

A STUDY OF FACTORS AFFECTING HIGH SCHOOL SAFETY AND SECURITY

by

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(Under the direction of Dr. C. Kenneth Tanner)

ABSTRACT

This study addressed safety and security issues in Georgia high schools. One objective was to determine if a relationship existed between the school design elements and the rates of discipline referral. Another objective was to compare the schools' discipline referral rates with their size, age, and location. The next objective was to examine crisis preparedness and the discipline referral rates. The study also investigated student characteristics that contribute to disturbances and discipline referrals. The final objective was to identify strategies to reduce disturbances in Georgia high schools.

A survey was mailed to 200 high school administrators to identify characteristics of high schools and categorize school disturbances. The survey was based on an instrument, "School Safety Audit: Protocol, Procedures, and Checklists" (1997) from the Virginia Department of Education. Of the 200 surveys, 125 or 63% were returned. The independent variables included design features, the schools' size, age, location, and crisis preparedness. The dependent variable was the discipline referral rate.

Statistically significant results were not found between design elements and discipline referral rates. However, schools having fewer than 500 students had the smallest rate of discipline referrals, while rural areas had the highest rate of discipline referrals. Administrators identified social judgment as the highest predictor of

disturbances. They specified influence of the media to be the lowest predictor. The eight most important strategies in reducing discipline referrals, according to the survey were (by rank) the crisis management plan (1), resource officers (2), visible faculty and administrators (3), security cameras (4), code of student conduct (5), staff development on safety and security issues (6), character education (7.5), and counselor referrals (7.5).

INDEX WORDS: School Violence, Safe Schools, and School Design Elements

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CHAPTER 1

INTRODUCTION TO THE PROBLEM

According to Crews and Counts (1997), "In any historical examination of school disturbance and juvenile delinquency, two concepts become immediately apparent. First, juvenile delinquency has existed for as long as juveniles have existed. Second, school disturbance and violence have existed for as long as schools have existed."

In colonial America, moral and social training were the primary purposes of an education. Students received a seven-year education in grammar schools focusing on the study of Latin. In colonial schools, the expectations for behavior were extensive and well defined. Schoolhouses were typically framed with logs and had rough puncheon floors. Walls were lined with seats and rough board desks. Blackboards or maps did not exist. In fact, students did not begin using slates until the 1820's. Students were forbidden from such behaviors as borrowing or lending items, climbing, balancing a pen on the ear, spitting on the floor, and leaving their seats without permission. Students were punished by lashes for offenses such as boys and girls playing together, failing to bow to strangers, or name-calling (Crews & Counts, 1997).

According to Baker and Rubel (1980), a common belief was that a child was prone to sin. A fear of committing sin or breaking God's laws was viewed as the way to keep a child under control. Family, church, and community were the three social institutions that dominated life for everyone. In the schools, students and teachers often battled for control of the classrooms. To allow teachers to have control in the

classrooms, whipping was seen as a teaching tool. Within the Scripture, violence against children was justified because corporal punishment was viewed as necessary for control and character regeneration. In fact, fines and the whip were used as the most common punishments for children. Due to the treatment of students during the colonial period, there is no evidence that significant student misbehavior occurred.

During the early national period (1780-1830), there were no drastic changes in education from that of the colonial period. Educational theorists began to fear social fragmentation and an undisciplined citizenry; therefore, there was a slow evolution of schooling throughout the early national period. Within the classrooms of the late eighteenth-century schools, boys and girls sat separately on wooden benches. A variety of age groups, ranging from five years to the teens, attended classes together. During this period, stern methods of punishment continued to be used because discipline remained critical to control in the classrooms. For example, students would typically receive praise for a correct answer and a blow for an incorrect one. Classrooms were loud places full of undisciplined youth and cries from students who were being physically punished. In addition to the battleground between teachers and students in the classrooms, most schoolrooms were dangerously cold in the winter and extremely hot in the summer. The insufficient numbers of seats and other discomforts often aggravated students into more disruptive behaviors (Crews & Counts, 1997).

During the early nineteenth century, discipline problems continued to be daily occurrences in U.S. schools. Teachers were forced to use threats, intimidation, and beatings to gain control of students in their classrooms. School disturbances during this period were attributed to the poor conditions of the early schoolhouses and to the

teaching methods used in the classrooms. It was believed that the physical conditions of the early classrooms were enough to cause much of the misbehavior found in students. Due to the inadequate physical conditions of the school, the teaching methods, and the discipline practices, a common description of schools in the late 1800s was as "wild and unruly places." At times, students were locked in windowless closets for whispering in class, and other students were tied to chairs for hours. It was believed that all teachers had bad reputations merely for being teachers (Baker & Rubel, 1980).

Crews and Counts (1997) found that during the late 1800s, the problem of having to deal with parental complaints concerning education began to develop and carried over into the twentieth century. Critical to the survival of children and the nation was teacher authority. Therefore, teachers were not to be questioned or challenged in any manner concerning their authority in the classroom. Drastic changes in juvenile behavior during the period between 1860 and 1960 resulted in changes in school disturbances. For example, when the education system began to emerge in the 1860s, the Civil War took its toll. Violent confrontations at the schoolhouse door were the result of much civil strife. Control of classrooms evolved from a structure around all student movement, to expulsion, to armed and uniformed police officers being placed in school buildings. Results of a classic study conducted in 1927 examined students' behaviors and teachers' attitudes and revealed that teachers regarded the most serious student behaviors as transgressions against authority, dishonesty, immorality, violation of rules, lack of orderliness, and lack of application to school work. Truancy was the only type of school disturbance that was documented in the late 1930s and early 1940s. School buildings

became larger and classrooms were larger. There was a shift from two-and three-story buildings to one-story buildings.

The 10 most reported school disturbances during the 1950s included stealing, temper tantrums, masturbation, nervousness, lack of respect for authority, cruelty, lying, fear, obscenity, and lack of responsibility. In the late 1950s, violence in public schools began to increase in severity to the point that it ultimately resulted in the formation of internal security forces. Violence became prevalent enough to represent a threat to the educational climate of the school in the late 1960s. In U.S. News and World Report, articles from 1968-1976 began to show where public concern was shifting from disruptions, such as riots and sit-ins, to actual crimes. An increase in high schools and college preparatory institutions occurred during the 1950s and 1960s. Syracuse University Research Corporation released the results of a 1967 survey that concluded that disruption of education in public high schools was becoming extremely widespread and serious. In the 1960s, the United States seemed to have become a country full of "trigger-happy people." School safety plans made their debut in the 1960s. Schools with high rates of vandalism in the 1960s brought much concern. It was concluded that the highest rates of school vandalism occurred in schools with obsolete, aging facilities and equipment, low staff morale, high student dissatisfaction, and heavy financial burdens placed on the students (Crews & Counts, 1997).

Elliott, Hamburg, and Williams (1998) suggest that, "The only arena in which adolescents had a socially recognized role was in the secondary school; yet this institution never was intended to meet all of the varied needs of children and youth." Many students found school to be limiting and frustrating. Only a minority of students

really enjoyed attending school. The students attending school who were not able to prepare themselves for living in a democracy felt useless and isolated from many of their peers. Many of these frustrated and isolated youth began to "wreak havoc on those social institutions that most directly rejected them." Therefore, school disturbance was one result of their frustration. In addition to student frustration with the traditional school environment, a growing number of societal changes influenced the outcomes of violence in U.S. schools. These societal changes included dysfunctional families, substance abuse, changing values of the adolescent subculture, and societal problems influenced by the social, emotional, and personal development of young people.

Baker and Rubel (1980) stated that a November 22, 1971 article was the first article that expressed serious alarm over the extent of school violence; however, it treated the subject as exclusively a problem of large city schools, disregarding growing problems of school crimes in suburban communities. The Gallop Polls of Public Attitudes Toward Education began in 1969 and appeared annually thereafter. According to Gallop, in every year but 1971, discipline was the public's foremost concern. In the late 1960s, pupils sued the schools for violating their constitutional rights due to suspensions without due process. By the 1970s, schools reacted by complying with the legal rulings and developing new due process procedures to protect against further court action. Increasingly disruptive behavior became tolerated in schools, since suspension mechanisms were now under the watchful eye of the courts. This tolerance of disruptive behavior led to increased fear of crime in schools. In the late 1960s, threats of pupil disruptions and riots swept down from colleges to secondary schools. Educators in 1975 predicted that in urban areas, gang activity would likely complicate the educational

system. Also, the erosion of *in loco parentis* powers of schools would have a lasting impact on teachers and pupils. Finally, school security officers would be used to reduce the fear of crime in schools and form a liaison with pupils in the classroom setting.

The results of a 1980 nationwide survey in senior high schools found few school administrators viewed physical conflicts among students, conflict between students and teachers, student weapon possession or rape as serious or moderately serious school problems. The primary focus of school violence and problems in the 1980s was drugs (Crews & Counts, 1997).

The commonality of divorce and mothers entering the workforce in unprecedented numbers were seen as molding factors of the 1990s generation. Schools during the 1990s could not escape the increased violence that occurred in the neighborhoods and communities surrounding the schools (Who's Who Among American High School Students, 1995).

In 1993, Attorney General Janet Reno wrote, "I think youth violence is probably the most serious crime problem that we face in America today." Remboldt (1994) reported that more than 160,000 students stay home from school daily because they are sick of the violence and afraid they might be stabbed, shot, or beaten. In 1996-97, 10% of all public schools reported at least one serious violent crime to the police or a law enforcement representative (Indicators of School Crime and Safety, 1998).

During the late 1990s, the lead stories on the national news became Springfield, Oregon; West Paducah, Kentucky; Jonesboro, Arkansas; Edinsboro, Pennsylvania; Pearl, Mississippi; Littleton, Colorado; Fort Gibson, Oklahoma, and Conyers, Georgia. These locations across the nation became familiar for a common reason. Students entered the

doors of these schools and expressed their anger and frustration on their peers and teachers in the most violent and lethal way possible. The accused perpetrators were described as average children from middle-class homes with good parents and sometimes no pattern of previous trouble. Yet, these students engaged in acts beyond anyone's comprehension with little regard for the long-term consequences of their behavior (Sandu & Aspy, 2000).

Ironically, twenty years ago, we thought children were safe in their homes. Then, we learned about physical and sexual abuse. We always believed that children were safe in their neighborhoods. But slowly violence crept into the neighborhoods across America. We thought children were safe in schools. However, due to the increase in violence in U.S. schools, some schools became armed camps to protect students from the dangers outside the walls as well as the dangers inside the schools. In America, school crime, violence, vandalism, and drug abuse are significant problems on far too many campuses (Who's Who Among American High School Students, 1995).

Crews and Counts (1997) described how schools have added an additional drill to their existing repertoire of drills such as the tornado, fire, and earthquake drills. Many schools added yellow-code(warning) alerts to their safety plans. During this new kind of drill, students are taught to dive under their desks when they hear gunfire or at the sound of a warning alarm. School safety has become a priority for parents, students, teachers, school administrators, politicians, and policy makers. The goal is to return schools to a place for children to learn, achieve, and acquire the skills they need to become successful and productive adults. It is a right of parents to expect that their children will be reasonably protected from harm. The safety of students while they are in school must be

ensured so that their full attention can be given to the process of learning. Parents want their children to be able to master skills beyond the basics of reading, writing, and arithmetic. They want their children to enter adulthood with the values and character that will enable them to be successful and productive in any workplace.

It is believed that in the future, education will be asked to continue to solve problems such as school violence that it did not create in environments that it cannot control such as neighborhoods, communities, and homes. When the educational system cannot provide solutions to these problems, the quality of education and teachers will once again be criticized. It must be understood that a technologically based society requiring capable and well-educated citizens will not be able to sit passively while a small percentage of adolescents brings the entire educational system to its knees (Rubel, 1978).

Statement of the Problem

The number, frequency, and severity of school disturbances are increasing. The literature reveals specific factors that increase the risk for school disturbances. Yet, in Georgia, specific conclusions for making high schools safe places for teaching and learning have not been established.

Statement of the Purpose

The purpose of this study was to examine the relationship between specific characteristics of high schools in Georgia and the degree of safety/security from school disturbances in those schools.

Research Questions

1. What is the relationship between the number of design elements present in the school and discipline referral rate?
2. Are there any significant differences among the schools' discipline referral rate and the schools' size, age, and location?
3. Is there a relationship to the degree of crisis preparedness of a school and the discipline referral rate?
4. Which student characteristics are perceived by administrators as being factors that contribute to school disturbances/discipline referrals?
5. Which strategies have been effective in reducing the number and frequency of school disturbances in high schools in Georgia?

Definition of Terms

ISS (In-School Suspension): Removal of the student from all classes and school-sponsored activities during the school day by the administration.

OSS (Out-of-School Suspension): Removal of a student from school and school-sponsored activities for a designated period of time by either the administration or the Board of Education.

Social judgment: The ability to attend to relevant interpersonal cues before interpreting the meaning of others' behavior.

Overview of Procedures

The respondents in this study were limited to a group of 200 randomly selected high schools throughout Georgia. Surveys were completed by school administrators to examine the relationship among specific characteristics of high schools in Georgia and the number and frequency of school disturbances in these schools. The administrative survey was based on an instrument entitled, "School

Safety Audit: Protocol, Procedures, and Checklists" (1997) from the Virginia Department of Education. The survey responses revealed effective and ineffective strategies currently used by high schools in Georgia to reduce the number and frequency of school disturbances and discipline referrals.

Assumptions of the Study

The following assumptions were identified from the study.

1. The degree of safety and security of the each high school may not have been accurately reflected by the survey instrument.
2. The factors, other than design, that affect the degree of safety of a high school may not have been completely reflected by the survey instrument.
3. A state-wide sampling of high schools provided adequate variability to make logical inference concerning safety and security.

Limitations of the Study

The following limitations were identified from the study.

1. The literature review may not have reflected the elements that affect the degree of safety and security of all high schools in Georgia.
2. The data collection was restricted to administrators of high schools in Georgia who completed the survey instrument.
3. The data was limited to high schools in the state of Georgia.
4. There were no personal observations made of each school where an administrator completed a survey instrument.

Overview of the Remainder of the Study

Chapter II provides a survey of related literature, and Chapter III describes the research procedures. Chapter IV includes the presentation, analysis, interpretation, and summary of the data from the surveys. Chapter V reveals the research-based conclusions and recommendations.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

The first section of this chapter seeks to develop the relationship between the interior and exterior design features of high schools and the level of safety of these schools. The second section discusses factors or elements, other than design, that affect the degree of safety in high schools. The third section of this chapter describes current strategies high schools are using to make their buildings safe.

Interior and Exterior Design Elements

Studies have been done to determine where and when school violence most often occurs. For example, the landmark Violent Schools-Safe Schools Study (1977), found that the “locus of much violence and disruption” was normally in public areas such as stairways, hallways, and cafeterias. The risk of violent encounters was greatest during class transitions. Even though environmental psychologists have not studied school contexts, the concepts of undefined public space are relevant in explaining why violence occurs where it does in schools. In 1973, Newman, an architect and urban planner, explained how the spatial organization of housing projects affected crime rates. Newman suggested that the structure and layout of the building influenced the attitudes and behaviors of residents and people in the neighborhood. Newman studied the social and psychological impact of the building design and areas within and around buildings that are prone to violence. The presence of undefined space that was not perceived by residents to be anyone's responsibility was one of the issues related to building safety.

Newman (1973) found that most of the crime and violence in housing projects occurred in semi-public areas of the buildings including lobbies, stairwells, halls, and elevators. When housing projects were large and impersonal, residents tended to feel isolated and were unlikely to take personal responsibility for public space. In addition, findings suggested that the highest crime rates occurred in buildings that did not architecturally define the transition from public to private space. Architectural interventions that reduced the separation between public and private space were most successful in deterring crime. The research indicated that the more undefined the ownership of a space was, the more likely it was for violence to occur within those spaces. Therefore, interventions focused on defining public spaces so that individuals would take personal responsibility for these areas. Astor, Meyer, Behre, and Bortz (1996) found that violent events occurred primarily in spaces such as hallways, dining areas, and parking lots at times when teachers typically were not present. By far the most effective deterrent to violence was the presence of a teacher. All 166 events and dangerous locations carried the common denominator of being school spaces with no teachers. All dangerous areas were locations that teachers tended to perceive as outside of their professional roles.

An article by Sabo (1993) described the following list of interior and exterior design features as measures that school districts across the country are taking in the design and renovation of school buildings to protect students and staff members:

- *Open storage spaces and shelves for primary grades. These spaces eliminate the risk of children getting locked in closets or cupboards.
- *Windows on the doors of offices and closets. The molestation or abduction of young children is less likely when someone can look into closed rooms.
- *Primary-level classrooms with their own bathrooms, so children don't have to leave the supervised area.

- *Motion detectors and electronic sensors in classrooms. If disturbed, these devices sound a silent alarm at the police station or the district's security department.
- *Closed-circuit television surveillance of bathroom entrances.
- *Electromagnetic doors that cannot be opened from the outside but automatically open when an alarm sounds.
- *Heavy-duty construction materials, such as concrete block or plaster instead of drywall.
- *Technological equipment such as metal detectors and card scanners.
- *Intercoms in each classroom, allowing teachers to call for assistance if an emergency arises.
- *Administrative offices located close to classrooms.
- *Expanded metal or woven-wire screens to protect windows from rocks, balls, and vandals. Some products cut as little as 30 percent of the available light.
- *Windows with laminated plastic sheets between the panes. When struck, the glass breaks into small beads instead of shattering.
- *Television surveillance of parking lots and entrance areas.
- *Large staging areas for buses. Students are not tempted to loiter if their buses leave immediately after classes end.
- *Landscaping that does not feature thickly planted bushes in which people could hide. Some schools in New York City plant "prickly" bushes next to every wall to further discourage interlopers and graffiti artists.
- *Steeply angled roofs with parapets and ridges. These are much harder to climb over than a flat roof.
- *Fences to limit access to hidden or recessed areas.
- *Heavy-duty materials that resist destruction, such as masonry walls. (p.38)

Tanner (1998) described the preliminary findings from a study of 14 elementary schools completed by the University of Georgia's School Design and Planning Laboratory. The study dealt with the influence of school design on student learning. One significant finding was that schools having clearly defined areas for freedom of movement are predictors of high ITBS scores. Freedom of movement within the school and among learning environments was one of the main patterns discovered in this study. Pathways play a major role in how people interact with a building. Lack of expansive pathways implies higher density and other restrictions that influence learning. Crowding and density have been associated with decreased attention, lower task performance, behavioral problems, and social withdrawal. Furthermore, circulation paths play a major

role in student safety. Supervising teachers need clear views of corridors and hallways to monitor student activity.

In his book, Castaldi (1994) explained that safety hazards in school plans may be due in part to building design, site planning, selection of floor materials, or location of obstacles such as fire extinguishers, water fountains, electrical floor stubs, and protruding pipes. Ramps, stairways, and corridors are hazards associated with the movement of people. There are also health hazards due to gases, chemical agents, radioactivity, and dust-like particles.

Day (1996) suggested that one way to prevent crimes from taking place in school is to design the school so it is difficult for the criminal to act without being observed. The design must eliminate the criminal's access to victims and property and cut off possible escape routes. The design must also assure police intervention and increase the chances that the criminal will be identified. Schools can be built in ways that are less tempting to vandals. Areas that are isolated or difficult to monitor, such as blind hallways, remote classrooms, or stairwells, can be redesigned. Experts say that security should be a consideration in the planning and construction of schools, the scheduling of events, and even the designing of landscaping. It is a mistake to concentrate too much on physical security and policing. Experts believe that physical security may change the students' perception of the school from a place of learning to a place of imprisonment.

According to a study by Hoffman (1996) most teachers believed that violence occurs in hallways or under staircases, in the lunchroom or cafeteria, or in unattended classrooms. Students agreed that most acts of violence begin in these places, but add the gym and locker rooms as primary locations. Students are also victimized in restrooms at

schools. Most acts of violence occur where adult supervision is minimal, or where there are large crowds of people in transition. Students, especially those who have been victims, learn quickly to avoid certain areas of the school.

Location of the Facility

According to Elliott, Hamburg, and Williams (1998) it is apparent from the literature that a neighborhood's socioeconomic status, racial/ethnic composition, population turnover, housing and population density, and family structure affected parents' ability to raise their children to live safe and productive lives. Schools in such neighborhoods inherit the difficulties of the community as well as the problems of the children who live there. There have been relatively few studies that have examined the relationship between community characteristics and crime and violence in schools. The general conclusion from the existing studies is that crime in schools is a reflection of crime in the surrounding community.

Age of the Facility

In a study that examined school facility safety in 27 Georgia schools, the data showed a significant relationship at the .05 level between school safety and school-building age for the high schools. The relationship between the school-building safety score and the school-building age was found to be statistically significant for middle and elementary schools at the .10 level (Chan & Morgan, 1996).

A report by the Educational Writers Association found that 25% of the nation's school buildings are in poor physical condition and not suitable for safe occupancy. The buildings often have obsolete mechanical and electrical systems, which consume large

amounts of energy, while others have problems with roofing, asbestos, handicapped accessibility, fire codes, or high maintenance and operational costs (Brubaker, 1991).

Honeyman (1998) stated that the physical condition of America's school buildings is questionable at best. Honeyman described a joint report from January of 1983 undertaken by the American Association of School Administrators that first described the poor condition of America's school buildings. The study concluded that many school buildings are either inadequate to house current student populations, inadequate to house current modes of instruction or require major repair or renovation. The results of the study indicated the inadequacy of many school buildings across all criteria and cite facilities that are unsafe for occupancy by students and teachers. Although proportions of old buildings vary greatly, almost 30% of all school buildings are approaching the end of their useful life at 50 years. The problem of deteriorating and inadequate schools is enormous and the condition of school facilities will become the educational issue of the future. For example, educational districts throughout the country operate school buildings that are often unsafe, inadequate for enrollment and inaccessible to special populations of students.

Degree of Preparedness for Crisis

Metal detectors became a popular tool for fighting school violence. Nevertheless, The Centers for Disease Control and Prevention say that metal detectors "have no apparent effect on the number of injuries, deaths, or threats of violence" in schools. Metal detectors have many limitations. Most schools only spot-check because scanning every student would take too long. Also, students can conceal weapons under their clothing items such as a heavy belt buckle or beat the system in other ways. The

presence of metal detectors may affect the students' attitudes toward school and create an us-against-them mentality. Other actions that schools have taken to prevent violence are to eliminate places where weapons can be hidden. Some districts have outlawed book bags, or ruled that they must be transparent so that the contents are visible. Others schools have eliminated lockers. The simple act of providing hall monitors, placing teachers or security officers at school entrances, or using television surveillance can reduce a perpetrator's ability to act without detection. Others school districts have used armed guards, patrol dogs, or police officers to secure the school. Communication tools such as intercoms or two-way radios can also help (Day, 1996).

According to Hoffman (1996) metal detector programs are fairly new and have undergone some limited evaluation. Early results indicate that students who attended high schools with metal detector programs were as likely as students who attended schools without such programs to have carried a weapon anywhere, but were less likely to have carried a weapon inside a school building or while going to or from school. Although metal detectors may reduce the number of weapons that come onto school grounds, they do not appear to reduce either weapon-carrying off of school property or violent behavior such as threats or physical fighting at or away from school. New York City Schools have reported some success with their metal detector program. Weapon-related incidents have decreased, school attendance has increased, and students reported an increased sense of security as a result of the metal detector program.

Socioeconomic Status

Fox and Pierce (1994) found that issues of violence and behavioral problems are prominent in minority communities. This problem is likely to increase in the near future. For example, by the year 2005, the number of teenagers aged 15-19 is likely to increase by 23%. African American teens alone will increase by an estimated 28%, and the Latino American adolescent population is estimated to increase by 47%. Schools with high percentages of African American students tend to express greater needs for violence prevention programs. In addition, the number of children living in poverty in the United States is likely to increase through at least the year 2020 (Pallas, Natriello, & McDill, 1989). Researchers document that socioeconomically disadvantaged adolescents face more socio-emotional and academic problems than adolescents from more disadvantaged backgrounds (Fontenot, 1993). Thus any relations among ethnicity, socioeconomic status, and violence are likely to remain important social issues in the future.

Size of Enrollment

Irmsher (1997) reported that a higher percentage of students, across all socioeconomic levels, were successful when they were part of smaller, more intimate learning communities. Females, nonwhites, and special-needs students, whether at risk, gifted, exceptional, or disadvantaged, were all better served by small schools. Security improves and violence decreases, as does student alcohol and drug abuse. Meier (1995) cited seven reasons why schools of 300 to 400 students work best: governance, respect, simplicity, safety, parent involvement, accountability, and belonging.

Violent outbursts were highly unlikely in a small school setting for two reasons: First, school is a community where students feel a sense of belonging. Second, teachers

and administrators know their students. Klonsky says the problem of school violence will not be solved with metal detectors or beefed up security. Schools need to be made smaller. Klonsky adds that a minimal decrease in the variety of classes has been far outweighed by the many important benefits gained such as higher student achievement, greater visibility of students, reduced violence and disruptive behavior, improved attendance and graduation rates, and increased teacher satisfaction (Klonsky, 1995).

Houston (1998) stated that it is time to start pushing for smaller school settings. It is clear from the research from recent years that smaller is better. It is better academically, it is better socially, and it is certainly better for maintaining an orderly environment. Houston stated that it is ironic that at the very time when students' psyches are most fragile as they enter the teen years, and where those who are troubled become the most volatile, is the time when we place kids in large, impersonal environments. Our secondary schools are often the opposite of the "Cheers" bar. They are places where no one knows the names of children particularly those who are withdrawn and living in their own inner world. Again, these lost children tend to be the profile of those most likely to lash out in an insane rage.

Principals were more likely to perceive at least one discipline issue as a serious problem in high schools with enrollments of more than 1,000 students. Thirty-eight percent of principals in large schools reported some serious discipline problems compared with 15% of principals in medium-sized schools and 10% of principals in small schools. Principals in large schools were more likely to report student tardiness as a serious or moderate problem than those in medium-sized and small schools. Student absenteeism/class cutting was also more of an issue in large schools, with 53%

of these schools compared with 24% of medium schools and 19% of small schools considering it a serious or moderate problem. Tobacco use was also more frequently regarded as a serious or moderate problem in large schools (Principals' Perceptions of Discipline Issues in their Schools, 1998).

McPartland, Jordan, Legters, and Balfanz (1997) described how the creation of small, caring learning communities transformed the climate at Patterson High School. The halls and stairways are now safe places, students are in class when they should be, teachers teach with their doors open, and decorations or posters in the building remain up and graffiti-free. Surveys show that before the reforms, 85% of the faculty agreed that “The environment at this school is not conducive to learning.” Now, 10% agree. Before the reforms, only 13% agreed that “This school seems like a big family, everyone is so close and cordial.” Now, 67% agree. Most encouraging is the upsurge in student attendance. It has risen from an average of 70% to 80% daily, while no other high school in the district has improved more than a point or two. As attendance has gone up, so too have student promotion rates from the 9th grade. Most recently, 80% of students earned enough credits at the end of the year to reach 10th grade, compared to 35% before the reforms were instituted. Patterson’s experience shows that students will exhibit better behavior and more respect for their teachers and school building when they become members of a smaller learning community.

Findings from a study by Lee (1996) found that enrollment size has a stronger effect on learning in schools with lower SES students, and also in school with higher concentrations of minority students.

Corley (1991) believed that small schools have indisputable benefits for student achievement, attendance and safety, as well as for teacher collaboration, teacher morale and a school-wide sense of community. The studies showed that small schools are significantly more likely to be violence-free than large ones, and that students are less likely to dropout of small schools. The principals of the small schools network find that the small size provides their schools with many important advantages. First, small schools are readily able to innovate and make changes. Second, working in a small school helps teachers to build a professional community. Third, small schools allow education to take place on a “human scale,” with consideration for the needs of each individual student.

Intelligence

Contemporary research consistently found a relationship between IQ and delinquency. Hirschi and Hindelang (1977) reported the average delinquent has an IQ about eight points lower than law-abiding juveniles. They also reported that IQ was associated with the type of crime likely to be committed. Bribers, embezzlers, and forgers score higher than auto thieves, burglars, and substance abuse offenders who, in turn, score higher than those who commit assault, murder, and rape (Crews & Counts, 1997).

Day (1996) reported the findings of a study done by Wilson, professor of public policy at University of California, Los Angeles. Professor Wilson found certain characteristics that young frequent offenders tend to share, including having a low verbal intelligence quotient (IQ) and doing poorly in school; not having many friends; having a criminal for a parent; experimenting with drugs at an early age; being impulsive; and

having difficulty understanding other people's feelings. Researchers have examined the connection between criminal behavior and lower than average IQ. The incidence of mental retardation has been estimated to be above thirty percent of all criminal offenders. The average IQ of convicted criminals is ninety-two, ten points lower than the average for law-abiding citizens. IQ scores are particularly low among repeat offenders. Moffitt, a psychologist at the University of Wisconsin-Madison, has said that "Our results also suggest that poor verbal ability is the 'active ingredient' for delinquency in the (overall) IQ." In contrast, young people who have been raised by abusive, neglectful parents or who live in high-crime areas, but do not become criminals have higher than average IQs. Learning disabilities and other conditions may also play a part in violent behavior. It has been estimated that forty percent of the United States prison population has a learning disability. Attention Deficit Disorder with Hyperactivity during the teenage years can also be a predisposing factor in the development of problems such as vandalism, theft, substance abuse, assaults, and other crimes.

On the contrary, Sandhu and Aspy (2000) stated that violent children generally have average or above-average intelligence. Some even surpass their peers as genius. Rarely are any of these violent students or young killers mentally retarded. However, they are mostly underachievers, performing poorly in academics and experiencing severe educational difficulties. These problems are not because they are not intelligent enough, but because they are not motivated to learn and do not actively participate in academic activities.

Hirschi and Hindelang (1977) reported the importance of limited intelligence and school achievement as risk factors for child aggression and violence. For example,

longitudinal research has demonstrated the relationship between low verbal intelligence, such as poor problem-solving skills and poor social skills (Moffitt, 1993). This association remained the same even after controlling for the influence of poverty, and remained stable from age 8 to 30. In general, studies show that IQ scores for delinquent youth are about 8 points lower than the general population, regardless of the individual's race, family size, or economic status (Rowe, 1994). The likelihood that an adolescent will commit a crime again in the future, is also related to IQ. In one study, 20% of adolescents with IQ s below 90 were rearrested compared to only 9% of adolescents in the 91 to 98 IQ range (West & Farrington, 1973).

School Achievement

According to Moore and Warner (1998) the facility in which students learn and teachers teach did affect achievement. They described the results of a study completed by Dr. Lorraine Maxwell of Cornell University on the effects of school renovation on Syracuse City School students. Her findings revealed a correlation between newer facilities and student performance levels. A statistically significant relationship between upgraded facility conditions and higher math scores was found. The relationship was strongest among sixth-grade students. Reading scores were not significantly correlated with facility condition. One explanation for this may be the influx of students for whom English was a second language. A more in-depth analysis might prove or disprove this hypothesis. In addition, results suggest decreased student performance during the renovation process, raising concerns about the timing of renovation projects.

Good and Brohy (1995) described alienated students as reluctant learners who reject the school and all its activities. Some of them were openly hostile and defiant and

create disruptions. Typically, teachers and their peers either are indifferent toward them or reject them. These students are potential dropouts.

Social Judgment

According to Sandhu and Aspy (2000), violent adolescents generalized their anger to all their activities. They may be geniuses and very creative, but they use their intelligence and talents to carry out destructive activities. Their creativity is a negative creativity. Their values, priorities, and motivations are generally deviant and abnormal. Where others seek fame, the alienated seek notoriety. Violent children and adolescents are fearless and are not much concerned about shame and self-respect.

Baker and Rubel (1980) theorized that certain factors intrinsic to the destruction of objects in the physical environment tend to elicit positive affective responses and positive thoughts about the self. These researchers believe that people engage in destructive acts for both “fun” and “profit.” They believe that destruction is pleasurable because of the aesthetic variables involved in it, and it is useful because it enhances the individual’s perception of himself with respect to control and competence. In turn, both these psychological consequences of destruction have implications for a person’s social identity, for his self-concept, and for evaluative responses from other people.

According to Bybee and Gee (1982) there were five components that influence alienation. They believe there were significant relationships between these components and the school factors contributing to violence and vandalism. First, powerlessness is the individual’s belief that he or she is unable to influence his or her world under the present rules. Second, meaninglessness is the lack of a clear set of values by which to interpret the world. The school does not make sense for some students, especially when rules are

indefensible and arbitrary and the curriculum irrelevant. Third, normlessness is the breakdown in the regulatory power of social values over individual behavior. There is also the expectation that personal needs and goals can only be fulfilled through socially unapproved behavior. Fourth, isolation is the individual's feeling of being apart from the social institution. The clearest example is the large and impersonal school. Finally, self-estrangement is an individual's reliance on external rewards such as grades or leadership positions and the frustration when he or she does not receive the expected grades or positions of leadership.

Research by Kadel and Follman (1993) suggested that students with learning disabilities have an increased tendency to engage in delinquent behaviors. If a learning disability was not detected or was not addressed through alternative educational strategies, students reacted inappropriately to frustrations and failures in school. Some students may display a tendency to act more aggressively than other students. This behavior may be learned or result from a lack of social and conflict-resolution skills. Research shows that young children who are allowed to express aggressive impulses inappropriately may develop a habit of aggressive behavior that is difficult to change when they are older. Characteristics of aggressive youth include attributing hostility to others, not trying to understand all the facts of a situation, and having no nonviolent solutions from which to draw in difficult or stressful situations.

According to Dodge, Price, Bachorowski, and Newman (1990) another problem for aggressive, delinquent, or violent youth was their tendency to make cognitive misattributions and to have impaired social judgment. Aggressive preadolescents, relative to average peers, were found to attend to fewer relevant interpersonal cues before

interpreting the meaning of others' behavior. The aggressive preadolescents tended to be more likely to attribute others' behaviors to hostile intentions and to report lower levels of fear and sadness and higher levels of anger when labeling their responses to various interpersonal situations. These same preadolescents were likely to expect that aggressive solutions would successfully reduce aversive behavior from others and would gain tangible rewards (DuRant, Treiber, Goodman, & Woods, 1996). Aggressive and violent adolescents were more likely to label neutral cues in their environment as hostile, thus increasing the likelihood that they would react aggressively to a particular situation (Graham & Hudley, 1992).

Family Factors

Duhon-Sells (1995) stated that American society has virtually abandoned its children. Children are too often left emotionally abandoned, physically alone, and unattended by the adults who are responsible for caring about them. This abandonment is not restricted to children of poverty or to children whose parents do not love them. Some of the most neglected children are in middle- and upper-class households. While their physical needs are being met, and they may even be showered with a wealth of material things, many of them are emotionally starved. The problems are caused when parents and adults do not give children the emotional support they need. If children grow up not being cared about and feeling emotionally insecure, they will not have the will, ethics, or skills to care about others. All children need to feel emotionally secure. If there is no emotional support in the home, children will turn to their friends for support. After all, family and friends are the primary sources of social grounding for individuals. Therefore, much of what we see as violence in children may be psychological responses

to emotional abandonment, ways of letting the world know about their emotional pain, and means of fighting back. The reaction is most certainly a cry for help. To respond to this appeal with punitive strategies is not productive. Rather than diminish violence, such a strategy may increase it instead.

Research by Thurston (1964) found the following factors to most commonly appear in the homes of children who are identified as “constant classroom deviants.” The discipline of the father is lax, overly strict, or erratic. The supervision by the mother is at best only fair or it is downright inadequate. The parents are either indifferent or even hostile toward the child. The family members are scattered in different activities and operate only somewhat as a unit or perhaps not at all. The parents find it difficult to talk things over regarding the child and the husband-wife relationship lacks closeness, equality or partnership. The parents find many things to disapprove of in their child. The mothers are not happy with the communities in which they live. The parents resort to angry physical punishment when the child does wrong. The parents believe they have little influence on the development of their child. The parents believe that other children exert bad influences upon their child. The parents’ leisure time activities lack much of a constructive element; and the parents, particularly the father, report no church membership (Baker & Rubel, 1980).

Although a bad childhood does not always cause an evil personality, it can contribute to it. When the child’s emotional needs are neglected and no recognition is given for achievement or love, the result can be “narcissistic rage” in adulthood. This rage is described as “The need for revenge, for righting a wrong, for undoing a hurt by

whatever means, and a deeply anchored, unrelenting compulsion in the pursuit of all these aims”(Day, 1996).

Baker and Rubel (1980) reported that family climate was a critical factor in the rearing of the young. A study of 10,000 high school graduates conducted by Berkeley's Center for the Study of Higher Education concluded that a positive family climate is directly related to a student's academic motivation, which is itself connected with such other attributes as persistence and behavior. Further support for the critical value of the home environment comes from a comparison of high school dropouts and graduates admitted to college. As early as the first grade, the two groups differed significantly from each other with regard to such things as academic performance, behavior ratings, absenteeism, and IQ. Family background is the likely cause of much of the variance.

Family factors seem to be the most powerful predictors of aggressive behavior in children. Two broad areas of family characteristics have been identified as being associated with serious aggressive and antisocial behavior and include parental management skills and family relationship characteristics. Parental management skills refer to supervision and discipline practices. Gerard and Buehler (1999) found that poor parenting quality, the most consistent predictor of youth problem behaviors, is detrimental to youth well-being regardless of other positive familial processes and resources considered important to youth adjustment. Poor monitoring skills and harsh discipline practices have been consistently linked to childhood aggression (Sandhu & Aspy, 2000).

Batsche and Knoff (1994) postulated that "a bully at school is a victim at home" which implies victimization at home is a precursor to the display of aggression at school.

Also, disruptions of the family affect child rearing and hence children's aggressive tendencies. Farrington (1978) found marital disharmony in families with boys at age 8 was associated with aggression in school at ages 8 to 10 years. Similarly, separation of a child from a parent before age 10 was associated with aggression during that same interval and was predictive of aggression at school at ages 12-14.

Research by Patterson (1992) found that parents of aggressive children punish more frequently, but inconsistently and ineffectively. They also tend to negatively reinforce manipulative child behavior and fail to adequately reinforce positive, prosocial behavior. Children learn that aggressive behavior often leads to parents' giving them what they want. One risk is that this learned style of interaction may generalize for the child from home to school. This behavior would become part of a child's repertoire with peers and teachers.

Parents who are harsh, rejecting, and neglecting also have children at higher risk for engaging in aggressive, violent behavior. Parental harshness has been found to increase the risk of delinquency, possibly by increasing child resentment and defiance, which is then expressed through truancy, poor school performance, and antisocial behavior (Earls, 1994).

Exposure to Violence

Widom (1991) stated that children and adolescents are being exposed to more frequent and more intense levels of violence at school. Evidence is mounting that exposure to violence and particularly victimization by violence are associated with increased risk of perpetrating violence. For example, Rivara, Shepherd, Farrington, Richman, and Cannon (1995) showed that adolescents victimized by assault were more

likely to have a history of criminal activity or to develop criminal behavior subsequent to their assault. In a study of urban black adolescents, previous victimization by violence and corporal punishment was associated with self-reported use of violence (DuRant, Cadenhead, Pendergrast, Slavins, & Linder, 1994). Widom (1991) found that abused or neglected youth were 38 percent more likely to be arrested for a violent crime by the time they were adults, compared to children who had not been mistreated. Singer, Miller, Slovak, and Frierson (1997) showed that even after controlling for the effects of demographic variables, parental monitoring, and watching aggressive television, recent violence exposure was the most significant predictor of self-reported violent behavior among third to eighth grade students. Farrell and Bruce (1997) also showed that exposure to community violence for urban sixth graders was related to their self-reported violent behavior, although they did not find increases over time in frequency of violent behavior related to violence exposure.

Influence of Media

Studies by Hoffman (1996) stated that American television, music videos, movies, and video games are the most violent in the world. According to the learning theory, exposure to media violence influences children's violent or aggressive behavior by demonstration (modeling), reward (reinforcement), and practice (rehearsal). Studies link television violence with aggressive behaviors in children. This negative effect is evident in children from single-parent households and from low socioeconomic groups. The major effects of violence, antisocial behavior, and aggression in the media can be placed into the following categories: (1) Displacement of Healthy Activities: The three to four hours per day of watching television displaces healthy activities including

exercise, play, reading, and homework; (2) Modeling of Inappropriate Behavior: Over one thousand studies and reviews suggest that media violence is a cause of or contributing factor to real-life violence. Behavior is modeled by role models and is assimilated by impressionable children; (3) Disinhibition: Violent programming results in aggressive, but nonimitative behavior. Such media presentation results in antisocial behaviors that have been generalized into aggressive activities; (4) Desensitization: The daily repetition of the violent television shows, video games, and music videos viewed by children results in indifference to the suffering of the victims of aggression. Negative effects include blaming the victim and accepting the current high levels of violence in the media; (5) Aggressive Arousal: Media violence and antisocial behaviors arouse aggressive responses in individuals or groups that are exposed; and (6) Association with Risk-Taking Behavior: Frequent commercial advertising of unhealthy products increases the use of tobacco and alcohol. Other risk-taking behaviors, including unprotected sexual intercourse and the use of recreational drugs, are also portrayed in the media.

It is estimated that by the time a child reaches the age of 18 he or she will have witnessed over 200,000 acts of television violence, including 33,000 murders (APA, 1993). Violent acts, defined as acts intended to injure or harm others, appear approximately 8 to 12 times an hour on prime time television and about 20 times an hour on children's programming (Sege & Dietz, 1994). A review of the extent of violence on commercial and public television indicates that 67% of children's programs portray violence in a humorous context. Further, only 5% of violent acts on children's programs show any long-term negative consequences of the violence (Mediascope, 1996).

Risk-Taking Behaviors

According to Hoffman (1996) the assignment of status to young males based on toughness and fighting skills was an enduring theme of gang life. Gangs present an opportunity for involvement in peer groups during adolescent development. Gangs are social groups that value a display of masculinity, risk taking, and autonomy. Violence is part of the collective identity of the gang and its members.

According to Day (1996), for some young people, gangs provided the only emotional and physical security that they have ever known. Gang membership can provide respect, power, family, and protection. Unfortunately, gang membership can also be very dangerous. Many gangs are not social or ethnic clubs, but crime organizations that may control area drug markets or extortion operations. The male gang members commit six times more crimes than non-gang members. Factors that motivate young people to join gangs include poor home situations (lack of supervision, drug use by parents, emotional isolation) and poor community environment (low community spirit, deteriorated buildings, few community resources). In addition, gangs are appealing to rebellious teenagers, particularly those who have a weak self-image, few goals, and who fear physical harm. Gangs seem exciting and also appeal to risk-taking teenagers. Some experts have gone so far as to say that gangs attract teenagers who enjoy crime and violence.

Sandhu and Aspy (2000) reported that to soothe the pain of loneliness, neglect, and emptiness, abused and neglected adolescents were subject to violence, and they abused drugs and alcohol to a much greater degree than other adolescents. Several studies have reported findings that confirm a positive correlation between substance

abuse and negative affect. This negative affect includes feelings such as anger, anxiety, and alienation.

Brendtro & Long (1995) indicated that a recent report to Congress tied alcoholism to 49% of murders and 52% of rapes in the United States. These authors add that by "9th grade, 90% of young people have tried alcohol, and a third of the 12th graders are binge drinkers." Other research indicates that when students feel that drugs are available at school, they are almost twice as likely to report fears of being attacked in school. Such statistics have led researchers on violence to conclude that issues such as alcohol and drug use during adolescence are important variables in understanding the roots of violence and behavioral problems during early adolescence (Bastian & Taylor, 1991).

Traditional Approaches to Safety

According to Hoffman (1996), in today's society, the ultimate task of an effective school security program must be understood as restoring the sense of community that makes a school a relatively safe place, because it is a self-protecting place based on the positive commitment of its members to each other. An effective school security program must be seen as part of a long-term community-building effort in the schools. The list of causes of violence is long, as is the list of remedies/solutions. The responsibility for change rests with every facet of our society including gun manufacturers, filmmakers, educators, parents, police, health providers, legislators, and the media. Our national community must agree to remove guns and lethal weapons from our children's lives, to end violent images in film and video, to educate parents and children in the skills of nonviolence, and to stop the culture of violence that is threatening to overwhelm us.

Day (1996) stated that many kinds of programs have been developed in an attempt to address school violence. The programs include security measures, disciplinary actions, conflict resolution training, peer mediation programs, parent involvement, educational programs, sensitivity training, and support groups. Unfortunately, there is no magic answer. There is no one program, no silver bullet to solve the problem of school violence. The schools are going to have to work with families and the communities.

Studies by Elliott, Hamburg, and Williams (1998) reported that in a national survey of secondary school principals, one third reported they had already implemented some type of violence prevention or safe school program; another third indicated they were planning to implement such a program. Most of the remaining principals reported they were either unsure of the need for such a program or of which programs were effective. There are some prevention efforts sponsored by both federal and state governments, by private foundations, and by private businesses. At the federal level, the major initiative involves the Safe and Drug-Free Schools and Communities Act of 1994. This act provided \$630 million in federal grants during 1995 to the states to implement violence (and drug) prevention programs in and around schools, in order to help the states meet the seventh National Education Goal of the America 2000 initiative. Most of the violence prevention programs employed in the schools include conflict resolution curricula, peer mediation, individual counseling, metal detectors, and locker searches and sweeps. These measures have either not been thoroughly evaluated or have been evaluated and found to be ineffective. It remains to be seen if any significant reductions in violent offending will result from the Safe and Drug-Free Schools and Community initiative. Currently, there are two types of administrators. Those administrators who

have already faced a crisis and those administrators who will at some point in their careers. A school administrator without a safe school plan is like a pilot without a flight plan. Elliott (1998) suggests that before writing a safe schools plan, it is important to look at federal laws such as the Federal Gun-Free School Zone Act of 1994. This act requires school officials who wish to receive federal funds to expel, for a minimum of one year, any student who brings, possesses, or uses a firearm on a public school campus. Also, administrators should review the U.S. Constitution and the Civil Rights Act, as well as the Drug-Free Schools and Communities Act of 1986, which requires schools to provide prevention programs for alcohol, tobacco, and other drugs to all students. A variety of other laws pertaining to the Americans with disabilities and special education (such as the Individuals with Disabilities Education Act, or IDEA) and relevant U.S. Supreme Court cases should be reviewed.

According to Goldstein (1994), there were nine categories of potential solutions to school violence. The nine categories include administrative, teacher focused, curriculum, community based, legal solutions (state and federal), physical school and facility alterations, security personnel, student oriented, and parent oriented.

Administrative-oriented interventions: Administrators are the key figures in preventing the spread of violence in schools. The principal must be observable and accessible. In working with students, it is crucial that administrators are skilled in verbal and especially nonverbal communication with students. The development of a manual for handling discipline problems is an important step for reducing violence in a school.

Teacher-focused intervention: Teacher-oriented interventions include the following: (a) individualized teaching strategies, (b) firm, fair, consistent discipline, (c) increased teacher-parent interaction, (d) enhanced teacher knowledge of problem-behavior students, (e) low teacher-pupil ratio, (f) increased teacher-student nonclass contact, (g) aggression-management training for teachers, (h) teacher-student-administrator group discussion, and (i) instructions on dangerous settings.

Curriculum-oriented interventions: Because there is a direct relationship between classroom demands and potential student frustrations, and consequent discipline problems, it is imperative that each staff member devotes time to the selection of curriculum material that gives each student the best opportunity to succeed.

Community-oriented interventions: If community assistance is to be effective, there must be clearly defined guidelines. The following interventions can be effective in combating violence: (a) adopt-a-school programs, (b) open schools to community use after hours, (c) improved school-juvenile court liaison, (d) community education programs, (e) more effective programs and training for disruptive students, (f) school-community resource coordinator, (g) vandalism-prevention education, and (h) vandalism watch on or near school grounds via mobile homes.

Legal-interventions (State and Federal): One method of prevention that has proved effective is having students and parents be held legally responsible for students' behavior.

Physical school interventions: (1) reduce school size, (2) reduce class size, (3) employ personal alarm system, (4) use electronic weapons detection, (5) design open and observable school buildings, (6) close off isolated areas, and (7) deploy alarm systems.

Security personnel intervention: A police officer working with students at the elementary, middle, and high school levels can be effective in reducing violence.

Student-oriented interventions: Every school should have some type of program to assist students in adjusting to a world of challenge.

Parent-oriented interventions: Parents must accept equal responsibility in resolving their children's discipline problems. (p.233)

Schwartz (1996) reported that concern about increasing youth violence is being channeled into a variety of innovative, and potentially effective programs around the country. Although components vary depending on the particular needs of the community, the most effective programs:

- Make an accurate assessment of the existence of violence and, especially, gang activity.
- Use all resources in the community, including social service and law enforcement, and not just rely on school officials to deal with the problem.
- Incorporate family services into both community and school programs.
- Intervene early in a child's life.
- Include not only anti-violence strategies but also positive experiences. (p.6)
- Create and communicate clearly defined behavior codes, and enforce them strictly and uniformly.
- Prepare to engage in a long-term effort.

Safe Schools, Safe Students (1998) was based on a comprehensive review of the prevention literature on violence, juvenile delinquency, and substance abuse. The study identified nine critical elements of violence prevention.

1. Activities designed to foster school norms against violence, aggression, and bullying.
2. Skills training based on a strong theoretical foundation such as the Social Learning Theory.
3. A comprehensive, multifaceted approach, including family, peer, media, and community.
4. Physical and administrative changes to promote a positive school climate.
5. At least 10-20 sessions during the first year of a well-organized, well-implemented program.
6. Interactive teaching
7. Developmentally tailored intervention which recognize that risk factors for violent behavior appear to be age and stage specific.
8. Culturally sensitive material appropriate to the racial, ethnic, and demographic characteristics of highly diverse student populations.
9. Teacher training to insure that programs will be implemented as intended by the program developers.

Research has raised serious doubts about the following violence prevention strategies:

1. Scare tactics that show pictures or videos containing violent scenes.
2. Segregating aggressive or anti-social students into a separate group.
3. Instructional programs that are too brief and not supported by a positive school administration.
4. Programs that focus exclusively on self-esteem.
5. Programs providing only didactic information without helping students develop skills necessary to avoid and handle conflict. (p.3)

Summary of the Literature in Table 1

Table 1

Summary of the Related Literature As Compared to the Research Issues

Research Issues	Related Literature
Design Elements	Astor, Meyer, Behre, and Bortz (1996) Castaldi (1994) Day (1996) Hoffman (1996) Newman (1973) Sabo (1993) Tanner (1998) Violent Schools-Safe Schools Study (1977)
Size of Enrollment	Corley (1991) Houston (1998) Irmscha (1997) Klonsky (1995) Lee (1996) McPartland, Jordan, Legters, and Balfanz (1997) Meier (1995) Principals' Perceptions of Discipline Issues in their Schools (1998)
Location of Facility	Elliott, Hamburg, and Williams (1998)
Age of Facility	Brubaker (1991) Chan and Morgan (1996) Honeyman (1998)
Degree of Crisis Preparedness	Day (1996) Hoffman (1996)
Student Characteristics	
Socioeconomic Status	Fontenot (1993) Fox and Pierce (1994) Pallas, Natriello, and McDill (1989)
Intelligence	Crews and Counts (1997) Day (1996) Hirschi and Hindelang (1977) Moffitt (1993) Rowe (1994) Sandhu and Aspy (2000) West and Farrington (1973)
School Achievement	Good and Brohy (1995) Moore and Warner (1998)
Social Judgment	Baker and Rubel (1980) Bybee and Gee (1982)

	Dodge, Price, Bachorowski, and Newman (1990) DuRant, Treiber, Goodman, & Woods (1996) Graham and Hudley (1992) Kadel and Follman (1993) Sandhu and Aspy (2000)
Family Factors	Baker and Rubel (1980) Batsche and Knoff (1994) Day (1996) Duhon-Sells (1995) Earls (1994) Farrington (1978) Gerard and Buehler (1999) Patterson (1992) Sandhu and Aspy (2000) Thurston (1964)
Exposure to Violence	DuRant, Cadenhead, Pendergrast, Slavins, and Linder (1994) Farrell and Bruce (1997) Rivara, Shepherd, and Farrington, Richmond, and Cannon (1995) Singer, Miller, Slovak, and Frierson (1997) Widom (1991)
Influence of Media	APA (1993) Hoffman (1996) Mediascope (1996) Sege and Dietz (1994)
Risk-taking Behaviors	Bastian and Taylor (1991) Brendto and Long (1995) Day (1996) Hoffman (1996) Sandhu and Aspy (2000)
Traditional Approaches to Safety	Day (1996) Elliott, Hamburg, and Williams (1998) Goldstein (1994) Hoffman (1996) Schwartz (1996) Safe Schools, Safe Students (1998)

CHAPTER 3

PROCEDURES

One objective of this study was to determine if there was a relationship between the number of design elements present in the school specifically related to school safety and the discipline referral rate. Another objective was to determine if there were any significant differences among the schools' discipline referral rate and their size, age, and location. The next objective was to determine if there was a relationship between the degree of crisis preparedness of a school and the school's discipline referral rate. The study also focused on determining which student characteristics were perceived by administrators as being factors that contribute to school disturbances/discipline referrals. The final objective of the study was to identify strategies that have been effective in reducing the number and frequency of school disturbances in high schools in Georgia.

Objectives were measured based upon the relationships between variables identified on the administrative survey completed by principals in high schools in Georgia. The administrative survey was based on an instrument entitled, "School Safety Audit: Protocol, Procedures, and Checklists" (1997) from the Virginia Department of Education. The independent variables in this study included the interior and exterior features of the school, the schools' size, age, location, and the degree of crisis preparedness. The dependent variable was the discipline referral rate. The divisions of this chapter include population and sample, instrumentation, data collection, research questions, and data analysis.

Population and Sample

The population for this study included the 316 public high schools in the state of Georgia with grades 9-12. A systematic random sample of 200 of those schools was used for this study. The schools were selected using an alphabetical ordering of the first 200 high schools in the 2001-2002 Public School Directory for Georgia. Each principal in the 200 high schools was asked to complete the survey instrument included in the Appendix.

Instrumentation

Development of the Instrument

The survey used in this study was modified from the instrument used in the Virginia study. First of all, validity had to be determined. Validity has many facets. The main concern in this study was that the instrument would help to gather the data necessary to answer the research questions with certainty. To ensure this aspect, after modifying the Virginia instrument, 10 school administrators were asked to respond to the instrument to establish its clarity and comprehensiveness. The suggested changes were made to the survey prior to distribution. The suggested changes included asking for a total number of assignments to ISS and OSS rather than an average for the 2000-2001 school year. The question concerning the presence of stairwells was eliminated since that information could be gathered from the number of levels of the school building. Finally, the wording of the description for modified restrooms was changed from doorless entry to doorless entries. Upon receiving instruments from the sample, a split-half reliability coefficient was used to establish an index of stability and consistency.

Data Collection

A cover letter explaining the purpose of the study was sent to the principal of each school selected randomly to participate in the study. Each principal was asked to complete the survey and return the completed survey in a self-addressed, stamped envelope. A copy of the cover letter and the administrative survey is included in the Appendix. The survey was divided into five sections. Section one identified the exterior design elements present in each school. Section two identified the interior design elements in each school. Section three identified the elements related to the degree of crisis preparedness for each school. Section four revealed the total number of discipline referrals for each school. Section five of the survey identified specific information about each school concerning safety and security on campus.

Research Questions

Research questions ascertained if there was a statistically significant difference among the independent variables. The questions were:

1. What is the relationship between the number of design elements present in the school and the discipline referral rate of the school?
2. Are there any significant differences among the schools' discipline referral rate and the schools' size, age, and location?
3. Is there a relationship to the degree of crisis preparedness of a school and the discipline referral rate of the school?
4. Which student characteristics are perceived by administrators as being factors that contribute to school disturbances/discipline referrals?

5. Which strategies have been effective in reducing the number and frequency of school disturbances in high schools in Georgia?

Data Analysis

The independent variables in this study included the interior and exterior features of the school, the schools' size, age, location, and the degree of crisis preparedness. The dependent variable was the discipline referral rate. First, a frequency count of all the responses was completed to provide a description of the data, including the interior/exterior design elements, size, age, location, and the degree of crisis preparedness for each school.

In order to determine whether a systematic linear relationship existed between the number of exterior design elements and the discipline referral rate for each school, the Pearson Product Moment Correlation was used. The Pearson Correlation was checked for statistical significance at the .01 and the .05 levels. The Pearson Correlation was also used to determine whether a relationship existed between the number of interior design elements present and the discipline referral rate of each school.

In order to determine if there was a significant difference among the schools' discipline referral rate and the size, age, and location of the school, a one way analysis of variance (ANOVA) was used. The Scheffe' test was used post hoc to determine where the statistically significant differences existed among the subgroups. The level of significance of .05 was used to determine the existence of statistical significance. To determine whether a systematic linear relationship existed between the higher degree of crisis preparedness to the discipline referral rate, the Pearson Product Moment Correlation was used.

A frequency and relative frequency distribution table was used to effectively identify the student characteristics perceived by administrators as being factors that contribute to school disturbances/discipline referrals. A bar graph was also used to represent the data from the frequency distribution table in a different form.

An open-ended response question was included in the four-page survey that asked administrators to list effective strategies that had been implemented in their schools that had reduced the number and frequency of school disturbances/discipline referrals. A frequency distribution table was used to identify the most commonly used strategies to reduce violence in high schools in Georgia. A bar graph was also used to represent the data from the frequency table.

CHAPTER 4

PRESENTATION, ANALYSIS, AND INTERPRETATION OF THE DATA

This study addressed the relationship between specific characteristics of high schools in Georgia and the degree of safety/security from school disturbances in those schools. One objective of this study was to determine if there was a relationship between the number of design elements present in the school specifically related to school safety and security and the discipline referral rate of the school. Another objective was to compare the schools' discipline referral rates with their size, age, and location. The next objective was to examine the degree of crisis preparedness of a school and the discipline referral rate of the school. The study also investigated student characteristics perceived by administrators as being factors that contribute to school disturbances/discipline referrals. The final objective of the study was to identify strategies that have been effective in reducing the number and frequency of school disturbances in high schools in Georgia. This chapter provides a presentation, an analysis, and an interpretation of the data.

Descriptive Data

The respondents in this study included 200 randomly selected public high schools throughout Georgia. The schools were selected using an alphabetical ordering of the first 200 high schools in the 2001-2002 Public School Directory for Georgia. A four-page survey was mailed to school administrators to examine the relationship among specific

characteristics of high schools in Georgia and the number and frequency of school disturbances in these schools. A cover letter explained the purpose of the study and included instructions for returning the completed survey. The survey responses also revealed effective strategies currently used by high schools in Georgia to reduce the number and frequency of school disturbances and discipline referrals. Of the 200 surveys distributed, 125 or 63%, were returned. However, only 91 of the 200 (46%) responded with data for the dependent variable (discipline referrals).

Findings Related to the Research Questions

Research Question One

What is the relationship between the number of design elements present in the school and the discipline referral rate? In order to determine whether a systematic linear relationship exists between two variables such as the number of exterior design elements paired with discipline referral rate, the Pearson Product Moment Correlation was used as shown in Table 2. There were 125 schools who reported their total number of exterior design elements and 91 schools who reported their total number of discipline referrals. Therefore, since the dependent variable, discipline referral rate (total number of referrals divided by the total number of students) could only be calculated for the 91 schools reporting their total discipline, these schools were the only ones used in the correlation. The exterior design elements included such things as fenced grounds, trimmed shrubs, defined bus loading areas, supervised drop-off/pick up, adequate lighting, and surveillance cameras. The Pearson Correlation did not show a statistically significant relationship at the .05 or the .01 levels. However, the correlation was .085 ($p=.421$) between the two variables as shown Table 2. This correlation implies that fences,

trimmed shrubs, lighting, surveillance cameras, etc. as noted above do not relate to the rate of discipline referrals.

Table 2

Total Exterior Design Elements and the Discipline Referral Rate

		Discipline referral rate	Sum of exterior elements
Discipline referral rate	Pearson Correlation	1	.085
	Sig. (2-tailed)	.	.421
	Number	91	91

To determine whether a systematic linear relationship existed between the number of interior design elements paired with the discipline referral rate, the Pearson Product Moment Correlation was also used as shown in Table 3. There were 125 schools who reported their total number of interior design elements and 91 schools who reported their total number of discipline referrals. Again, since the dependent variable, discipline referral rate (total number of discipline referrals divided by the total number of students) could only be calculated for the 91 schools reporting their total discipline referrals, these schools were the only ones used in the correlation. The interior design elements included such things as central alarm system, two-way communication, supervised entries, wide corridors, and modified restrooms. The Pearson Correlation did not show a statistically significant difference at the .05 or the .01 levels. The correlation was .170 ($p=.108$) between the two variables as shown in Table 3. The essence of this finding is that a central alarm system, two-way communication, supervised entries, wide corridors, and modified restrooms do not relate to the rate of discipline referrals.

Table 3

Total Interior Design Elements and Discipline Referral Rate

		Discipline referral rate	Sum of interior elements
Discipline referral rate	Pearson Correlation	1	.170
	Sig. (2-tailed)	.	.108
	Number	91	91

Research Question Two

Are there any significant differences among the schools' discipline referral rate and the schools' size, age, and location? In order to determine if there was a significant difference between the schools' size to the discipline referral rate, a one way analysis of variance (ANOVA) was used. The total number of surveys completed by each school size is illustrated in part A of Table 4. A (1) represents schools with a student population less than 500; (2) represents a population of 501-1200 students; (3) represents a student population of 1201-1800; (4) represents a population greater than 1801 students. Mean referral rates ranged from .4454 for the less than 500 student population to .6782 for the greater than 1800 student population as shown in part B of Table 4. In part C of Table 4, the significance level of the size of the school as compared to the discipline referral rate was .367. This does not show a statistical significance at the .05 level. Although there were no statistically significant differences, the rates for smaller schools was .1907 less than its closest rival (schools having from 1201 to 1800 students). Figure 4.1 reveals a description of these means.

Table 4

School Size and Discipline Referral Rate

A. Between-Subjects Factors

		Value Label	Number
Size	1	< 500	12
	2	501-1200	50
	3	1201-1800	22
	4	> 1801	7

B. Descriptive Statistics

Dependent Variable: Discipline Referral Rate

Size	Mean	Std. Deviation	Number
< 500	.4454	.40092	12
501-1200	.7976	.79873	50
1201-1800	.6361	.35457	22
> 1801	.6782	.35073	7
Total	.7034	.64762	91

C. Tests of Between-Subjects Effects

Dependent Variable: Discipline Referral Rate

Source	F	Significance
SIZE	1.068	.367

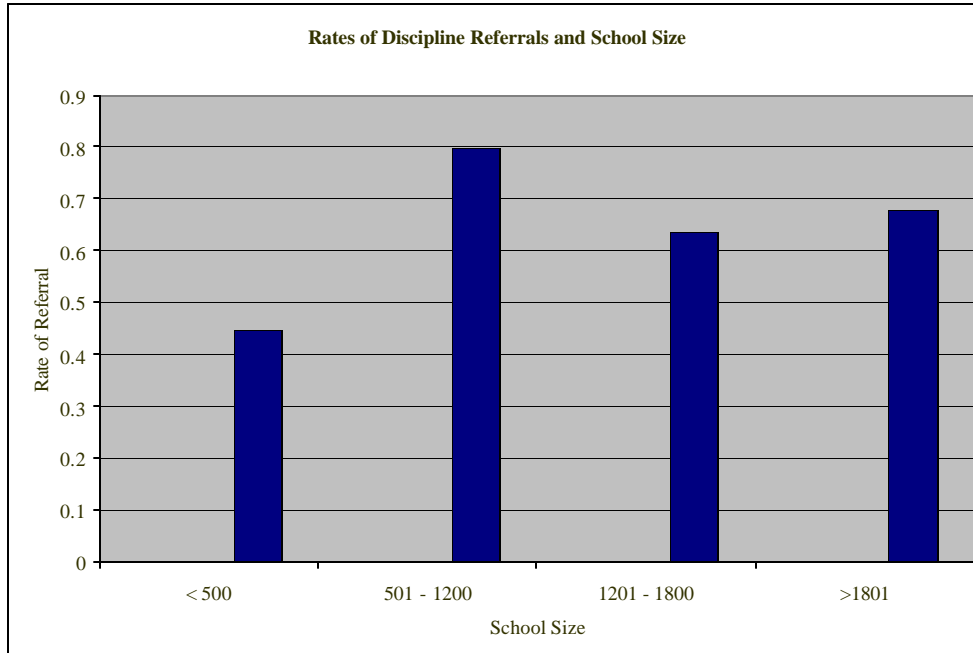


Figure 4.1 A Comparison of Discipline Referral Rates and School Size

To determine if there was a significant difference between the schools' age and the discipline referral rate, a one way analysis of variance (ANOVA) was used. The ANOVA was used to study the mean differences among the groups. The total number of surveys completed by each facility age is illustrated in part A of Table 5. A (1) represents schools with a facility age of 0-5 years; (2) represents a facility age of 5-10 years; (3) represents a facility age of 10-20 years; (4) represents a facility age of 20-30 years; and (5) represents a facility age of 30+ years. In looking at the comparison of one independent variable (school age) on the dependent variable (discipline referral rate), the means were compared as illustrated in part B of Table 5. In part C of Table 5, the significance level of the facility's age as compared to the discipline referral rate is .675 ($F=.584$). These rates are shown in Figure 4.2 where it is noted that the lower rate of

discipline referrals fell within the school age range of 5 to 10 years and the higher rate was in the 20-30 years grouping.

Table 5

Comparison of School Age and Discipline Referral Rate

A. Between-Subjects Factors

		Value Label	Number
Age	1	0-5 years	8
	2	5-10 years	14
	3	10-20 years	15
	4	20-30 years	22
	5	30+ years	32

B. Descriptive Statistics

Dependent Variable: Discipline Referral Rate

Age	Mean	Std. Deviation	Number
0-5 years	.6506	.68476	8
5-10 years	.5319	.33214	14
10-20 years	.6561	.38250	15
20-30 years	.8587	.76809	22
30+ years	.7071	.75337	32
Total	.7034	.64762	91

C. Tests of Between-Subjects Effects

Dependent Variable: Discipline Referral Rate

Source	F	Significance
Age	.584	.675

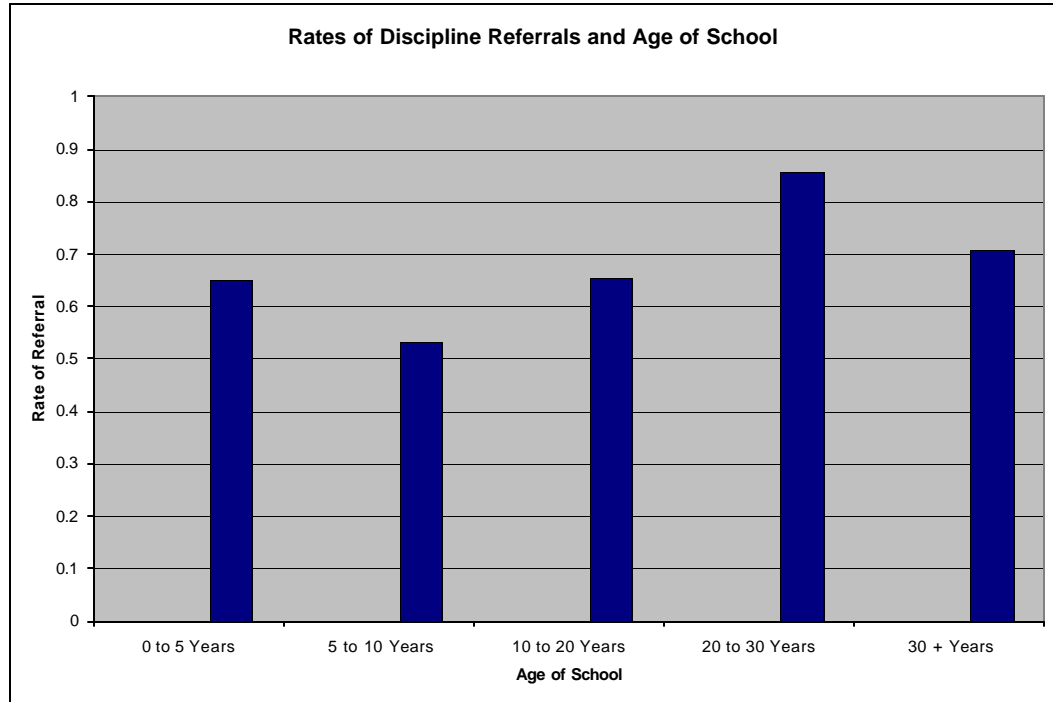


Figure 4.2 A Comparison of Discipline Referral Rates and Age of School

To determine if there was a statistically significant difference between the schools' location to the discipline referral rate, a one way analysis of variance (ANOVA) was used. The ANOVA compared the mean differences among the groups. The total number of surveys completed by each school location is illustrated in part A of Table 6. A (1) represents schools with a rural location; (2) represents schools with a suburban location; and (3) represents schools with an urban location. The means are shown in part B of Table 6. In part C of Table 6, the significance level of the facility's location as compared to the discipline referral rate is .567 ($F=.572$). The rural area had the highest rate of referral (see Figure 4.3).

Table 6

Comparison of School Location and Discipline Referral Rate

A. Between-Subjects Factors

		Value Label	Number
Location	1	Rural	65
	2	Suburban	19
	3	Urban	6

B. Descriptive Statistics

Dependent Variable: Discipline Referral Rate

Location	Mean	Std. Deviation	Number
Rural	.7495	.72666	65
Suburban	.6009	.39746	19
Urban	.5441	.34969	6
Total	.7044	.65118	90

C. Tests of Between-Subjects Effects

Dependent Variable: Discipline Referral Rate

Source	F	Significance
Location	.572	.567

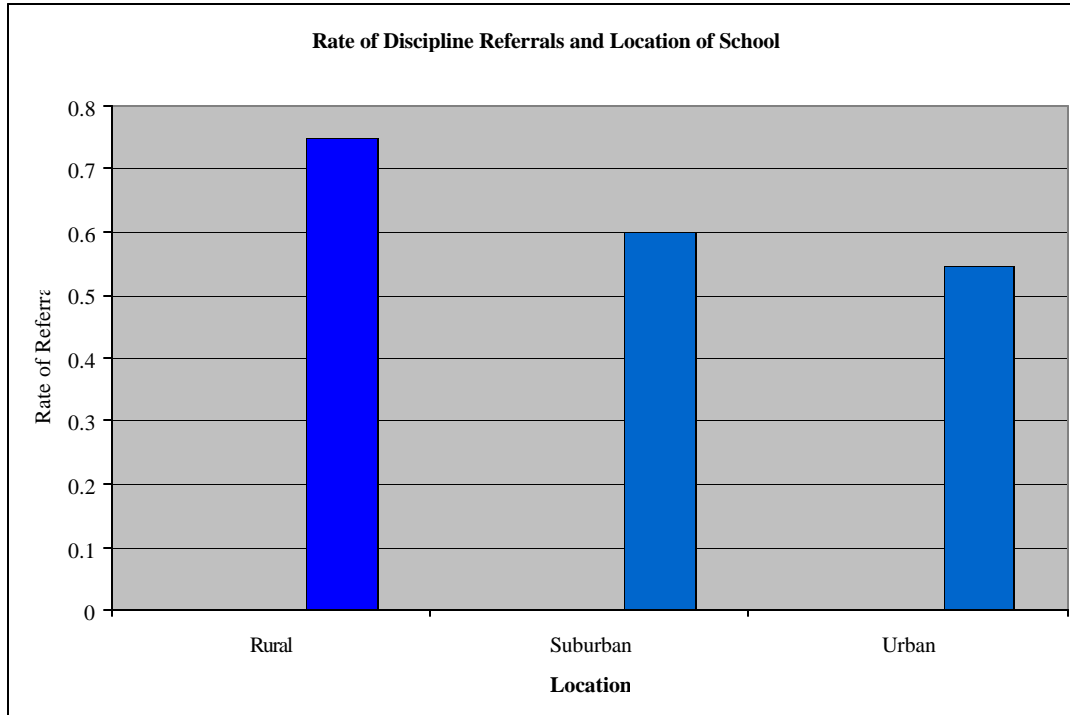


Figure 4.3 A Comparison of Discipline Referral Rates and Location of School

Research Question Three

Is there a statistically significant relationship between the degree of crisis preparedness of a school and the discipline referral rate? To determine whether a systematic linear relationship exists between the degree of crisis preparedness of a school to the discipline referral rate, the Pearson Product Moment Correlation was used as shown in Table 7. There were 125 schools who reported their degree of crisis preparedness and 91 schools who reported their total number of discipline referrals. Therefore, since the dependent variable, discipline referral rate (total number of referrals divided by the total number of students) could only be calculated for the 91 schools reporting their total discipline, these schools were the only ones used in the correlation. The degree of crisis preparedness included such elements as having an updated crisis

management plan, having procedures to detail staff members' responsibilities in public areas, and law enforcement officers on campus. The Pearson Correlation did not show any significance at the .01 or the .05 levels. The correlation was $-.138$ ($p=.192$) between the two variables as shown in Table 8. This negative correlation indicates that the rate of discipline referrals was inversely related to the preparedness, indicating that preparedness may be of value.

Table 7

Sum of Crisis Preparedness and Discipline Referral Rate

		Discipline referral rate	Sum of preparedness
Discipline referral rate	Pearson Correlation	1	$-.138$
	Sig. (2-tailed)	.	.192
	Number	91	91

Research Question Four

Which student characteristics are perceived by administrators as being factors that contribute to school disturbances/discipline referrals? One hundred twenty-five schools reported the factors that contribute to violent behavior. Table 8 illustrates the factors that administrators feel are the most important predictor of a student's potential for being violent/disruptive at school. (1) represents low socioeconomic status; (2) represents level of intelligence; (3) represents school achievement; (4) represents social judgment; (5) represents family factors such as poor family climate; (6) represents exposure to violence; (7) represents influence of media; and (8) represents prevalence of risk-taking behaviors such as gang affiliation, drug use, alcohol use, etc. Administrators identified #4, social

judgment, as being the greatest predictor and #7, influence of media, as being the least predictor of violent behavior.

Table 8

Frequency and % of Student Characteristics Related to School Disturbances/Discipline Referrals

Factor	Frequency	Percent	Valid Percent	Cumulative Percent	Rank
(1) Low SES	15	12.0	12.0	12.0	5
(2) Level of Intelligence	4	3.2	3.2	15.2	7
(3) School Achievement	12	9.6	9.6	24.8	6
(4) Social Judgment	27	21.6	21.6	46.4	1
(5) Family Factors	23	18.4	18.4	64.8	2.5
(6) Exposure to Violence	18	14.4	14.4	79.2	4
(7) Influence of Media	3	2.4	2.4	81.6	8
(8) Prevalence of Risk-Taking Behaviors	23	18.4	18.4	100.0	2.5
Total	125	100.0	100.0		

Since it is also sometimes desirable to represent the reduced set of data graphically so that a picture of the situation can be obtained at a glance, a graph of the data is presented in Figure 4.4.

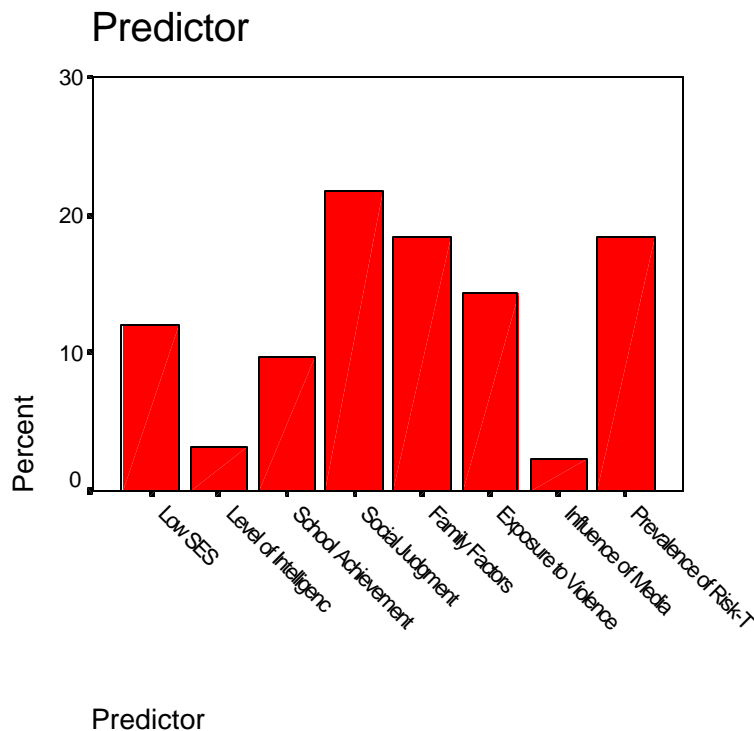


Figure 4.4 Student characteristics that are perceived by administrators as being factors that contribute to school disturbances/discipline referrals

Research Question Five

Which strategies have been effective in reducing the number and frequency of school disturbances in high schools in Georgia? To answer this question an open-ended response question was included in the four-page survey. One hundred two administrators or 84% responded to the open-ended question. As outlined in Table 10, administrators listed the following strategies as being effective in their schools: Crisis management plan (87 schools or 85%), cell phones/walkie-talkies among administrators (2 schools or 2%), resource officers (81 schools or 80%), small classes (2 schools or 2%), character education programs (5 schools or 5%), door lock down drills (3 schools or 3%), highly

visible faculty and administration (26 schools or 25%), advisement program-parent/community support (3 schools or 3%), random searches by drug dogs for drugs/weapons (4 schools or 4%), security cameras (12 schools or 12%), staff development on safety issues (7 schools or 7%), metal detectors (4 schools or 4%), student-support teams in place (1 school or 1%), counselor referrals for discipline violations (5 schools or 5%), day alternative school (1 school or 1%), 24 hour school violence hotline (1 school or 1%), interior and exterior of school on CD (1 school or 1%), code of student conduct (9 schools or 9%), and GEMA evaluations (2 schools or 2%). A bar graph of Table 9 is shown in Figure 4.5.

Table 9

Strategies Used In High Schools In Georgia

Strategies	# of Schools	% of Schools
Crisis Management Plan	87	85%
Cell Phones/Walkie-Talkie	2	2%
Resource Officers	81	80%
Small Classes	2	2%
Character Education	5	5%
Door Lock Down Drills	3	3%
Visible Faculty and Admin.	26	25%
Advisement Program	3	3%
Random Searches	4	4%
Security Cameras	12	12%
Staff Development on Safety	7	7%
Metal Detectors	4	4%
Student Support Teams	1	1%
Counselor Referrals	5	5%
Day Alternative School	1	1%
24 Hour Violence Hotline	1	1%
CD of Int./Ext. of School	1	1%
Code of Student Conduct	9	9%
GEMA Evaluations	2	2%

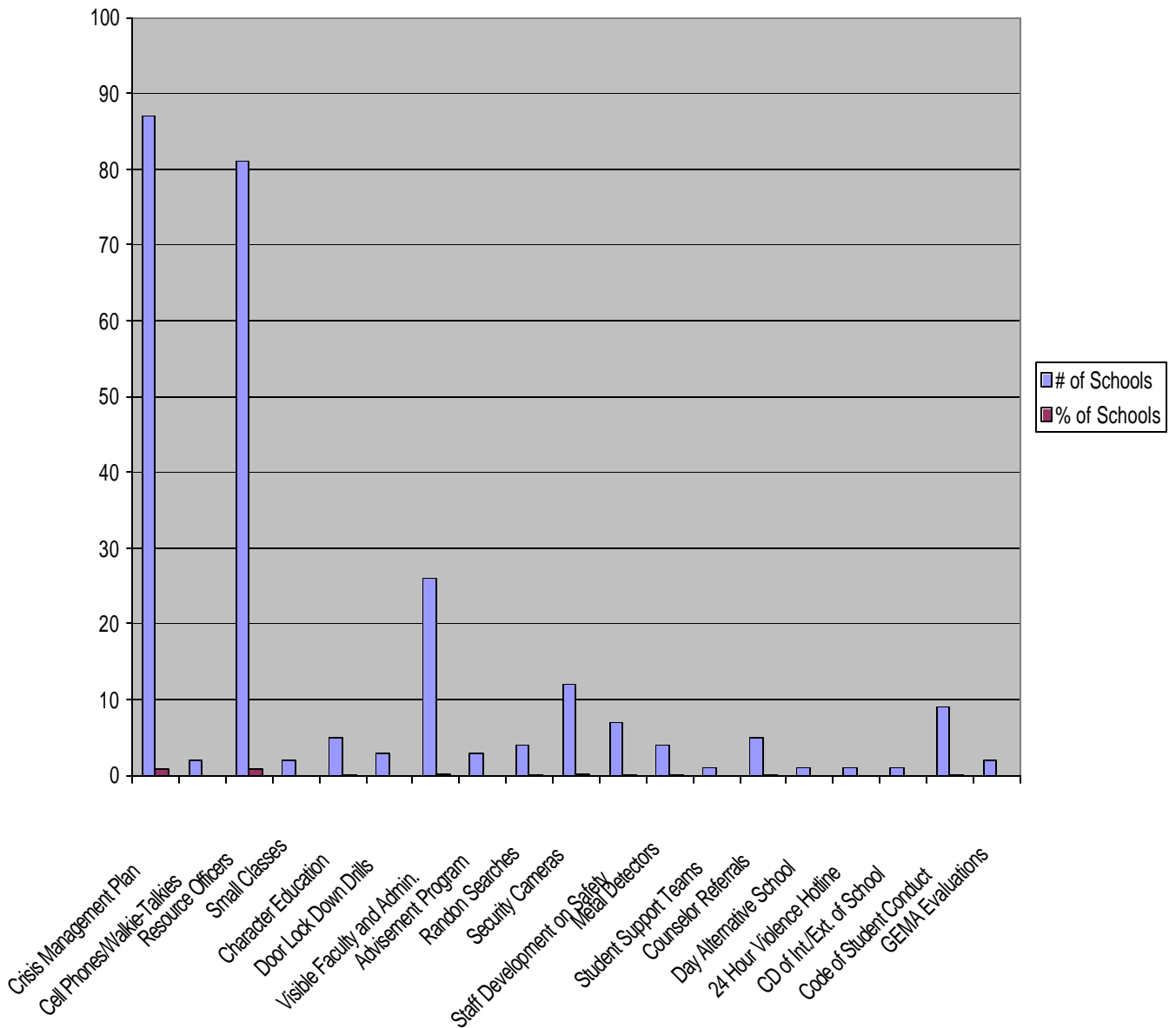


Figure 4.5

Graph of data in Table 10

Graph of the Number and Percentage of Schools Using Various Strategies

Summary of Findings

This fourth chapter presented the data and the results of the analysis. Statistically significant results were not identified in the correlation between the number of design elements present in the school and the discipline referral rates. Therefore, based upon the findings of this study, no statistically significant relationship exists between the number of design elements present in the school and the rate of discipline referrals.

Statistical significance was not found at the .05 level when comparing schools with varying student populations and their discipline referral rates. Statistically significant differences were also not found when comparing the age and location of the facility to the discipline referral rates.

When comparing the degree of crisis preparedness of schools to the total number of discipline referrals, statistically significant results were not found. The findings yielded a significance level of $-.138$ when the correlation was completed.

School administrators identified social judgment as the highest predictor of potential school disturbances/discipline referrals. Twenty-seven administrators identified social judgment as the greatest predictor of school violence. They also found influence of the media to be the lowest predictor of potential school disturbances with only three administrators identifying the media as a predictor.

Finally, school administrators listed the following strategies as being most effective in reducing the number and frequency of school disturbances in high schools in Georgia: Crisis management plan, cell phones/walkie-talkies among administrators, resource officers, small classes, character education programs, door lock down drills, highly visible faculty and administration, advisement program, random searches by drug

dogs for drugs/weapons, security cameras, staff development on safety issues, metal detectors, student-support teams in place, counselor referrals for discipline violations, day alternative school, 24 hour school violence hotline, interior and exterior of school on CD, code of student conduct, and GEMA evaluations. The eight most important strategies in reducing discipline referrals, according to rank were the crisis management plan (1), resource officers (2), visible faculty and administrators (3), security cameras (4), code of student conduct (5), staff development on safety (6), character education (7.5), and counselor referrals (7.5).

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The findings of this study are reviewed and interpreted in this chapter. Following the background information, a discussion of the findings, conclusions, and recommendations is presented.

Background

A review of the literature showed that schools have become no longer the safe havens they once were. School violence directly or indirectly effects everyone, especially our nation's students, parents, teachers, and other school staff (Who's Who Among American High School Students, 1995). The goal is to return schools to their status as safe havens for children to learn, achieve, and acquire the skills they need to become successful and productive adults (Crews & Counts, 1997). The number, frequency, and severity of school disturbances are increasing. The literature reveals specific factors that increase the risk for school disturbances. Yet, in Georgia, specific conclusions for making high school safe places for teaching and learning have not been established. Thus, the purpose of this study was to examine the relationship between specific characteristics of high schools in Georgia and the degree of safety/security from school disturbances in those schools. In this study, there were five independent variables identified in the study that included design elements, size, age, location, and degree of crisis preparedness of each school. Each of these variables was compared to the dependent variable, the discipline referral rate of each school. The total number of school disturbances/discipline referrals in each school was calculated based on the total

assignments to In-School Suspension (ISS), the total number of assignments to Out-of-School Suspension (OSS), and the total number of fights reported during the 2000-2001 school year. In order to calculate the discipline referral rate for each school, the total number of discipline referrals was divided by the total enrollment in each school.

This study also identified student characteristics that are perceived by administrators of high schools in Georgia as being factors that contribute to school disturbances/discipline referrals. The final objective of the study was to identify strategies that have been effective in reducing the number and frequency of school disturbances in high schools in Georgia. The conclusions for the entire study are presented in the following sections.

Summary Per Independent Variable

Research Question One

One objective of this study was to determine if there was a relationship between the number of design elements present in the school specifically related to school safety and security to the discipline referral rate. The design elements present in the school were divided into exterior and interior elements. The exterior elements included such features as fenced school grounds, trimmed shrubs and foliage, defined bus loading, supervised loading/drop-off areas, defined parent drop-off/pick-up, adequate lighting, surveillance cameras in exterior areas, and surveillance cameras at entrances/exits. The interior elements included features such as central alarm system, two-way communication between classrooms and office, supervised entries to building, strategic positioning of offices, extra-wide corridors (more than six feet), surveillance cameras in hallways, and modified restrooms (with doorless entries).

On the survey, the design elements were presented in the form of a checklist. If an element was in place, the administrator checked yes. If an element was not in place, the administrator checked no. The mean of the total number of exterior design elements was compared to the discipline referral rate of each school. Also, the mean of the total number of interior design elements was compared to the discipline referral rate of each school. In the correlation comparing the number of interior and exterior design elements present to the discipline referral rate, no statistically significant relationship was found. The correlation between the sum of exterior design elements and discipline referral rates yielded a two-tailed significance of .421. The correlation between the interior design elements and discipline referral rates yielded a two-tailed significance of .108.

These findings contradict Day (1996) who suggested one way to prevent disturbances from taking place in school was to design the school so that it is difficult for the disturber to act without being observed. Based on the findings of this study, since no statistically significant relationship exists between the variables, the number of design elements present in the school do not relate to the rate of discipline referrals.

Also, within the survey, administrators were asked to rate from (1) to (5) the location where most school disturbances occur. The locations included classrooms, hallways, restrooms, cafeteria, commons area, and other. From the survey results, administrators identified hallways, cafeterias, and commons areas to be places where most school disturbances occur. These findings are in agreement with Hoffman (1996) who found that most teachers believe that violence occurs in hallways, in the cafeteria, or in unattended classrooms. Astor, Meyer, Behre, and Bortz (1996) found that violent

events occurred primarily in spaces such as hallways, dining areas, and parking lots at times when teachers are not present.

Research Question Two

Another objective of this study was to determine if there were any significant differences among the schools' discipline referral rate and the schools' size, age, and location. In order to determine if any significance exists between the schools' size, age, or location to the rate of discipline referrals, a one way analysis of variance (ANOVA) was used. If necessary, following the ANOVA, the Scheffe' post hoc analysis was completed. In looking at the independent variable of the size of the school, the administrators were asked to check the population of their student body given the following choices <500, 501-1200, 1201-1800, and >1800. Total respondents of the survey included 12 schools with a population of <500, 50 schools with a population of 501-1200, 22 schools with a population of 1201-1800, and 7 schools with a population of >1801.

This study found that although there was no statistically significant differences when comparing student population to discipline referral rates, the rates for smaller schools was .1907 less than its closest rival, schools having from 1201-1800 students. Also, it should be noted that schools with a population between 501-1200 students had the highest rate of referrals. The mean for the discipline referral rate for schools with a student population of <500 was .4454. The mean for schools with a population of 501-1200 was .7976. The mean for schools with a student population of 1201-1800 was .6361. Finally, the mean for schools with a population of >1801 was .6782. Since no statistical significance was found, the post hoc test was not necessary.

These findings are in line with Irmsher (1997) who reported that security improves and violence decreases in small schools. Corley (1991) found that small schools are significantly more likely to be violence-free than large ones, and that students are less likely to dropout of small schools.

This study did not find statistical significance between the age of the school facility and the discipline referral rate. On the survey, administrators were asked to check if their school's age was 0-5 years, 5-10 years, 10-20 years, 20-30 years, or 30+ years. The findings in this study were based upon surveys returned from 8 schools 0-5 years, 14 schools 5-10 years, 15 schools 10-20 years, 22 schools 20-30 years, and 32 schools 30+ years. The mean of the rate of discipline referrals for schools 0-5 years old was .6506. The mean of the rate of discipline referrals for schools 5-10 years old was .5319. The mean for the rate of discipline referrals for schools 10-20 years old was .6561. The mean for the rate of discipline referrals for schools 20-30 years old was .8587. Finally, the mean for the rate of discipline referrals for schools 30+ years old was .7071. Since the significance level was .675 and significance was not found at the .05 level, a post hoc analysis did not contribute to the analysis. Based on the findings of this study, the lower rate of discipline referrals were in schools within the age range of 5 to 10 years. The higher rate of discipline referrals belonged to schools that were 20-30 years old.

Chan and Morgan (1996) found statistical significance at the .05 level for middle and elementary schools when comparing school safety and school building age. Based on the respondents of the current study of a random sampling of high schools in Georgia, the results reflect conclusions drawn from Honeyman (1998) who found that almost 30% of all school buildings are approaching the end of their useful life at 50 years.

This study did not find statistical significance between the location of the school and the rate of discipline referrals. On the survey, administrators were asked to check whether their school would be considered a rural, suburban, or an urban school. The findings of this study were based upon survey results that yielded 65 from rural schools, 19 from suburban schools, and only 6 from urban schools. The mean for the rate of discipline referrals for rural schools was .7495. The mean for the rate of discipline referrals for suburban schools was .6009. Finally, the mean for the rate of discipline referrals for urban schools was .5441. It should be noted from this study, the schools in rural areas had the highest rates of discipline referrals. Schools in urban areas had the lowest rates of referrals.

According to Elliott, Hamburg, and Williams (1998) few studies have examined the relationship between community characteristics and crime/violence in schools. The general conclusion from the existing studies is that crime in schools is a reflection of crime in the surrounding community.

Research Question Three

The next objective of this study was to determine if there was a relationship between the degree of crisis preparedness of a school and the rate of discipline referrals. On the survey, administrators were asked to check yes or no to the following elements of crisis preparedness which included having an updated crisis management plan, specific procedures for staff responsibilities for supervising students in public areas of the school, and the presence of law enforcement officers on campus. The total elements present in each school were compared to the rate of discipline referrals. This study did not find statistical significance when comparing the degree of crisis preparedness to the rate of

discipline referrals. These findings yielded a significance level of .192 and a correlation of -.138 after the Pearson Correlation was completed. This negative correlation indicates that the rate of discipline referrals was inversely related to the preparedness, indicating that preparedness may be of value when explaining the rate of discipline referrals. In support of the findings, Day (1996) suggested that the simple act of providing hall monitors, placing teachers or security officers at school entrances, or using television surveillance can reduce a perpetrator's ability to act without detection.

Research Question Four

This study also tried to determine which student characteristics were perceived by administrators as being factors that contribute to school disturbances/discipline referrals. According to the literature, the following characteristics were identified as predictors of a student's potential for being violent/disruptive at school: Low socioeconomic status, level of intelligence, school achievement, social judgment, family factors, exposure to violence, influence of media, and prevalence of risk-taking behaviors. This study found that administrators feel that social judgment is the greatest predictor of school disturbance.

On the survey, administrators were asked to rate characteristics from 1 to 8 with 1 being the most important predictor of a student's potential for being violent/disruptive at school. The results of this study revealed that 15 administrators thought low socioeconomic status was the greatest predictor of potential violence. Four administrators thought level of intelligence was the greatest predictor. Twelve administrators chose school achievement as the greatest predictor. Twenty-seven selected social judgment as the greatest predictor. Twenty-three administrators thought

family factors such as poor family climate to be the greatest predictor. Eighteen administrators voted exposure to violence as the greatest predictor. Three administrators found influence of the media to be the greatest predictor. Finally, twenty-three administrators found prevalence of risk-taking behaviors such as gang affiliation, drug use, alcohol use, etc. to be the greatest predictor of potential violence/disruption at school. These findings are in line with Sandhu and Aspy (2000) who found violent children and adolescents are fearless and are not much concerned about shame and self-respect. Dodge, Price, Backorowski, and Newman (1990) found that violent adolescents are more likely to label neutral cues in the environment as hostile, thus increasing the likelihood that they will react aggressively to a particular situation. This study revealed that fewer administrators of high schools in Georgia found the influence of the media to be a predictor of violent behavior.

Research Question Five

The fifth objective of the study was to identify strategies that have been effective in reducing the number and frequency of school disturbances in high schools in Georgia. On the survey, administrators were asked to respond to an open-ended question that asked them for effective strategies that their school has in place to increase school safety and security.

From the results of the surveys for this study, school administrators listed the following strategies as being most effective in reducing the number and frequency of school disturbances in high schools in Georgia: Crisis management plan, cell phones/walkie-talkies among administrators, resource officers, small classes, character education programs, door lock down drills, highly visible faculty and administration,

advisement program, random searches by drug dog for drugs/weapons, security cameras, staff development on safety issues, metal detectors, student-support teams in place, counselor referrals for discipline violations, day alternative schools, 24 hour school violence hotline, interior and exterior of school on CD, code of student conduct, and GEMA evaluations.

In the literature, Day (1996) stated that many kinds of programs have been developed in an attempt to address school violence. Unfortunately, there is no magic answer. There is no one program, no silver bullet to solve the problem of school violence. According to Goldstein (1994), there are nine categories of potential solutions to school violence. The nine categories include administration, teacher focused, curriculum, community based, legal solutions, physical school and facility alterations, security personnel, student oriented, and parent oriented.

Conclusions of the Study

Research evidence in the literature indicated that school crime, violence, vandalism, and drug use are significant problems on far too many campuses in America. They directly or indirectly affect everyone, especially our nation's students, parents, teachers, and other school staff (Who's Who Among American High School Students, 1995). According to Rubel (1978) in the future, education will be asked once again to solve problems that it did not create in environments that it cannot control. Therefore, the findings from this study may be considered significant for many reasons. From the research literature and this study, it can be concluded that the presence of teachers and administrators may decrease disturbances even in public areas that may or may not have secure interior and exterior design elements. Also, based on this study and a review of

the literature, it can be concluded that the smaller the school the fewer school disturbances. Therefore, the idea of creating schools within a large school may prove to decrease the number and frequency of school disturbances. Though no statistical significance was found when comparing the location of the school facility to the total number of school disturbances/discipline referrals, it must be noted that the level of significance may have been affected by the unbalanced survey results returned from rural, suburban, and urban schools. Though age as compared to the total number of discipline referrals did not show statistical significance, the age of high schools in Georgia may be an interesting factor in future research. From the findings of this study, it can also be concluded that even though statistical significance could not be found when comparing the degree of crisis preparedness of high schools in Georgia to rate of discipline referrals, that high schools in Georgia are taking steps to prepare for a potential crisis. This study implies that administrators do not view socioeconomic status as a high level predictor of potential school disruption/violence; however, according to Pallas, Natriello, and McDill (1989) the number of children living in poverty in the United States is likely to increase at least through the year 2020. Therefore, any relations among ethnicity, socioeconomic status, and violence are likely to remain important social issues in the future. Finally, based on the literature and the findings of this study, there is no one program to solve the problem of school violence. Yet, the solution will be the combined efforts of school administrators, teachers, parents, students, and a myriad of other categories to reduce the number and frequency of school disturbances in high schools in Georgia.

Recommendations for Further Research

Based on the results of this study, the following recommendations for further research are made:

1. A study should be conducted to determine teachers' opinions of their responsibility to supervise public areas (hallways, cafeteria, commons areas, parking lots, etc.) in high schools.
2. A study should be conducted to research effective programs for violent adolescents to improve their social judgment.
3. A longitudinal study should be conducted to determine the effectiveness of programs in high schools to reduce the frequency of violent behavior.

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APPENDIX A
SCHOOL SAFETY INVENTORY

SCHOOL SAFETY INVENTORY

*The purpose of this study is to examine the relationship between specific characteristics of 200 high schools in Georgia and the **degree of safety** of these schools. I appreciate your taking the time to respond to this survey. If you would like a copy of the findings of the study, please visit the website below. The findings of this study will be posted as the study progresses. <http://www.coe.uga.edu/sdpl/research/SDPLStudiesInProgress/tolbert.html>*

Title of person completing survey: _____

Age of your facility(in years): 0-5____ 5-10____ 10-20____ 20-30____ 30+____

Grades levels in your school: 8____ 9____ 10____ 11____ 12____

Total number of **students** in your school (as of spring, 2002):

____ 0-500
____ 501-1200
____ 1200-1800
____ 1801-2400
____ 2401-3000+

Location of your facility: _____rural _____suburban _____urban

Number of class changes each day: 4____ 5____ 6+____

DIRECTIONS: Please use the following checklists to assess the school's strengths and weaknesses related to safety and security of your school building and grounds. If an element *is* in place, please check **YES**. If an element *is not* in place, please check **NO**.

Part I: School Exterior

ELEMENTS	YES	NO
1. School grounds are fenced.		
2. Shrubs and foliage are trimmed to allow for good line of sight.		
3. Bus loading and drop-off zones are clearly defined.		
4. Staff members are assigned to bus loading/drop off areas.		
5. Parent drop-off and pick-up area is clearly defined.		
6. There is adequate lighting around the building.		
7. Security cameras provide surveillance of parking lots/exterior areas.		
8. Security cameras/personnel provide surveillance of entrances/exits to campus.		

PLEASE CONTINUE TO NEXT PAGE.

Part II: School Interior

ELEMENTS	YES	NO
1. There is a central alarm system in the school.		
2. Two-way communication between the classrooms and office		
3. Multiple entries to the building are controlled and supervised.		
4. Strategic positioning of offices (near restrooms and/or entrances)		
5. Extra-wide corridors (more than six feet wide)		
6. Security cameras provide surveillance of hallways/commons area.		
7. Modified restrooms (for example, doorless entries)		

Part III: Degree of Preparedness

ELEMENTS	YES	NO
1. The school has a Crisis Management Plan in effect that is reviewed and updated annually.		
2. Specific procedures are in place that detail staff members' responsibilities for supervising students in public areas such as hallways, cafeteria, restrooms, etc.		
3. Law enforcement officers (with arrest powers) are present on campus during school hours and school-related events.		

Part IV: Discipline Referrals

ELEMENT	2000-2001	Most common reason (i.e. tardies, fights, etc.)
1. Total # of assignments to ISS (In-School Suspension) during most recent school year		
2. Total # of assignments to OSS (Out-of-School Suspension) during most recent school year		
3. # of fights during the school year		
4. # of assignments to an alternative school setting during school year		

Part V: Miscellaneous

1. Where do most of your school disturbances, if present, take place? Please rate from (1) to (5) with (1) being the most often.

___ Classrooms

___ Hallways

___ Restrooms

___ Cafeteria

___ Commons Area

Other _____

PLEASE CONTINUE TO NEXT PAGE.

2. During what period of the day do school disturbances **most often** occur? Please rate from (1) to (5) with (1) being most often.
- ___ Before school
 ___ After school
 ___ During school hours
 ___ During lunch
 ___ Weekends
3. Number of entrances/exits to your **campus**: 1-3 ___ 3-5 ___ more than 5 ___
4. Number of entrances/exits to your **building**: 1-3 ___ 3-5 ___ more than 5 ___
5. How many levels does your building have? 1 ___ 2 ___ 3 ___
6. Most common discipline referral in your school is for which of the following? Please rate the list from (1) to (4) with (1) being the most often.
- ___ Tardies
 ___ Fights
 ___ Disrespect
 ___ Vandalism
 Other: _____
7. Within the last five years, has any student been disciplined at your school for bringing a weapon to your school? Yes / No If so, which kind? Check all that apply.
- Gun ___
 Knife (at least 2" blade) ___
 Other: _____
8. How many violent incidents (i.e. shooting, knifing, etc.) have occurred on your campus during school hours within the last five years?
- 0 ___
 1-5 ___
 more than 5 ___
9. The literature reveals specific characteristics that may cause students to become disruptive in school. From your professional experiences, please rate the following characteristics from (1) to (8) with (1) being the most important predictor of a student's potential for being violent/disruptive at school.
- ___ Low socioeconomic status
 ___ Level of intelligence
 ___ School achievement
 ___ Social judgment
 ___ Family factors (poor family climate)
 ___ Exposure to violence
 ___ Influence of media
 ___ Prevalence of risk-taking behaviors (gang affiliation, drug use, alcohol use, etc.)

PLEASE CONTINUE TO NEXT PAGE.

Open Response:

What specific strategies does your school currently have in place to address school safety? (i.e. resource officer, emergency plan, etc.)

Thank you for participating in this survey. Please return this survey in the self-addressed stamped envelope.

APPENDIX B

LETTER TO PRINCIPALS

176 Blue Heron Drive
Commerce, Georgia 30529

Principal
High School
Mailing Address
City, GA Zip
Date

Dear Principal:

The number, frequency, and severity of school disturbances are increasing. The current research reveals specific factors that increase the risk for school disturbances. Yet, in Georgia, specific conclusions for making high schools safe places for teaching and learning have not been established.

I am currently conducting research for my doctoral dissertation at the University of Georgia. The purpose of my study is to examine the relationship between specific characteristics of high schools in Georgia and the degree of safety/security from school disturbances in those schools.

The population for this study is all of the public high schools in the state of Georgia with grades 9-12. A systematic random sample of 200 of those schools will be used for this study. Your school has been randomly selected as one of the 200 high schools to participate in this study. I would appreciate your willingness to complete the enclosed survey instrument. Please respond to the enclosed survey instrument and return it in the self-addressed stamped envelope within fifteen days of the date of this letter. The results of your responses will remain anonymous. Neither you nor your school will be identified through the course of this study or through any published research findings.

The survey should only require approximately ten minutes of your time to complete. All participating schools and those not selected for the study will have the opportunity to view the summary of the findings at the SDPL web site
<http://www.coe.uga.edu/sdpl/research/SDPLStudiesInProgress/tolbert.html>.

I greatly appreciate your cooperation in the completion of this study.

Sincerely,

Joy R. Tolbert
Public School Administrator