schools that necessitate the use of a standardized form. Using standardized forms makes it easier to compare crime statistics across school districts in the state. States like Virginia have open statistical records that can be inspected by the public while other states such as Alabama rely on school staff members to report the crime to the school’s principal who then has 72 hours in which to report the crime to state officials (Office of Justice Programs, 2002).

In a study conducted by the New York State Comptroller’s office (2006) it was found that 10 out of the 15 (67%) school districts audited for school violence data collection grossly under-reported violent incidents in schools. This study compared the reports of violent incidents from schools with the schools disciplinary records. It was found that, on average, approximately one-third of violent incidents were not reported to the state. Ten of the 15 school districts under-reporting violent incidents ranged from 38% of non-reported incidents to 94% of non-reported incidents. The most under-reported incidents by the 15 school districts in rank order of under-reporting was assaults with physical injuries, instances of intimidation, harassment and/or bullying, and assaults with a weapon.
Albeit, this is only one example of under-reporting of violent incidents in schools but without a standardized crime reporting system with accountability measures in place, it is difficult, at best, to know if schools are reporting all crimes and violent incidents and if they are reporting them correctly. Non-reporting or under-reporting of violent incidents leads to school administrators and community organizations developing safety plans to defend against school violence without a complete and accurate picture. This in turn can make it difficult to determine if implemented strategies are having a positive effect on decreasing violence.

3.2.2 School Characteristics

Research has indicated that there is an association between a school’s characteristics and school violence (Kandakai, Price, Telljohann & Wilson, 1999). Some of these characteristics include: the size of the school, ethnic distribution and the location of the school (Dwyer et al., 2000; Furlong & Morrison, 2000; Heaviside, Rowand, Williams, Farris, Burns & McArthur, 1998; Kandakai et al., 1999).

3.2.2.1 School Size and Violence

There has been some evidence to support that there is more violence in large schools as compared to smaller ones (Cotton, 1996; Devoe, Peter, Kaufman, Miller, Noonan & Snyder, 2004; Heaviside, Rowand, Williams, Farris, Burnes & MacArthur, 1998; Kaiser, 2005; National Center for Educational Statistics, 1998; Newman, Fox, Harding, Mehta & Roth, 2004; Stevens, 2003). For example, the National Center for Educational Statistics (1998) reported that 89 percent of large schools surveyed
admitted to one or more criminal incidences in a year whereas only 38 percent of the smaller schools made this same claim. Additionally, Devoe et al., (2004) found that smaller schools with enrollments of 400 to 600 students experienced lower rates of serious violent incidents than schools with enrollments in excess of 600 students. Table 3.1 provides a breakdown of the types of crimes committed as well as the percentage experienced by both small and large schools. The definition of small school is enrollment of less than 600 while the definition of a large school is enrollment of more than 600 students.

Table 3.1 Percent of Crime Experienced by Small and Large Schools

<table>
<thead>
<tr>
<th>Reported Crime</th>
<th>School Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small School &lt; 600 Students</td>
</tr>
<tr>
<td>Serious Crime Overall</td>
<td>4.0%</td>
</tr>
<tr>
<td>Physical Attacks</td>
<td>2.0%</td>
</tr>
<tr>
<td>Theft/Larceny</td>
<td>18.0%</td>
</tr>
<tr>
<td>Vandalism</td>
<td>23.0%</td>
</tr>
</tbody>
</table>

Source: Devoe, Peter, Kaufman, Miller, 2004

In 2006, Kaiser examined 17 cases of mass school shootings that happened between 1996 and 2005. All of the school shootings examined were in public schools by students against students. Seven of the shootings took place in schools in the suburbs, four in towns, four in rural areas and two in large cities. There were 13 high schools and four middle schools. Kaiser found that 11 out of 13 high school shootings took place in schools that had enrollments greater than 150 students per grade and 14
out of the total 17 school shootings took place in schools with enrollments greater than 150 students per grade.

One of the limitations of the studies focusing on violence in small schools versus larges schools has to do with the data collection. These studies relied on surveys administered to principals from small and large schools to gather information on the level of violence in these schools. Since it has already been discussed that there is evidence of non-reporting and under-reporting of violence from principals, the results from studies that involve reporting by principals alone could be unreliable. A more reliable way of ascertaining the level of violence in small versus large schools would be to analyze school records to obtain counts of recorded violence for each disciplinary report written. Also, the studies completed by the National Center for Educational Statistics (1998) only asked principals to report incidents of crime in which the police or other law enforcement representatives were involved. It could be that smaller schools do not always report incidents of crime to the police or other law enforcement representatives but rather choose to work out problems between the students and their families. This in turn would decrease the number of incidents of crime for smaller schools.

Another limitation has to do with case study analysis. The analysis completed on the 17 schools, again, had to do with mass school shootings and not everyday serious violence. With such a small sample of schools and because the violent incidents were mass shootings, there could have been other factors in addition to school size that
triggered these events but would be factors that are not necessarily found in other large schools across the nation.

3.2.2.2 Ethnic Distribution and Violence

Ethnic distribution seems to have an effect on school violence as well. Schools with a larger number of minority students appear to be more prone to violence (Eitle & Eitle, 2003; Heaviside et al., 1998). Some studies have shown that when schools have larger enrollments of minority students, they are more likely to experience violent crimes than those schools that have lesser enrollments of minority students (Eitle & Eitle, 2003; Heaviside et al., 1998). However, Soriano and Soriano (1994) report that it is not the presence of minority groups alone that increase violence but it is the various attitudes of racism, classism and sexism of each racial group brought together that leads to more school violence. Additionally, Eitle and Eitle (2003) report that “under conditions of greater racial inequality…the magnitude of the association between school segregation and violent crime is larger” (p. 604).

The empirical research surrounding race/ethnic distribution and school violence is very scarce. Two studies (Eitle & Eitle, 2003; Hill & Drolet, 1999) in particular were found that examined race/ethnicity and school violence as well as a recently published annual survey by the Department of Health and Human Services Centers for Disease Control (2006) called the Youth Risk Behavior Surveillance (YRBS). One study (Hill & Drolet, 1999) was a secondary analysis of the CDC – YRBS report from the years 1993 and 1995. The other study (Eitle & Eitle, 2003) looked specifically at segregation and
school violence. It is very surprising that the empirical literature surrounding
race/ethnicity and school violence is so scarce considering there has been much research
carried out over the past two decades concerning racial segregation in neighborhoods
and communities and increased crime rates (Logan & Messner, 1987; Messner & South,
1986; Parker & McCall, 1999).

The YRBS data is collected every two years and consists of six categories of
health-risk behaviors that are of main concern for youth. The data is collected from a
nationally representative sample of students in grades 9 through 12. The survey is
distributed to randomly selected schools. Student surveys are distributed evenly across
grades and between genders. Items associated with school violence were added in 1993.
The three items from the survey that are associated with school-related violence
includes (1) carrying a weapon such as a gun, knife, or club on school property in the 30
days preceding the survey, (2) number of times threatened or injured with a weapon
such as a gun, knife, or club on school property in the 12 months preceding the survey
and (3) number of times involved in a physical fight on school property in the 12
months preceding the survey.

The following tables show comparisons between the 1993, 1995 and 2005 data
collected from students completing the YRBS in those years. Table 3.2 shows
comparisons between the percent of students reporting they carried a weapon such as a
gun, knife, or club on school property in the 30 days preceding the survey in 1993, 1995
and 2005.
Table 3.2  Percent of Students Carrying a Weapon on School Property 30 Days Prior to Survey

<table>
<thead>
<tr>
<th>Category</th>
<th>Students Who Carried a Weapon on School Property</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1993</td>
</tr>
<tr>
<td>%</td>
<td>%</td>
</tr>
</tbody>
</table>

Race/Ethnicity of Male Participants

<table>
<thead>
<tr>
<th>Category</th>
<th>1993</th>
<th>1995</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, non-Hispanic</td>
<td>17.7</td>
<td>14.1</td>
<td>10.1</td>
</tr>
<tr>
<td>African American</td>
<td>18.2</td>
<td>12.2</td>
<td>6.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>20.2</td>
<td>19.4</td>
<td>13.7</td>
</tr>
<tr>
<td>Asian</td>
<td>11.2</td>
<td>7.5</td>
<td>*</td>
</tr>
</tbody>
</table>

Race/Ethnicity of Female Participants

<table>
<thead>
<tr>
<th>Category</th>
<th>1993</th>
<th>1995</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, non-Hispanic</td>
<td>3.4</td>
<td>3.1</td>
<td>2.0</td>
</tr>
<tr>
<td>African American</td>
<td>11.9</td>
<td>8.8</td>
<td>3.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6.6</td>
<td>8.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Asian</td>
<td>0.5</td>
<td>3.0</td>
<td>*</td>
</tr>
</tbody>
</table>

Source: Hill & Drolet, 1999; YRBS, 2006
*Data for Asian male and female students were not provided in the YRBS, 2006 report.

These statistics show that the percentage of male students who reported carrying a weapon on school property at least 30 days prior to the survey, regardless of race/ethnicity, decreased between 1993 and 2005. The percentage of African American male students reporting carrying a weapon on school property had the largest percentage decrease between 1993 (18.2%) and 2005 (6.8%) and fell below the percentage of White (10.1%) and Hispanic (13.7%) male students reporting carrying a weapon on school property.
weapon on school property in 2005. The percentage of Hispanic males reporting carrying a weapon on school property, while decreasing from 1993 (20.2%) to 2005 (13.7%), remained higher than the percentages of White (10.1%) and African American (6.8%) males.

A decrease in percentage of female students reporting carrying a weapon on school property from 1993 to 2005 can also be seen in all race/ethnic categories. However, for female students, the percentage of African American (3.3%) females remained higher than the percentage of White (2.0%) and Hispanic (2.6%) females reporting carrying a weapon on school property in the 2005 survey. Interestingly, the percentage of Asian females reporting carrying a weapon on school property increased dramatically (0.5% to 3.0%) from 1993 to 1995. Since data for Asian male and female students were not provided in the YRBS 2006 report, it is unknown if this percentage continued to increase/decrease or if the percentage is higher than all other race/ethnic female categories.

Table 3.3 provides comparisons between the percent of students reporting they had been threatened or injured with a weapon such as a gun, knife, or club on school property in the 12 months preceding the survey in 1993, 1995 and 2005.
Table 3.3 Percent of Students Threatened or Injured on School Property 12 months Prior to Survey

<table>
<thead>
<tr>
<th>Category</th>
<th>Students Who Have Been Threatened or Injured with a Weapon on School Property</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1993</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td><strong>Race/Ethnicity of Male Participants</strong></td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>8.1</td>
</tr>
<tr>
<td>African American</td>
<td>12.6</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.7</td>
</tr>
<tr>
<td>Asian</td>
<td>8.4</td>
</tr>
<tr>
<td><strong>Race/Ethnicity of Female Participants</strong></td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>4.4</td>
</tr>
<tr>
<td>African American</td>
<td>9.9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6.4</td>
</tr>
<tr>
<td>Asian</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Source: Hill & Drolet, 1999; YRBS, 2006

*Data for Asian male and female students were not provided in the YRBS, 2006 report.

The data in Table 3.3 show that African American (12.6%, 15.2%), Hispanic (10.7%, 15.2%) and Asian (8.4%, 13.7%) male students were more likely to have been threatened or injured with a weapon on school property 12 months prior to the survey in 1993 and 1995 than White (8.1%, 9.2%) male students. Hispanic (11.9%) male students were more likely than African American (10.2%) and White (8.7%) male students to have been threatened or injured with a weapon on school property in 2005.
The percentage of White female students that had been threatened or injured with a weapon on school property increased between 1993 (4.4%) and 2005 (5.7%) while the percentage for African American females decreased from 1993 (9.9%) to 2005 (6.1%). In 2005, the percentage of Hispanic (7.5%) female students who had been threatened or injured with a weapon on school property remained higher than the percentage of White (5.7%) and African American (6.1%) females.

Table 3.4 presents comparisons between the percent of students reporting they had been involved in a physical fight on school property in the 12 months preceding the survey in 1993, 1995 and 2005.

<table>
<thead>
<tr>
<th>Category</th>
<th>Students Who Have Been Involved in a Physical Fight on School Property</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1993</td>
</tr>
<tr>
<td>Race/Ethnicity of Male Participants</td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>15.0</td>
</tr>
<tr>
<td>African American</td>
<td>28.6</td>
</tr>
<tr>
<td>Hispanic</td>
<td>24.1</td>
</tr>
<tr>
<td>Asian</td>
<td>18.3</td>
</tr>
</tbody>
</table>
Table 3.4  Continued

<table>
<thead>
<tr>
<th>Race/Ethnicity of Female Participants</th>
<th>6.8</th>
<th>6.5</th>
<th>6.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, non-Hispanic</td>
<td>15.5</td>
<td>14.3</td>
<td>14.0</td>
</tr>
<tr>
<td>African American</td>
<td>11.7</td>
<td>16.6</td>
<td>12.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3.3</td>
<td>19.5</td>
<td>*</td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Hill & Drolet, 1999; YRBS, 2006
*Data for Asian male and female students were not provided in the YRBS, 2006 report.

From the data presented in Table 3.4 it can be ascertained that the percentage of African American and Hispanic male and female students involved in a physical fight on school property 12 months prior to the survey decreased from 1995 to 2005 decreased. However, the percentages of African American males (20.1%) and Hispanic males (24.4%) as well as the percentages of African American females (14.0%) and Hispanic females (12.1%) remained above the percentages of White male (16.2%) and female (6.9%) students reporting having been involved in a physical fight on school property in 2005.

While data from Hill and Drolet (1999) and the YRBS report (2006) provide information pertaining to race/ethnic group’s involvement in school-related violence, it still does not provide all the necessary information to determine if race/ethnic distribution has an effect on the levels of school violence.

For example, the data from YRBS 1993, 1995 and 2005 ask students to answer either yes or no to the questions of carrying a weapon, being threatened/injured with a
weapon and being involved in a physical fight while on school property. These questions are designed to determine the numbers and percentages of students who have had these experiences while at school. However, these numbers and percentages do not provide information that could potentially help researchers determine if the race/ethnic distribution of a school has an impact on the level of violence experienced at that school. Examining proportion of each race within the school’s total population compared to the number of students who have had these experiences would provide a clearer understanding if race/ethnic distribution has an impact on serious violent incidents.

In another study (Eitle & Eitle, 2003) Florida statewide data and the census data were used to examine whether differences in the levels of segregation in schools were associated with acts of school violence separate from other known correlates of school misbehavior (i.e. school culture, school organizational structure, etc.). This study hypothesized that the greater the segregation in a school system, the greater the rate of school violence. One of the findings from this study revealed that when there were greater percentages of African American students who experienced greater racial inequality in a school, the violent crime rates were higher in that school.

A limitation to this study, however, has to do with the cross-sectional design in that a causal order of the association cannot be determined. For example, forms of segregation within a school known as second-generation discrimination in which minority students experience higher levels of suspensions and expulsions and where
teachers use ability grouping and curriculum tracking for minority students could have a reciprocal affect. Also, longitudinal studies could better examine the consequences of segregation and any cumulative effects this may have on school violence over time.

3.2.2.3 School Location and Violence

There appears to be conflicting information concerning the association between the location of the school and school violence. For example, the National Center for Educational Statistics found significant differences in the levels of school violence for city and rural schools but no significant differences in the levels of school violence for city and suburban schools (Heaviside et al., 1998). While Elam and Rose (1994) found that school violence was higher in city schools than in suburban and rural schools, Furlong and Morrison (2000) found no significant differences between city, suburban and rural schools and school violence.

These conflicting reports make it difficult to determine if the location of the school alone contributes to the overall level of school violence. Of these few studies that looked at school location as it relates to school violence, the studies focused on a single school district which limits the generalizability of the study results. While these studies tended to control for individual and/or community factors in determining levels of school violence, factors of the school climate or organizational structure were not a part of the analysis. According to Kandakai and colleagues (1999), schools that have a more positive school climate have lower rates of misbehavior. Also, schools that have a culture of positive communication patterns, clearly communicated expectations for
behavior and consequences for deviating, clear role relationships and patterns of influence are less likely to experience higher rates of school violence (Eisenbraun, 2007; Mayer & Leone, 1999; Welsh, 2001). Therefore, these factors should also be considered when looking at the relationship between the location of the school and violence.

3.3 School Approaches to School Violence

In light of the concerns over the level of school violence and in recognition of the need for safe school environments for youth, Congress passed the Safe School Act of 1994. This Act provided schools with funds and technical assistance in developing school safety plans and any equipment such as metal detectors, security cameras and/or security personnel. The idea behind the Safe School Act is that by placing metal detectors and security cameras in schools and hiring security personnel, youth will be less likely to be involved in school-related violence (Schreck, Miller, & Gibson, 2003). Since this Act was passed, metal detectors, security cameras and hired security personnel have become the most common solution to school-related violence (Welsh, 2000).

3.3.1 School Security

A few studies (Sacco & Twemlow, 1997; Schreck, Miller, & Gibson, 2003) have sought to focus on these commonly used security practices in schools around the United States. Sacco & Twemlow (1997) evaluated a school violence reduction model in Jamaica in which it initially appeared that the presence of a security officer at
Montego Bay Secondary School, a school with one of the highest crime rates in the area, helped reduce the rates of violence in school. The intervention involved 75 security officers who received 100 hours of training from a team that consisted of social workers, psychologists, martial artists, and special education teachers. The training consisted of teaching the security officers, what was known as, the hard and soft approach used concurrently. The hard and soft approach included the security officers firmly enforcing the rules of the school while at the same time forming a clubhouse for formal meetings that would serve as a connection to the student body in forming the security officer’s student support network.

Within the first week of a security officer’s placement at the Montego Bay Secondary School, several hundred weapons were impounded and within six weeks of the officer’s placement, it was reported that school violence had decreased. The reduction of violence appeared to be reversed when the original security officer that had been placed at the school left his position. Another security officer was hired in the original officer’s place but the intervention no longer yielded the same results.

Limitations to this study include the way in which school violence was measured. Since there has not been a clear and explicit definition for school violence adopted for research, it can sometimes create an ambiguous understanding of the results of the research. In this study (Sacco & Twemlow, 1997) school violence was measured in three ways; confiscation of weapons, rates of attendance and teacher/student reports of feeling safer at school.
These measures of school violence may not necessarily measure school violence per se. As discussed earlier, the percentage of students carrying a weapon on school property had decreased between 1993 and 2005 across genders and race/ethnicity groups but for some race/ethnicity groups the percentages of being threatened/injured with a weapon or the involvement of a physical fight on school property actually increased or remained the same from 1993 to 2005. This shows that the confiscation of weapons alone does not necessarily denote less violence.

Also, teachers and students feeling safer at school could be attributed to the presence of a security guard as well as the confiscation of weapons. Likewise the feelings of safety, because of the presence of a security guard and fewer weapons at school, could lead to more students attending school. Without measuring the effects of the security officer on feelings of safety and increase in attendance, it cannot be concluded that the security officer alone helped reduce rates of school violence in this school.

Another study (Schreck, Miller & Gibson, 2003) conducted a secondary analysis on the 1993 National Household and Education Survey, School Safety and Discipline (NHES-SSD). This survey was administered to 6,427 youth in grades 6 through 12 that represented all 50 states and the District of Columbia. The results from this study showed that the use of security officers, metal detectors and locked doors did not have an impact on student bullying.
This study only examined the impact of these very specific security measures in the school but because of the nature of a secondary analysis, it was unable to include variables that have been previously discussed such as school climate and organizational structure. As detailed earlier, adding these variables to the analysis in addition to the security measures in this study, could have produced different results. Additionally, the researchers only looked at the impact of these security measures on bullying. Bullying has been noted as a precursor to more serious violent behavior but is not usually recognized as a serious violent crime. So, it is still unclear if these security measures would have an impact on serious violent crimes at school.

Even though there appear to be differing opinions about what security measures should be implemented in schools to ensure the safety of students and staff, the debate continues about the optimum choice for school security. Outcome data is severely lacking in the area of school security measures and school violence as it is in many areas related to intervention and prevention of school violence. Because of this, the questions of what will help reduce or deter school violence remains to be answered.
CHAPTER 4
METHODOLOGY

Chapter four will describe the background of the School Survey on Crime and Safety: 2003 – 2004 administered by the United States Department of Education as well as the selection of participants for the survey. Following this description, the variables to be used in this study will be discussed. The independent and dependent variables will be identified and operationally defined. The research question to be answered and the hypothesis in this study will be introduced.

4.1 Background on the School Survey on Crime and Safety: 2003 – 2004

This study used survey data from the School Survey on Crime and Safety: 2003-2004 (U.S. Department of Education, Institute of Education Sciences, 2006). The survey is managed by the National Center for Educational Statistics on behalf of the U. S. Department of Education. The survey collects data on crime and safety from principals and school administrators in public schools in America. To date, the School Survey on Crime and Safety is the only periodic survey that collects data on crime and safety in U. S. public schools.

There are eight components to the survey. The first component is related to school practices and programs. This section addresses current school practices and programs relating to crime and discipline. The second component is related to parent and community involvement at school. This section seeks information about the efforts
on behalf of schools to involve parents in maintaining school discipline and the extent
to which community groups and related organizations and agencies are involved in
schools’ efforts to promote safe schools. The third component is related to teacher
training and the training provided by the school district to teachers and teacher’s aides
for discipline policies and practices related to violence. Next, is the section on
limitations on crime prevention. This section addresses the extent to which schools’
efforts have been constrained by factors related to teachers, parents, students and/or
administrative policies. The last four components include: frequency of crime and
violence at school, number of incidents, disciplinary problems and actions and school
characteristics.

4.1.1 Participants of the Survey

The study used a stratified sample of 3,743 regular public schools that were
drawn from the Common Core of Data Public School Universe file. Private schools
were excluded from this study because analysis and related policy concerns about
school violence and disruption have mostly been within public education settings. Strata
were defined by crossing instructional level, type of locale, and enrollment size.
Additionally, minority status and region were used as implicit stratification variables by
sorting schools by these variables within each stratum before sample selection. Since it
was estimated that primary schools would have less variation in the amount of school
violence, a large proportion of the sample was allocated to middle and high schools.
For the 2003-04 school year, surveys were mailed to 3,743 public primary, middle, high and combined schools and data was collected between March 2004 and June 2004. Of the 3,743 surveys distributed, 2,772 completed surveys were received, yielding a 77.2% response rate.

4.1.2 Selection of Variables

Eight variables from this data set were used in measuring the level of community involvement in school safety plans. These eight variables are drawn from questions 6A – Community involvement, parent groups; 6B – Community involvement, social services; 6C – Community involvement, juvenile justice; 6D – Community involvement, other law enforcement; 6E – Community involvement, mental health services; 6F – Community involvement, civic organizations; 6G – Community involvement, businesses; and 6H – Community involvement, religious organizations. Participants were asked to answer “yes” or “no” to each of the eight questions indicating whether or not either of these community groups and related organizations and agencies is involved in developing the schools’ safety plan in the last year.

In staying consistent with the review of the literature in defining serious violent crimes, six variables were identified from the data set that were used to measure serious violent crimes. These six variables are drawn from questions 17A1 – Number of rapes/attempted rapes; 17B1 – Number of sexual batteries other than rape; 17C1_1 – Number of robberies with a weapon; 17C2_1 – Number of robberies without a weapon; 17D1_1 – Number of attacks with weapon; 17D2_1 – Number of attacks without a
weapon. Participants were asked to report the number of each type of incident that occurred on school campus in the last year. It is important to note that these questions ask the participant to report the number of incidents and not the number of victims or offenders.

Finally, variables that measured whether or not the school employed prevention/intervention strategies in working to reduce the number of serious violent incidents were identified. Prevention variables include: q1f random metal detector checks for students, q1p required clear book bags or no book bags allowed, q1q required visible student ID, and q1s security cameras. Intervention variables include: q3a prevention through curriculum/instruction/training, q3b behavior modification, q3c counselors/social workers, q3d individual mentoring/tutoring, q3f student involvement in resolution of problems, and q3g schools promotion of sense of community.

4.1.3 Independent and Dependent Variables

The independent variables in this study are each of the eight community groups and related organizations or agencies that are involved in developing the schools safety plan. The variables are: parent groups, social service agencies, juvenile justice, other law enforcement agencies, mental health agencies, civic organizations, businesses and religious organizations. Some of these variables were combined to reduce the number of independent variables. The combined variables then make up four community groups. The new variables are: parent groups, social groups (social services, mental health, religious organizations, civic organizations), law enforcement (juvenile justice, law
enforcement) and business groups. Operationally, these independent variables function as organizations’ involvement in school safety planning. Other independent variables include: school size, school location and distribution of minority students. Operationally, these independent variables function as school characteristics. The last group of independent variables: prevention of violence through curriculum, instruction, training, behavior modification, provided counseling through school counselor/social worker, individual mentoring/tutoring, involving students in resolution of problems, promoting a sense of community, operationally function as a serious violent incident intervention variable. Random metal detector checks of students, requiring clear book bags or no book bags, visible display of student ID and security cameras operationally function as a prevention variable.

The reliability of the composite independent variables: law enforcement, social groups, violence prevention and violence intervention, was tested using Cronbach’s alpha. Table 4.1 shows the alpha values for all the composite independent variables. According to George and Mallery (2003), all the alpha values for the composite independent variables were questionable (.60), poor (.50) or unacceptable (less than .50).

<table>
<thead>
<tr>
<th>Composite Variable</th>
<th>Number of Cases</th>
<th>Number of Items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law Enforcement</td>
<td>2,772</td>
<td>2</td>
<td>.50</td>
</tr>
<tr>
<td>Social Groups</td>
<td>2,772</td>
<td>4</td>
<td>.63</td>
</tr>
</tbody>
</table>
Table 4.1  Continued

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Violence Intervention</td>
<td>2,772</td>
<td>4</td>
<td>.32</td>
</tr>
<tr>
<td>Violence Prevention</td>
<td>2,772</td>
<td>6</td>
<td>.60</td>
</tr>
</tbody>
</table>

The dependent variable was derived from combining six variables together to create one variable, serious violent crime. The six variables combined include: rapes/attempted rapes, sexual battery other than rape, robbery with a weapon, robbery without a weapon, attack with a weapon and attack without a weapon. Operationally, this dependent variable functions as the level of serious violent crime.

4.1.4 Research Question and Hypothesis

It is highly suggested that schools involve community organizations in school safety plans and development of safety strategies, yet there are no known studies suggesting the effectiveness of this involvement. This study proposes to address this gap and increase the knowledge base of the literature in this area. The following is the research question and hypothesis of this study.

Research Question: Is there a statistically significant relationship between the community organizations’ involvement in school safety planning and the level of serious violent incidents committed on school campuses?

Hypothesis: Schools that have parent groups, social groups (social services, mental health agencies, religious organizations, civic organizations), law enforcement (juvenile justice agencies, law enforcement agencies) and business groups involved in developing the school’s safety plan will have lower rates of serious violent incidents
than those schools that do not have parent groups, social groups (social services, mental health agencies, religious organizations, civic organizations), law enforcement (juvenile justice agencies, law enforcement agencies) and business groups involved in developing the school’s safety plan.
CHAPTER 5
RESULTS

This chapter contains descriptive statistics of applicable variables, and linear regression to ascertain if involvement of community organization groups in school safety planning predicts less serious violent crime on school campuses. The Statistical Package for the Social Sciences (SPSS 15.0) was used in the analysis of the data.

5.1 Descriptive Statistics

Descriptive statistics were run in order to provide an understanding of the data that was collected. Frequencies and percentages of (1) the title/position of the respondent, (2) the different types of community groups involved in the development of school safety plans, (3) serious violent crimes, (4) location of the schools participating in the survey and (5) enrollment of minority students.

5.1.1 Title/Position of Respondent

Respondents were placed into one of four categories based on the title/position of the responder. Of the 2,772 respondents 3.1% were secretarial staff, teachers, district staff or security personnel; 15.5% included respondents with titles/positions not in one of the four categories; 15.5% were assistant principals and 65.9% of responders were principals.
5.1.2 Community Groups

Table 5.1 provides data on the frequency and percent of schools using each of the eight community groups in developing the school safety plan.

<table>
<thead>
<tr>
<th>Type of Community Group</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( f )</td>
<td>( % )</td>
<td>( f )</td>
<td>( % )</td>
</tr>
<tr>
<td>Parent Group</td>
<td>2022</td>
<td>72.9</td>
<td>750</td>
<td>27.1</td>
</tr>
<tr>
<td>Social Services</td>
<td>1973</td>
<td>71.2</td>
<td>799</td>
<td>28.8</td>
</tr>
<tr>
<td>Juvenile Justice</td>
<td>1652</td>
<td>59.6</td>
<td>1120</td>
<td>40.4</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>2457</td>
<td>88.6</td>
<td>315</td>
<td>11.4</td>
</tr>
<tr>
<td>Mental Health</td>
<td>1635</td>
<td>59.0</td>
<td>1137</td>
<td>41.9</td>
</tr>
<tr>
<td>Civic Organizations</td>
<td>1288</td>
<td>46.5</td>
<td>1484</td>
<td>53.5</td>
</tr>
<tr>
<td>Businesses</td>
<td>894</td>
<td>32.3</td>
<td>1878</td>
<td>67.7</td>
</tr>
<tr>
<td>Religious Organizations</td>
<td>705</td>
<td>25.4</td>
<td>2067</td>
<td>74.6</td>
</tr>
</tbody>
</table>

Law enforcement groups are the largest community group that schools use in developing their school safety plans while religious organizations is the smallest community group used by schools. A crosstabulation of the data revealed that in all school size categories (less than 300, 300-400, 500-999 and 1000+) law enforcement was the most likely used community group in developing a school safety plan, parent groups were the next most likely group used and social service and juvenile justice the third largest groups most likely to be used by schools (see Table 5.2).
Table 5.2  Community Groups Used in School Safety Planning

<table>
<thead>
<tr>
<th>Community Group</th>
<th>School Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;300</td>
</tr>
<tr>
<td></td>
<td>f</td>
</tr>
<tr>
<td>Parent Group</td>
<td>194</td>
</tr>
<tr>
<td>Social Services</td>
<td>196</td>
</tr>
<tr>
<td>Juvenile Justice</td>
<td>134</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>237</td>
</tr>
<tr>
<td>Mental Health</td>
<td>144</td>
</tr>
<tr>
<td>Civic Organization</td>
<td>115</td>
</tr>
<tr>
<td>Businesses</td>
<td>79</td>
</tr>
<tr>
<td>Religious Organization</td>
<td>82</td>
</tr>
</tbody>
</table>

5.1.3 Serious Violent Incidents Reported

Of the 2,772 respondents reporting serious violent incidents on the school campus, 2,203 (79.5%) respondents reported having no serious violent incident occur in the year prior to the survey and 569 (20.5%) respondents reported at least one serious violent incident. The number of serious violent incidents reported ranged from no (0) incidents to 97 incidents in the prior year. The 569 respondents reporting serious violent incidents included 248 (44%) reporting one incident, 108 (19%) reporting two incidents and 173 (30%) reporting between three and ten incidents.
5.1.4 Location of the School

In order to understand the location of the school in which the data was collected, definitions of the locations are provided. According to the National Education Association (2008), the following are definitions of locations based on the placement within a Standard Metropolitan Statistical Area (SMSA) and population size.

- City – a large city is a place within a SMSA with a population greater than 400,000 and a mid-size city is a place within a SMSA with a population less than 400,000 but greater than 25,000
- Urban Fringe – a place within a SMSA of a large city, mid-size city or a large town with a population greater than or equal to 25,000
- Town – a place not within a SMSA with a population of less than 25,000 but greater than or equal to 2,500
- Rural – a place not within a SMSA with a population of less than 2,500

More than a third (37.1%) of the respondents of this survey was from schools located in urban fringe areas. Seven hundred twenty-eight (26.3%) respondents were from schools located in cities, 649 (23.4%) were from schools located in rural areas and 367 (13.2%) were from schools located in towns.

5.1.5 Race/Ethnic Distribution

The survey asked respondents to identify the percentage of “minority students” in the school. Minority student was defined as any race/ethnicity other than white. The categories of percentages the respondents were able to choose from are as follows: less
than five percent, five to twenty percent, twenty to fifty percent and fifty percent or more. There were 553 (19.9%) respondents who reported that less than five percent of the student body were minority students, 704 (25.4%) reported that five to twenty percent of the student body were minority students, 657 (23.7%) reported that twenty to fifty percent of the student body were minority students and 800 (28.9%) reported that more than fifty percent of the student body were minority students.

5.1.6 Violence Intervention

Respondents were asked to provide information concerning the type(s) of violence intervention methods employed by their school. These violence intervention methods included: (1) curriculum/instruction/training, (2) behavior modification, (3) providing counseling through school counselor/social worker, (4) individual mentoring/tutoring, (6) involving students in resolution of problems and (7) promoting a sense of community.

Descriptive statistics show that intervention methods used by schools as reported by respondents ranged from no (0) intervention methods used (1%) to all six intervention methods being used (45%) in the same school with the mean being five intervention methods used. Approximately 89% of respondents reported providing four or more intervention methods to students who perpetrate violence at school. A crosstabulation analysis revealed that, of those schools that used intervention methods in their school, the most widely used intervention method was to send the student who had perpetrated violence to the school counselor or social worker (94%) and the least
used method of intervention was involving students in the resolution of the problem (60%).

5.1.7 Violence Prevention

Respondents were also asked to provide information concerning the type(s) of violence prevention methods utilized by their school. The violence prevention methods included: (1) random metal detector checks of students, (2) requiring clear book bags or no book bags, (3) visible display of student ID and (4) security cameras.

Descriptive statistics show that prevention methods used by schools as reported by respondents ranged from no (0) prevention methods used (44%) to all four prevention methods being used (1%) with the mean being one prevention method used. Approximately 51% of respondents reported they used as many as two prevention methods. A crosstabulation analysis revealed that, of those schools that used prevention methods in their school, the most widely used prevention method was a security camera (47%) and the least used method of prevention was requiring clear book bags or no book bags (9%).

5.2 Bivariate Analysis

Correlations between school violence (dependent variable) and parent group, business group, social groups, law enforcement groups, violence prevention and violence intervention (independent variables) was calculated (see Table 5.3).
Table 5.3 Correlations Between School Violence and Independent Variables

<table>
<thead>
<tr>
<th></th>
<th>ED</th>
<th>SL</th>
<th>SS</th>
<th>VP</th>
<th>VI</th>
<th>PG</th>
<th>BG</th>
<th>SG</th>
<th>LE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SV</td>
<td>.091**</td>
<td>-.096**</td>
<td>.115**</td>
<td>.059**</td>
<td>.040*</td>
<td>-.001</td>
<td>.022</td>
<td>.016</td>
<td>.011</td>
</tr>
<tr>
<td>ED</td>
<td>- .266**</td>
<td>.094**</td>
<td>.031</td>
<td>.039*</td>
<td>-.013</td>
<td>.001</td>
<td>-.007</td>
<td>.053**</td>
<td></td>
</tr>
<tr>
<td>SL</td>
<td>-.312**</td>
<td>-.127**</td>
<td>-.106**</td>
<td>-.058**</td>
<td>-.091**</td>
<td>.013</td>
<td>.052**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SS</td>
<td>.240**</td>
<td>.098**</td>
<td>.081**</td>
<td>.060**</td>
<td>.097**</td>
<td>.193**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VP</td>
<td>.050**</td>
<td>-.002</td>
<td>.073**</td>
<td>.127**</td>
<td>.161**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>.200**</td>
<td>.202**</td>
<td>.281**</td>
<td>.191**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PG</td>
<td>.210**</td>
<td>.259**</td>
<td>.131**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BG</td>
<td>.460**</td>
<td>.204**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG</td>
<td>.480**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

There are significant positive correlations between school violence and ethnic distribution ($r = .091, p < .01$), school violence and violence prevention ($r = .059, p < .01$) and school violence and violence intervention ($r = .040, p < .05$). There is a significant negative correlation between school violence and school location ($r = -.096,$
p < .01). It should be noted that school location is measured as an ordinal variable where 1 = city, 2 = urban fringe, 3 = town and 4 = rural. The significant negative correlation indicates then that respondents whose schools are located in the city reported more serious violent incidents.

Additionally, the school violence variable was re-coded into a categorical variable (0 = no incidents reported, 1 = 1 to 2 incidents reported, 2 = 3 to 4 incidents reported and 3 = 5 or more incidents reported) and a crosstabulation was calculated with school violence the independent variables. Table 5.4 presents the results from the crosstabulation which also includes chi-square results.

Table 5.4 Crosstabulation School Violence with Independent Variables and Chi-Square

<table>
<thead>
<tr>
<th>Category</th>
<th>Violent Incidents Reported</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>1 -2</td>
<td>3 - 4</td>
<td>5 or more</td>
<td>Total</td>
<td>(X^2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Violence Prevention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No VP</td>
<td>993</td>
<td>82.2</td>
<td>140</td>
<td>11.6</td>
<td>38</td>
<td>3.1</td>
<td>37</td>
</tr>
<tr>
<td>VP Used</td>
<td>1,210</td>
<td>77.4</td>
<td>216</td>
<td>13.8</td>
<td>63</td>
<td>4.0</td>
<td>75</td>
</tr>
<tr>
<td>Violence Intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No VI</td>
<td>20</td>
<td>91.0</td>
<td>1</td>
<td>4.5</td>
<td>1</td>
<td>4.5</td>
<td>0</td>
</tr>
<tr>
<td>VI Used</td>
<td>2,183</td>
<td>79.5</td>
<td>355</td>
<td>12.9</td>
<td>100</td>
<td>3.6</td>
<td>112</td>
</tr>
</tbody>
</table>
Table 5.4  Continued

<table>
<thead>
<tr>
<th>Parent Groups</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No PG</td>
<td>598</td>
</tr>
<tr>
<td>PG Used</td>
<td>1,605</td>
</tr>
<tr>
<td>Business Groups</td>
<td></td>
</tr>
<tr>
<td>No BG</td>
<td>1,515</td>
</tr>
<tr>
<td>BG Used</td>
<td>688</td>
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<tr>
<td>Social Groups</td>
<td></td>
</tr>
<tr>
<td>No SG</td>
<td>391</td>
</tr>
<tr>
<td>SG Used</td>
<td>1,812</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td></td>
</tr>
<tr>
<td>No LE</td>
<td>253</td>
</tr>
<tr>
<td>LE Used</td>
<td>1,950</td>
</tr>
<tr>
<td>Ethnic Distribution</td>
<td></td>
</tr>
<tr>
<td>&lt;5%</td>
<td>478</td>
</tr>
<tr>
<td>5% to 20%</td>
<td>579</td>
</tr>
<tr>
<td>20% to 50%</td>
<td>516</td>
</tr>
<tr>
<td>&gt; 50%</td>
<td>581</td>
</tr>
</tbody>
</table>

**Note:** Figures indicate significance levels: .001, .01, or .05.
<table>
<thead>
<tr>
<th>School Size</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;300</td>
<td>259</td>
<td>89.0</td>
<td>24</td>
<td>8.2</td>
<td>3</td>
<td>1.0</td>
<td>5</td>
<td>1.7</td>
<td>291</td>
</tr>
<tr>
<td>300 to 400</td>
<td>449</td>
<td>88.2</td>
<td>50</td>
<td>9.8</td>
<td>6</td>
<td>1.2</td>
<td>4</td>
<td>0.8</td>
<td>509</td>
</tr>
<tr>
<td>500 to 999</td>
<td>884</td>
<td>81.9</td>
<td>126</td>
<td>11.7</td>
<td>36</td>
<td>3.3</td>
<td>33</td>
<td>3.1</td>
<td>1,079</td>
</tr>
<tr>
<td>1000+</td>
<td>611</td>
<td>68.4</td>
<td>156</td>
<td>17.5</td>
<td>56</td>
<td>6.3</td>
<td>70</td>
<td>7.8</td>
<td>893</td>
</tr>
<tr>
<td>School Location</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City</td>
<td>526</td>
<td>72.3</td>
<td>112</td>
<td>15.4</td>
<td>38</td>
<td>5.2</td>
<td>52</td>
<td>7.1</td>
<td>728</td>
</tr>
<tr>
<td>Urban Fringe</td>
<td>819</td>
<td>79.7</td>
<td>126</td>
<td>12.3</td>
<td>40</td>
<td>3.9</td>
<td>43</td>
<td>4.2</td>
<td>1,028</td>
</tr>
<tr>
<td>Town</td>
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<td>82.8</td>
<td>49</td>
<td>13.4</td>
<td>6</td>
<td>1.6</td>
<td>8</td>
<td>2.2</td>
<td>367</td>
</tr>
<tr>
<td>Rural</td>
<td>554</td>
<td>85.4</td>
<td>69</td>
<td>10.6</td>
<td>17</td>
<td>2.6</td>
<td>9</td>
<td>1.4</td>
<td>649</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

### 5.3 Multivariate Analysis

An analysis of the frequency distribution of the dependent variable “schvioln” reported from respondents revealed a skewness of the distribution to be too large (12.625). In order to minimize the skewness of the dependent variable “schvioln”, a log transformation was performed. Log transformations are used when the distribution is not symmetrical and when the largest value is more than three times larger than the smallest value (Simon, 2002). Once the log transformation was completed, skewness was reduced (2.922) and a new dependent variable “schviolnr” was created in order to perform a regression analysis.
5.3.1 Regression Analysis

A regression analysis was conducted to predict serious violent incidents in schools. In block one of the regression model, all combined community organizations variables were added (parent groups, social groups, law enforcement groups, business groups) to predict serious violent incidents. In block two of the regression model, known school characteristics (school size, location of the school and racial distribution) variables were added to the model to predict serious violent incidents. In block three of the regression model, prevention and intervention were added to the model to predict serious violent incidents.

In the first model of combined community organization variables and serious violent incidents, only 0.7 percent of the variance is explained. In the second model, with the addition of school characteristic variables, an additional 4.6% of the variance of violence was accounted for explaining 5.2% of the variance of violence. In the third model of prevention/intervention variables, only an additional 0.2% of the variance of violence was accounted for which increased the variance of violence to 5.3% explained by the model (see Table 5.5).

An effect size for hierarchical multiple regression, Cohen’s $f^2$, was calculated using Soper’s (2008) effect size for hierarchical multiple regression calculator. The accepted rule of Cohen’s $f^2$ effect size is .02, .15 and .35 for small, medium and large effect sizes respectively (Cohen, 1988). The effect size attributable to the addition of the independent variables in block two of the regression model is minimal (.05) and even
smaller when adding the independent variables in block three of the regression model (.002). This shows that the overall effect of the model is very small.

Table 5.5 Percent of Variance Explained by Each Block in the Regression Model

<table>
<thead>
<tr>
<th>Model</th>
<th>Law Enforc</th>
<th>School Size</th>
<th>School Local</th>
<th>Racial Distrib</th>
<th>Violent Preven</th>
<th>F</th>
<th>df</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1 β</td>
<td>-0.065*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.551</td>
<td>4, 2767</td>
<td>.008</td>
<td></td>
</tr>
<tr>
<td>Block 2 β</td>
<td>-0.044*</td>
<td>0.155**</td>
<td>-0.069**</td>
<td>0.079**</td>
<td></td>
<td>22.561</td>
<td>3, 2764</td>
<td>.054</td>
<td>.046*</td>
</tr>
<tr>
<td>Block 3 β</td>
<td>-0.040</td>
<td>0.146**</td>
<td>-0.065**</td>
<td>0.079**</td>
<td>-0.043*</td>
<td>18.135</td>
<td>2, 2762</td>
<td>.056</td>
<td>.002</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

Results from the regression analysis show (see Table 5.6) that in block one, law enforcement involvement in school safety planning was the only significant predictor of serious violent incidents (p < .05). However, law enforcement organizations had a negative relationship (t = -2.994) meaning that when law enforcement organizations are involved in school safety planning, there are lower numbers of serious violent incidents.

In block two, when adding known school characteristics (size, location and racial distribution) to the model, law enforcement involvement continues to be a significant predictor of serious violent incidents (p < .05) and still having a negative relationship (t = -2.058). As supported by the literature, school size, school location and racial distribution were also significant predictors of serious violent incidents. Schools
with higher percentages of minority students have higher numbers of serious violent incidents \( (t = 4.125, p < .01) \), schools with larger enrollments of students have higher number of serious violent incidents \( (t = 7.736, p < .01) \) and the schools location has a negative relationship with the number of serious violent incidents \( (t = -3.386, p < .01) \). School location is measured as an ordinal variable \( (1 = \text{city}, 2 = \text{urban fringe}, 3 = \text{town} \) and \( 4 = \text{rural}) \) The negative relationship between school location and serious violent incidents then shows that schools located in cities have higher numbers of serious violent incidents than schools located in urban fringe, town and rural areas.

In block three of the regression model, violence prevention and intervention variables were added. The results of this analysis shows that law enforcement no longer has a significant relationship with serious violent incidents \( (t = -1.829, p > .05) \). In this model it can be seen that prevention variables related to student surveillance had a negative relationship with serious violent incidents \( (t = -2.240, p < .05) \).

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>( B )</th>
<th>( SE )</th>
<th>( \beta )</th>
<th>( t )</th>
<th>( sig )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent group</td>
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<td>.026</td>
<td>.012</td>
<td>.611</td>
<td>.541</td>
</tr>
<tr>
<td>Business group</td>
<td>-.031</td>
<td>.027</td>
<td>-.025</td>
<td>-1.150</td>
<td>.250</td>
</tr>
<tr>
<td>Social Groups</td>
<td>-.012</td>
<td>.011</td>
<td>-.026</td>
<td>-1.074</td>
<td>.283</td>
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Table 5.6 Regression Predicting Serious Violent Incidents
<table>
<thead>
<tr>
<th>Block 2</th>
<th>Parent group</th>
<th>Business group</th>
<th>Social Groups</th>
<th>Law Enforcement Groups</th>
<th>Racial Distribution</th>
<th>School Location</th>
<th>School Size</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>.032</td>
<td>.026</td>
<td>.024</td>
<td>1.225</td>
<td>.221</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-.017</td>
<td>.027</td>
<td>-.014</td>
<td>-.645</td>
<td>.519</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-.014</td>
<td>.011</td>
<td>-.030</td>
<td>-1.280</td>
<td>.201</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>-.039</td>
<td>.019</td>
<td>-.044</td>
<td>-2.058</td>
<td>.040*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.025</td>
<td>.006</td>
<td>.079</td>
<td>4.125</td>
<td>.000**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-.037</td>
<td>.011</td>
<td>-.069</td>
<td>-3.386</td>
<td>.001**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.096</td>
<td>.012</td>
<td>.155</td>
<td>7.736</td>
<td>.000**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 3</th>
<th>Parent group</th>
<th>Business group</th>
<th>Social Groups</th>
<th>Law Enforcement Groups</th>
<th>Racial Distribution</th>
<th>School Location</th>
<th>School Size</th>
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<tbody>
<tr>
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<td>-.595</td>
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<tr>
<td></td>
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<td>.011</td>
<td>-.026</td>
<td>-1.087</td>
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<td></td>
</tr>
<tr>
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<td>.019</td>
<td>-.040</td>
<td>-1.829</td>
<td>.067</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>.025</td>
<td>.006</td>
<td>.079</td>
<td>4.125</td>
<td>.000**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-.035</td>
<td>.011</td>
<td>-.065</td>
<td>-3.184</td>
<td>.001**</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>.091</td>
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<td>.146</td>
<td>7.182</td>
<td>.000**</td>
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<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td></td>
<td>-.031</td>
<td>.014</td>
<td>-.043</td>
<td>-2.240</td>
<td>.025*</td>
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<td></td>
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</tbody>
</table>

*p < .05, **p < .01
CHAPTER 6

CONCLUSION

The purpose of this study was to determine if community organizations’ involvement in school safety planning would predict the level of serious violent incidents in a school. A secondary analysis of the School Survey on Crime and Safety: 2003-2004 with 2,772 respondents was conducted. Limitations of this study, discussion of the findings, implications for policy and practice as well as recommendations for further research will be presented in this chapter.

6.1 Limitations of the Study

There are a few limitations to this study that should be considered. The first limitation of this study is that the research design by the U.S. Department of Education (2006) involved a cross-sectional design with no control groups for comparison. This creates problems in establishing internal validity. Additionally, the findings of this study should not be misunderstood as having causal inferences. In order to determine the true influences of community organization’s involvement in school safety planning and the impact it has on school violence, a time-series design is needed.

The next limitation stems from the fact that this study is a secondary analysis of data collected by another organization. The data set had pre-determined questions based on that organization’s research needs. This does not allow for additional questions to be
asked that this study may have benefited from had there been an opportunity to design the survey specifically for the purposes of this study.

Also, there are a number of variables that should be included in this analysis that were not available through the data set. The literature discussed the importance of biological and interpersonal relationship factors impacting school violence. Factors such as drug/alcohol use, bullying, academic difficulties parental monitoring and dating violence all play a role in helping to explain violence in youth. Furthermore, general demographic variables such as age, gender, race other than just percentage of ethnic distribution, socio-economic status and/or percentage of students receiving free or reduced lunches would have been beneficial in strengthening this study. It is possible that the low variability accounted for in the regression model of this study was due to the omission of biological factors, interpersonal relationship factors and various demographic variables.

Another limitation is that the available data set was the only data used in this study. With no other data being analyzed (i.e. analysis of written documents to verify respondent’s answers, student and/or teacher responses) triangulation was not possible.

Finally, survey data in general can be vulnerable to systematic measurement error since data is collected only at one point in time and expects the respondent to recall past events. Measurement error could occur if the respondent does not understand the question being asked and answers the questions based on that misunderstanding and/or do not answer the questions truthfully. Also, there could be systematic error
associated with the school violence variable in that approximately 80% of respondents reported no serious violent incidents on their school’s campus. The literature points out that often times, school administrators do not report serious violent incidents unless the disciplinary action taken involved that of law enforcement. Also, schools in small towns or rural areas may not have large law enforcement personnel and school administrators may need to rely on other resource groups such as religious organizations or social service organizations to help with serious violent incidents in the school.

6.2 Discussion of Findings

When looking at community organizations’ involvement in school safety planning and the impact these organizations have on the number of serious violent incidents in school, only law enforcement agencies statistically significantly predicted serious violent incidents in the school. It was found that law enforcement agencies had a negative relationship with serious violent incidents. It appears that when law enforcement agencies are used in school safety planning, lower numbers of serious violent incidents occur. No other community organization group statistically significantly predicted serious violent incidents. However, it should be noted that the percent of variance accounted for in law enforcement agencies predicting number of serious violent incidents is very small (0.7%).

The findings of law enforcement agencies involvement having a negative relationship with serious violent incidents is not consistent with findings from other studies found in the literature (Kandakai, 1999; Mayer & Leone, 2001; Schreck, Miller
& Gibson, 2003). However, these studies investigating the relationship law enforcement agencies have with violent incidents in school do not show causal relationships. It is just as likely that violence in the school predicts the level of law enforcement in school. Additionally, there are some conflictive results about the use of law enforcement and other security measures to reduce violence in schools. Even with conflicting results, law enforcement and other security measures such as random searches, metal detectors and security cameras remain the most commonly practiced method for schools in trying to reduce violence (Welsh, 2001).

A negative relationship was observed between school violence and the prevention variable which included random metal detector checks, requiring clear or no book bags, visible display of student ID and security cameras. The more schools employ these prevention methods the lower the number of serious violent incidents. Other authors have reported conflicting findings where the more closely students are monitored by these types of methods, the more violence there will be in a school (Kandakai, 1999; Mayer & Leone, 2001; Welsh, 2000). It is believed that this type of atmosphere breeds an environment of mistrust and fear and when this method is practiced, students act on that mistrust and fear more often than when these methods are not practiced (Kandakai, 1999; Mayer & Leone, 2001). Again, these studies cannot be interpreted as truly causal in that experimental and control groups were not used to determine a causal relationship. This raises concern for the internal validity of these studies in that the potential is maximized for alternative explanations.
The findings of school characteristics prediction of serious violent incidents is also supported by the literature (Devoe, et al., 2004; Eitle & Eitle, 2003; Elam & Rose, 1994; Heaviside, et al., 1998; Hill & Drolet, 1999; Kaiser, 2006). This study found that school size statistically significantly predicted serious violent incidents. That is, as schools get larger there are more serious violent incidents reported. This study also found that school location statistically significantly predicted serious violent incidents as did the racial distribution of the school.

While this study did not find statistically significant predictions of community organizations’ involvement in school safety planning reducing serious violent incidents in school, the benefits of community involvement in the school as a way of reducing violence should not be overlooked. An example of community involvement in the school is that of juvenile mentoring programs such as Big Brothers/Big Sisters (BB/BS). Mentoring programs have various project goals that include delinquency prevention, violence prevention and anger management. BB/BS involves members of the community volunteering to spend time with youth in their school every week. Student participants range from 5 to 18 years of age with the mean age of 13. In a study of 959 youth in 8 cities, youth reported the following after one year of participation in the mentoring program: 54.7% reported the program helped a lot with avoiding fights, 67.6% reported the program help a lot with staying away from gangs, 68% reported the program help a lot with not using knives/guns and 51% reported the program helped a lot with avoiding friends who started trouble (Reno, Fisher, Robinson, Bilchick, 1998).
Empirical literature surrounding the causes and prevention of violence at school is severely lacking. When there are more empirical studies completed in this area, more conclusive evidence can be provided as to what works in reducing violence and what does not work in reducing violence in school.

6.3 Implications for Practice and Policy

Findings from this study support the need for school social workers to be involved in helping to reduce serious violent incidents in school. This was evident in that the crosstabulation showed, of the schools utilizing intervention methods, most (94%) relied on school counselors/social workers to intercede with students who are perpetrators of violence at school. Social workers are trained in using strengths in which to build stronger environments that help meet the needs of all involved. Social workers could create programs where they taught teachers, staff and administrators how to positively communicate to students. This positive communication could then serve as a model for students in communicating to teachers, staff and administrators. Additionally, social workers could work with teachers, staff and administrators in detailing expected behaviors from students as well as connecting these behaviors to related consequences when students deviate from that expectation. Furthermore, social workers can present themselves as a positive role model to the students, teachers, staff and administrators as effective leaders in promoting a positive climate in the school.

These findings also suggest that there could be a need for policy changes. The Safe School Act of 1994 puts money in the hands of schools to use in purchasing
security equipment such as security cameras and metal detectors and paying salaries for security personnel. More studies should be conducted to determine if schools with heightened security measures truly have a negative impact on school violence.

In the meantime, there should also be more studies that focus on positive, preventative methods. If more studies are completed to provide evidence for less constrictive methods of positive communication and climate building as an effective means of reducing violence in schools, then federal dollars might need to be redirected into programs that have a more positive effect. Depending on the results of continued studies, the basis for policy change might be provided.

6.4 Recommendations for Future Research

Recommendations for future research surrounds the need to learn more in the areas of community organizations’ involvement in the school safety planning process, studying school climates that are positive and longitudinal studies to determine order of association.

The first recommendation for future research has to do with investigating the community organizations’ involvement in the schools safety planning process. Because this study was a secondary analysis, more specific questions regarding the role individuals from each community organization plays in the planning process could not be determined. Comparisons and analysis could be made if more information about the individuals representing each community organization was known. For example, if it was known how much input these individuals had in school safety planning or if the
individuals representing the community organization volunteered to be a part of the planning or if they were just assigned by the organization, it could possibly have an impact on whether or not these organizations’ involvement would better predict serious violent incidents.

Another recommendation has to do with completing longitudinal studies versus cross-sectional studies. When longitudinal studies are conducted, it could help determine the causal order of association between the predictor variable and serious violent incidents. For example, does the level of serious violent incidents increase as schools get larger or as a school gets larger are more constraining methods (i.e. law enforcement) used to help reduce potential violence and does this in turn have an impact on the increase of serious violent incidents? Longitudinal studies would help determine the direction of causality.

Lastly, studies should focus more on positive factors that help reduce violence. Factors such as positive communication patterns, clearly communicated expectations for behavior, clearly stated consequences for deviating from expectations, clear role relationships and clear positive leadership/role models should be examined to determine if schools with more positive climates have less violence than those with less positive climates.
REFERENCES


BIOGRAPHICAL INFORMATION

Joy D. Patton received a Bachelor degree in Psychology from the University of Central Oklahoma in 1999. She received a Master degree in Counseling Psychology from Liberty University in 2004. She is presently the Assistant Director of the Community Services Center, a non-profit center in connection with the School of Social work at the University of Texas at Arlington. Following the completion of this current Master’s program, Joy will continue with her doctoral studies in Social Work at the University of Texas at Arlington.