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The Efficacy of Teaching Conflict Resolution

Joan E. Grigaitis

THE EFFICACY OF TEACHING
CONFLICT RESOLUTION

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An Abstract Presented to the Faculty of the Graduate School
of Lindenwood College in Partial Fulfillment of the
Requirements for the Degree of
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ABSTRACT

The purpose of this study was to examine the efficacy of Conflict Resolution Programs in an elementary school. The question to be studied was whether incidents of disciplinary referrals would be reduced after implementing a Conflict Resolution Program. The entire student population of Simpson Elementary School for the academic years 1994-1995 and 1995-1996 served as subjects for this study. Disciplinary referrals were tallied for the students for the 1994-1995 academic year (i.e., the "control" group or prior to the Conflict Resolution Program). A Conflict Resolution Program was implemented coincident with the start of the 1995-1996 academic year. Disciplinary referrals were again tallied for the students for the 1995-1996 academic year (i.e., the "test" group or after receiving the Conflict Resolution Program). Results of a "Paired-T Test" on the student population demonstrated that the Conflict Resolution Program had a statistically significant effect in reducing disciplinary referrals.

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Chapter 1

Introduction

It has been the assumption with the public school systems that teaching

conflict resolution skills to students will decrease verbal and physical aggression.

According to Johnson and Johnson (1996) the current evidence indicates that (a)

conflicts among students do occur frequently in schools, (b) untrained students by

and large use conflict strategies that create destructive outcomes by ignoring the

importance of their ongoing relationships, (c) conflict resolution and peer

mediation programs do seem to be effective in teaching students integrative

negotiation and mediation procedures, (d) after training, students tend to use these

conflict strategies which generally leads to constructive outcomes, and (e)

students' success in resolving their conflicts constructively tends to result in

reducing the numbers of student-student conflicts referred to teachers and

administrators.

The United States public school system has been under pressure to come

up with solutions to address the increase of violence in the school system.

Brettmann and Moore (1994) claim schools, like the court system, have been

asked to find ways to keep kids safe. The National Education Association

estimates that 2,000 students and 40 teachers are attacked every hour, causing the

disruption of classroom instruction (Shulman, 1996). Friedlander (1993) explains

that justified anxiety over personal safety in school is a virtual guarantee that

learning stops. There is a close relationship between academic performance and levels of violence in students' lives.

In addition, the United States is first in the world in homicides. Murder is the number-one cause of death among African-American males. Each day approximately 135,000 kids take guns to school. Violent crime continues to rise every year. Metal detectors surround the entrances to too many high schools. Physical fights in classrooms and in halls are everyday occurrences (Taibbi, 1994).

Violence has reached epidemic proportions in the United States. Coben et al. (1994) explain how nationally, more than 400,000 students were victims of violent crime at school during a six-month period in 1988. An estimated 430,000 students took something to school to protect themselves from attack or harm at least once during a six-month period in 1988 and 1989. A survey of high school students nationwide found that one in 25 students had carried a gun in 1990. In a survey of high school students conducted in 1992, 48% of 10th-grade boys and 34% of eighth-grade boys said they could get a handgun if they wanted one. A 1993 national survey on the opinions and experiences of American teachers found that 11% of public school teachers and 23% of students reported being victims of violence in or around their school.

Urban and rural communities have documented an increase in conflict among their students. Johnson and Johnson (1996) report the common types of conflicts in schools are verbal harassment (name-calling, insults), verbal arguments, rumors, gossip, physical fights, and dating issues. The urban and rural

communities have noted a marked increase in physical and verbal aggression.

Urban areas have larger increases in physical aggression, while the rural

communities have seen a marked acceleration in verbal aggression.

American schools can choose to do nothing or take action to decrease the

violence. Bowditch (1993) reports school systems around the country are trying to

do something, to find ways to keep kids safe and teach them that retaliation is not

the way to respond. Doing something falls into three categories: Policing,

Suspensions, or Conflict Resolution Programs. In general, urban schools, which

have incurred increased physical aggression, use more policing procedures such as

metal detectors, police officers, and out of school suspensions while the rural

schools generally use more conflict resolution programs to counter the increase of

verbal aggression.

Statement of Purpose

The purpose of the study was to examine the efficacy of Conflict

Resolution Programs in the elementary school. The study is directed toward the

work of the researcher, which involves teaching conflict resolution skills in an

elementary school in a rural district. The question to be studied was whether

incidents of disciplinary referrals would be reduced after implementing a Conflict

Resolution Program.

Null Hypotheses

This study examines 1 null hypothesis, and seeks to determine whether there is a relationship between instituting a Conflict Resolution Program and disciplinary events, as measured by disciplinary referrals. Following are both the null and alternative hypotheses:

$H_{0:}$ $\mu1 = \mu2$ (mean disciplinary referral with Conflict Resolution Program is not less)

$H_{a:}$ $\mu1 > \mu2$ (mean disciplinary referral with Conflict Resolution Program is less)

Chapter 2

Literature Review

The Literature Review will first present background information and statistics regarding violence in secondary and elementary school systems. Next, it will present strategies that have been implemented to decrease school violence, including metal detectors, police officers at schools, suspensions, and conflict resolution programs. Last, a closing summary addresses what steps can be taken to provide safer schools for children.

Background Information

The changing environment in schools has required greater and broader skills to work with students who come to school with a host of special needs, such as Attention Deficit Disorder (ADD), Attention Deficit Disorder with hyperactivity (ADD-H), Conduct Disorder, and Oppositional Defiant Disorder. Furthermore, the climate of public education has experienced dramatic changes in the demographic makeup of the student population. Stephens (1994) states schools are serving more children of teenage parents, single parent families, dysfunctional families, and more special education students than ever before. Each of these changes is occurring within the context of an increasingly violent society with seemingly fewer economic resources to respond to these issues. As

schools must address so many needs, personal safety has become a top educational concern among students, parents, teachers, and others. The changing educational climate with its new challenges is creating a "categorical imperative" to identify tools, strategies, and model programs that enhance the safety and success of all children and the professionals who serve them.

According to Noddings (1984) there is a crisis of caring in today's schools. Many students do not feel cared for and they do not care about others. Youth are more often the victims of violence and intentional injuries than any other age group. The *Carnegie Quarterly* reported that between 1985 and 1994, nearly one million adolescents between the ages of 12 and 19 were victims of violent crimes each year. From 1982 to 1992, juvenile arrests for homicide increased 228% and the homicide rate among males aged 15 to 19 more than doubled between 1985 and 1991, (The Center for Disease Control, 1992).

Times for educators were not always this challenging. Prutzman (1994) explains prior to the 1960's teachers would use terror of degradation as a way of keeping control of student behaviors. However, by the mid 1960s, the situation changed. Earlier methods of school control became ineffective. Students' insubordination and aggression toward teachers was becoming increasingly common, and violence within schools, especially among students, was widely seen as the norm. With control and compliance increasingly difficult to obtain, many urban schools lowered their expectations with respect to student behavior. The preoccupation with enforcing rules was gradually replaced with a desire to

maintain average daily attendance, since this was the key funding formula for schools.

Concerns about safety have caused more educators to evaluate more thoroughly before making an attempt to reprimand a student. The teacher's attempt may be taken as a challenge by the student of a physical confrontation, for which the majority of teachers are not prepared. Noguera (1995) states how his work with teachers and students at a number of urban schools has shown that students often know when their teachers fear them. In many cases, students use a teacher's fear to assert their control over the classroom and, if possible, the entire school. When fear is at the center of student-teacher interactions, teaching becomes almost impossible, and concerns about safety and control take precedence.

Some students believe that physical force is the procedure by which conflicts are resolved. Others use such procedures as verbal attack, the "cold shoulder," or getting even. Toch, Gest, and Guttman (1993) describe a startling shift in adolescent attitudes. Suddenly and chillingly, respect for life has ebbed sharply among urban and rural teenagers. Twenty percent of the suburban high schoolers surveyed by Thoits (1982) endorsed shooting someone "who has stolen something from you." Eight percent believed that it is all right to shoot a person "who had done something to offend or insult you."

Currently there are more than 3 million crimes a year committed in or near United States public schools. The horrifying thing is that the nature of school crimes has grown more violent and the perpetrators are steadily younger. Elliot

(1994) reports the adolescent homicide rate has more than doubled in the last 7 years, and youth violence is currently the leading preventable cause of death for adolescents.

The inner city schools have documented an increase in the amount of guns, knives, and clubs carried on to school property. A University of Michigan study reports that 9 percent of eighth graders carry a gun, knife, or club to school at least once a month. An estimated 270,000 guns go to school every day. In reaction to these statistics, inner city schools began adding "drive by shooting drills" to the traditional fire drills. Furthermore, schools have fenced in their campuses, installed metal detectors, started locker searches, and have implemented student shakedowns. In Los Angeles the school board voted to put its armed, plain-clothes security officers in uniforms and to add nightsticks to their weaponry.

Toch et al. (1993) explain how these days, attending school represents an act of courage for many students. Sixteen percent of eighth graders and fourteen percent of tenth graders told University of Michigan researchers that they fear for their safety. There were 5,761 violent incidents in the New York City schools last year, up 16 percent from a year earlier.

In addition to the violence outlined above, violence is not confined to inner cities. Cameron and Dupuis (1991), researchers at Cincinnati's Xavier University, interviewed principals in 1,216 school systems. Sixty-four percent of urban principals said violence has increased in their schools in the past five years, so did 54 percent of suburban principals and 43 percent of those in rural areas.

With the increasing amount of violence in schools it has become difficult for many students to have a sense of safety when arriving on school grounds. George E. Butterfield, who is the deputy director of the National School Safety Center in Westlake, California states that for many students the goal of the school day is to get through it without being harmed. These students have lost the focus of getting their education. Giordano (1994) explains that students who would never be classified as troublemakers are arming themselves with knives, box cutters, and even guns because they don't feel safe in school. That feeling of fear, coupled with the presence of a knife or gun, can turn minor disputes into bloodbaths.

It is frightening for the community to hear such tales of violence. Many individuals reason that the schools reflect what is occurring in our culture and that because certain communities are filled with violence and almost all communities are touched by violence, both physical and verbal violence (in the form of name calling, insults, pushing, shoving, and fighting) will continue to be a common daily occurrence in schools (Stop the Violence, 1994).

Some of the most common strategies to reduce violence in schools are the use of metal detectors, highly visible police officers on school grounds, suspensions, and conflict resolution programs. Each strategy presented has its own benefits and shortcomings, which will be discussed in the following pages.

Strategies for Reducing School Violence

Metal Detectors and Police Officers

Noguera (1995) explains that metal detectors, wire fences, armed guards, policemen, and principals wielding baseball bats as they patrol the halls are all symbols of tough action. A survey by the National School Board found that 15 percent of the 749 districts that responded to the survey use metal detectors along with police officers in some or all of their schools. Baltimore, San Diego and Miami are among the school systems that have taken the route of employing police officers, rather than security guards. "Having that badge and saying 'You are under arrest' is a powerful tool," says Peter Blauvelt, head of security for the Prince George's County schools, Maryland (Zhang, 1994, p. 101). Further, the school systems in Detroit, Los Angeles, Chicago and New York are using police officers along with metal detectors. Kemper (1993) reports these school systems claim that the metal detectors and officers do seem to cut down on the number of weapons students bring into the schools and are said to give staff members a sense of safety in the schools.

However, it may be a false sense of security. A school is not an airport or a courthouse where everyone can be funneled through one door and not have access to the outside (Knoff, 1994). Schools with metal detectors and police officers still have shootings being committed on school grounds. Chase (1993) points out that New York City, the nation's largest school system with nearly a million students, spent $60 million on school security in the 1991-1992 school

year. This buys a small army of security guards, 2,450 of them, and pays for full or part time metal detectors at 41 high schools. Yet, it does not buy complete safety: In the same school year, six students were shot and killed in New York City school buildings and 13 were shot and wounded.

Furthermore, several building principals throughout the United States claim that metal detectors are ultimately ineffective. Most schools use hand-held "wands" rather than walk through detectors because they are less expensive ($115 versus $2,500). Unfortunately students can "beat" the wand by hiding a gun behind a heavy belt buckle or be the lucky person who was not randomly selected to be scanned at the front door. Several schools must use a random method of selecting students to scan each morning because scanning all of them would take too long. According to a report on school-safety measures by the Centers for Disease control in Atlanta, metal detectors "have no apparent effect on the number of injuries, deaths, or threats of violence" on school grounds.

Police officers and metal detectors may even be psychologically detrimental. Some studies suggest that metal detectors and police officers on the school grounds may have a negative effect on students' attitudes toward school. Several of the students from Wingate (New York City public school) report they feel like they are entering a prison when they go to school (Peart, 1994).

In short, the prevailing wisdom among school officials is that schools must counter violence with force, and that schools can be made safe by converting them into prison-like facilities. However, most of the students Noguera (1995) has spoken to during his visits to schools realize that a student who wants to bring a

weapon to school can get it into a building without being discovered by a metal

detector, and that it is highly unlikely that any principal will hit a student with a

baseball bat. The symbols of "ending the violence" persist, masking the truth that

those responsible for implementing school safety have not been very successful in

stemming the tide of violence.

Suspensions

Bowditch (1993) examined the routine disciplinary procedures of an inner-

city high school. The analysis showed that school policies and procedures

encourage disciplinarians to use suspensions, transfers, and involuntary "drops" to

get rid of students they deem trouble makers. The indicators that disciplinarians

use to identify troublemakers are the same factors that, according to educational

research, place students at risk of dropping out. While many schools use

suspensions as their main vehicle of resolution for student outburst some inner

city educators believe that administrators are creating schools where primarily the

African Americans and Hispanics are suspended while the white students reap the

rewards of a full education. Because a disproportionate number of urban African

American and Hispanic students come from circumstances that interfere with

attendance and attention, or produce behaviors defined as insubordinate or

disobedient, routine disciplinary practices that exclude troublemakers may be a

mechanism through which the school helps perpetuate racial and class stratification in the larger society.

Out of school suspensions for inappropriate behavior teach students that an outburst will send them home, which in many cases is the preference for at risk kids. These students would rather be at home than in the classroom, and may therefore act-out in the "hopes" of being suspended. The long-term effect is that these students never have the opportunity to learn conflict management. Tabbi (1994) explains that the best approach to safety comes from old-fashioned education; teaching young people how to resolve conflicts peacefully through conflict resolution.

Conflict Resolution

Conflict resolution and peer mediation programs began in the 1960s with the Teaching Students to Be Peacemakers Program. This program was derived from social interdependence theory and focused on teaching all students in a school the nature of conflict, how to use an integrative negotiation procedure, and how to mediate peer conflicts. In 1972 Priscilla Prutzman directed a Quaker educational project in New York City known as the Children's Creative Response to Conflict. It taught all students that the power of nonviolence lies in justice, caring, and personal integrity. In the 1980s, there was the Resolving Conflict Creatively Program and the President Carter's Neighborhood Justice Centers.

Currently, in the 1990s, the National Association for Mediation in Education (NAME) estimates that there are more than 5,000 schools implementing conflict resolution programs with their classrooms (Crary, 1992).

Gentry and Beneson (1993) report that the majority of children are very capable of resolving their own conflicts when given the opportunity and some helpful tools to use. When children take responsibility for solving their own problems, they learn the skills they will need to better cope in the adult world. When one shifts the responsibility for solving appropriate school conflicts from adults to students, it frees the teachers and allows them to concentrate on teaching rather then on discipline.

The ability to manage conflicts constructively is an essential aspect of psychosocial health and adjustment. Johnson and Johnson (1994) believe that without the ability to manage conflicts, children can easily become socially isolated, which is associated with behavior maladjustment. Fortunately, through conflict resolution training, students who were once thought of as maladjusted, blossom into individuals who recognize their errors in their reactions towards others, resulting in increased personal control and peer approval.

Deutsch (1992) reported an investigation on the effects of conflict resolution in three New York City alternative high schools that specialized in students at risk. A student survey was given at different times during the training, systematic observations were conducted, and interviews were conducted. Students improved in ability to manage their conflicts. They experienced increased social support and less victimization from others. This improvement in

their relations with others led to increased self-esteem as well as a decrease in feelings of anxiety and depression and more frequent positive feelings of well being. The higher self-esteem, in turn, produced a greater sense of personal control over their own fates. The increases in their sense of personal control and in their positive feelings of well being led to higher academic performance and an increase in positive peer relations. There is also indirect evidence that the training improved students work readiness and work performance.

In addition, Kimmel et al. (1995) also reported that conflict resolution training results in increased self-esteem. They discovered that 80 middle school students who took an elective course in conflict resolution skills showed a significant increase in self-concept. Even the teachers saw these students as having improved self-esteem as a result of the conflict resolution program.

Last, conflict resolution programs can encourage better race relations and academic growth. Robinson (1993) reports mediation and negotiation training helps students deepen their understanding of themselves and others. Mediation training, with its emphases upon listening to others' points of view and the peaceful resolution of differences, assists in preparing students to live in a multicultural world. The use of mediation to resolve disputes can result in improved race relations among the student body.

The classroom conflict resolution curriculum is based on the following premises (Webster, 1993):

1. The violence prevention training needs of each student are similar enough that all would benefit from participation in a standardized program.

2. Adolescents who engage in violent behavior do so because of deficiencies in social information processing or other skills needed to solve social conflicts nonviolently.

3. The most important social skill needed to reduce the risk of violence is how to negotiate one's way through conflicts.

The curricula are designed to start in the school system as early as possible. Many programs, such as the one previously mentioned (mediation programs), begin in kindergarten. Giuliano (1994) reports violence prevention must start early because research supports the "cycle of violence" hypotheses. For this cycle to be broken, efforts must be directed to primary prevention in the form of early childhood interventions. These interventions must stress nonviolent problem solving and conflict resolution.

In addition, Clark (1994) states conflict resolution programs and practices are widely recognized for providing preventive measures against hostile interactions, developing more creative, flexible, and integrative problem solving, and increasing acceptance of and compliance with mediated decisions. Conflict resolution programs are said to decrease frequency of fights, suspensions, and discipline referrals; improve teacher morale and school climate; and produce positive changes in the mediators and disputant.

In summary, the ability to resolve conflicts constructively tends to increase psychological health, self-esteem, self-regulation, resilience, and promote positive race relations. Laursen and Collins (1994) explain that in many ways, being skillful in integrative negation and mediation is a developmental advantage that

enable students to build and maintain healthy relationships with others the rest of their lives.

The Efficacy of Conflict Resolution

Given that students learn the integrative negotiation and peer mediation procedures, retain knowledge over time, are able to apply the procedures to conflicts, and spontaneously transfer the procedures to nonclassroom and nonschool conflicts, conflict resolution and peer mediation training should result in reduced discipline referrals and suspensions. Johnson and Johnson (1994) believe students' success in resolving their conflicts constructively should result in reduced numbers of student-student conflicts referred to teachers and administrators, which, in turn, should reduce suspensions. There are numerous studies in which teachers, administrators, and students were interviewed about their perceptions of the outcomes of the conflict resolution and peer mediation training. For example, one elementary school principal stated that conflict resolution programs had done more to improve the climate of the school and decrease referrals for behavior problem that any other single innovation in her administrative career (Mortenson, 1991).

According to Leadbeater et al. (1989) there have also been testimonies given by federal officials in favor of conflict resolution, such as Education Secretary Riley, who states that he hopes more programs spring from places like Roosevelt Middle School in Oceanside, California. Four years ago, the majority

of the school's 1,500 sixth, seventh and eighth graders lived in fear, as gangs "mad dogged" each other and deliberately provoked fights. Currently, the school is at peace thanks to conflict resolution. When a problem develops, it usually is settled within a day by student mediators who are trained to sit classmates down and resolve arguments with words rather than fists.

Furthermore, Daniel Webster (1993) studied a middle school conflict resolution program. However, his study was directed towards fourteen African American adolescents. Conflict resolution skills were addressed (solving problems and negotiating) during training. The training was provided twice a week in fifty-minute sessions for half the school year. The teachers selected these students based on their history of aggressive behavior. An evaluation compared these fourteen youths with thirteen youths that were referred on similar criteria but did not receive training. The results indicated that conflict resolution participants showed improvement in all skills measured by observers, while no changes in the comparison group were reported. Moreover, none of the conflict resolution participants were suspended or expelled from school for fighting; yet, there were two expulsions and seven suspensions for fighting in the comparison group.

The elementary and secondary schools have also seen similar results. In the elementary schools studied, Johnson and Johnson (1994) discovered an 80% decrease in the frequency of student-student conflicts that teachers had to manage and a reduction in principal referrals to zero in the classes participating in the conflict resolution program. Moreover, Meek (1992) evaluated a conflict resolution program in New York city by conducting a survey of 130 teachers and

found that 71% reported a reduction of physical violence in the classroom, 66% heard less name calling and fewer verbal put-downs, and 69% saw increased student willingness to cooperate with each other. Meek reported a 50% decline in student assaults. Last, Roush and Hall (1993), studied 38 fourth graders, 55 fifth graders, and 52 sixth graders who participated in a conflict resolution program, and found that the number of misconduct slips handed out on the playground decreased significantly.

In the secondary schools, Millhauser (1989) reported that a conflict resolution program reduced the dropout rate. Cheatham (1989) reported a 46% to 70% reduction in suspensions for fighting. Sadalla et al. (1990) reported a 75% drop in the number of incidents referred to the principal.

Any trained professional can incorporate conflict resolution skills within his or her classroom. Conflict resolution training does not have to be presented by the school counselor to be effective. Trained classroom teachers can be just as competent and effective as the school counselor can. However, an untrained professional will not receive the same results.

Adalbjarnardottir (1993) designed a study to explore whether teachers who receive special training in working with students on social conflict resolution can promote the social-cognitive competence and skills of their students more successfully than teachers who do not receive such training can. In particular, when helping students resolve social conflicts. This study compared the social-cognitive competence of children who received training in working on the resolution of social conflicts (intervention group) with the social-cognitive

competence of children who do not receive such training (control group) during one school year. Ninety-six children (48 girls, 48 boys) aged 8 (48 children) and 11 (48 children) were selected at random from eight classes at four schools. Children in four classes at two of the schools received training to solve social conflicts, whereas children in four classes at the other two schools did not.

Results indicated that children who participated in the intervention program improved more in thought level, showing greater progress in reciprocity, than children in the regular program. Moreover, in real-life situations, children in the intervention program improved more in action level when negotiating with classmates. They showed more increased reciprocity in their social conflict resolutions with classmates than children who did not receive special training.

Cameron and Dupuis (1991) conducted another classroom study. This conflict resolution program was conducted in four classrooms in a suburban, middle-class elementary school. Ninety-two students in the third through sixth grades received thirty minutes of training per day for six weeks. The training focused on negotiation and mediation procedures and skills. Prior to the training program, frequent conflicts involving physical aggression, playground activities, access to or possession of objects, turn taking, put-downs and teasing were reported. The conflicts were primarily brought to the teacher for arbitration or managed with ineffective and destructive strategies that generally made the conflicts worse.

The training program was successful in teaching negotiation and mediation procedures and skills. The students were able to transfer the

procedures and skills and apply them in real conflicts among classmates. Careful observation of hallways, the lunchroom, the playground, and the gymnasium revealed that four months after training, students seriously and carefully used these procedures to resolve highly emotional and prolonged conflicts with fellow students. The training reduced dramatically the number of conflicts referred to teachers and the principal. Discipline problems that previously drained teachers' attention, time, and energy were eliminated, as students became much more autonomous in managing their conflicts constructively.

Cons of Conflict Resolution

Not all of the research conducted on conflict resolution programs has been positive. Deutsch (1994) discussed the procedures and unfavorable results from research conducted on one of the most widely used ten-session conflict resolution curriculums. The short-term effectiveness of the curriculum was evaluated in a study involving tenth-graders at six inner-city schools around the country. A teacher from each of these schools attended a one-day training session on how to use the curriculum. These teachers assigned classes (nonrandomly) to either an intervention or a control group. Teachers also were responsible for administering pretests two weeks before implementing the curriculum and posttests one month after the curriculum was completed. Usable data was available for only four of the sites. When data for these four schools were combined and pretest measures

were accounted for in the statistical models, no significant differences were found in posttest scores on knowledge about violence, attitudes about ways to handle conflicts, acceptance of violence, violence locus of control, self-esteem, self-reported fighting, drug use, or weapon carrying.

There have also been difficulties in generating statistical data from an immense population. Johnson et al. (1994) explained that at this time there are no conflict resolution studies based on a broad and representative sample of students, and there is also a lack of recording of all conflicts that occurred in school over an expansive period of time. Further, the data is suspect due to the lack of clear definition of the dependent variables. Concepts such as fight, discipline problem, referral, and suspension are ambiguous and may be defined in quite different ways by different researchers and different teachers; therefore, it is difficult to compare findings across studies.

In general, without knowing exactly what is taught to students and how it is taught, the program cannot be replicated because there is no way to standardize the treatment, and there can be no way to determine which aspects of the program had what effect on the dependent variables. Even control groups cannot be effectively designed if the nature of the program is not clear.

Until conflict resolution programs are clearly defined, their effectiveness cannot be reliably assessed. In addition to the ambiguity about the definition of the independent variable, there is ambiguity concerning the nature of many of the dependent variables. What is and is not a fight, what is a discipline problem, what constitutes a referral, when does suspension take place. Ambiguity in the

definition of dependent variables makes it difficult to determine what is to be measured, plan how to measure it, and compare findings across studies. Gentry and Beneson (1993) summarize that there is no actual research data that supports conflict resolution in schools because the present data is anecdotal, such as quoting students and administrators saying how they as an individual or as a community have benefited from the teachings of conflict resolution.

Last, several teachers feel that teaching conflict resolution in the classroom takes valuable time away from academics. Bettmann and Moore (1994) state several teachers involved in conflict resolution studies were dissatisfied with the program because so much of their time is given towards conflicts and creating students who are relying even more on teachers to help during disputes. This undercuts the children's time learning the basics: reading, writing, and arithmetic.

In summary, there should be more extensive studies done to obtain solid evidence proving without a doubt that conflict resolution programs produce long-term changes in violent behavior before taking on the heavy price tag of the program. Conflict resolution programs can be very costly and time consuming, resulting in moneys and time being taken away from the standard curriculum.

Discussion

The literature on dealing with violence in schools generally presents three perspectives. One is the process of physical structure (metal detectors and stationed police officers) to prevent weaponry from entering the school. Another is eliminating conflict by implementing a suspension program. Finally, there is the counseling approach (conflict resolution) to modify the behavior that causes one to want to bring a weapon into school or to use physical and/or verbal abuse to address conflicts.

Schools using metal detectors and police officers discovered a decrease in the amount of weapons being brought to school. However, it created a prison like environment for students and staff. In addition, it was unsuccessful in preventing in school shootings. Students were still getting guns into the schools and killing other students.

The use of suspensions is generally ineffective because the students who are thrown out of school are missing an education and the opportunity to learn how to deal with conflict effectively. These students continue down a path of destruction, later to be identified as at-risk. Eventually, the at-risk student makes a decision to continue on in school or drop out. The choice to drop out results in an individual who has not learned self-control nor earned a high school degree. The student and the community lose out.

The vision of the conflict resolution program is to work with the *individual*. Conflict resolution equips the individual with tools (negotiation skills) to be used when conflict occurs, instead of using guns, fists, or foul language. In addition, most of the research that has been conducted is in favor of the program.

Instituting physical barriers (metal detectors and stationed police officers) or relying suspensions is a treatment of the symptom not a treatment of the cause. The process of avoiding violent behavior ought to be preemptive where from the earliest stages children are taught that violence is not an effective method to overcome problems in their lives. The physical barriers simply teach kids how to be creative in a negative fashion when confronted with obstacles such as metal detectors. An example of this type of thinking is a youth that hid a gun inside his pants behind a large metal belt-buckle. The metal-detecting wand passed over the gun and signaled metal, but because the process had become so routine, the officer figured the source of the alarm was the belt-buckle, and let the youth pass.

Chapter 3

Method

Materials

Coincident with the beginning 1995-1996 academic year, the researcher implemented a Conflict Resolution Program that consisted of in-classroom instruction. The program was presented in a classroom setting, as opposed to individual, one-on-one instruction/counseling. The researcher chose the classroom approach primarily because of time-constraints, and balancing of instruction load with the day-to-day individual crisis counseling that was a part of the researcher's responsibility. Each class in the school received 30 minutes of instruction per week. The conflict resolution program was divided into four parts, coincident with the academic quarters:

- Developing Self-Concepts (Q1)
- Growing in Social Awareness (Q2)
- Acquiring Communication Skills (Q3)
- Developing Respect and Empathy (Q4)

The instruction was based primarily on the program developed by Teacher Created Materials, Incorporated. The main reason this program was chosen was

because it was created and tested by teachers. It is a systematic program designed to show counselors methods that will help students ward off or even bypass many conflicts altogether. It also presents nonviolent ways (assertiveness, negotiation, compromise, and mediation) to resolve the conflicts that do occur. The instruction, in addition to lecture material, included activities such as role-playing, hands-on activities (e.g., tug-of-war), cues/visuals, readings, videos, and self-evaluation.

Participants

Disciplinary referrals are tracked and tallied by the Simpson principal's office each time a student is referred by a staff member for disciplinary reasons. The gross or high level data needed for analysis was a school-wide comparison of referrals, before and after the Conflict Resolution Program (i.e., for the 1994 – 1995, there was a school-wide total of x, while for 1995-1996, there was a school-wide total of $x - y$). If a reduction of referrals was indeed the case, the next step would be to perform the analysis to ensure that the difference was indeed statistically significant and not simply coincident or a function of analysis error.

As the data was initially analyzed, it was quickly apparent that the class size for each grade level increased the next year. As an example, the kindergarten class of 1994-95 had 98 total students. The following year, 1995-96, when these kindergartners were in first grade, the total had risen to 101 students or an

increase of 3% in the class size. Because of this year-to-year class size increase, it is likely that gross numbers of discipline referrals would increase, regardless of how successful the Conflict Resolution Program was; the data might not indicate a reduction in discipline referrals. Included is a table of the student populations for the two academic years:

Table 1 - Simpson School Student Population, Academic Year 1994 - 1995

Grade	Males	Females	Total
K	58	40	98
1	43	53	96
2	50	48	98
3	48	37	85
4	45	52	97
5	45	52	97
6	27	40	67
Totals	316	322	638

Table 2 - Simpson School Student Population, Academic Year, 1995 - 1996

Grade	Males	Females	Total
K	68	60	128
1	54	47	101
2	49	58	107
3	52	50	102
4	48	49	97
5	50	50	100
6	47	44	91
Totals	368	358	726

This disparity in year-to-year student population had several implications:

- General student population increased year-to-year

- New students that had not received the Conflict Resolution Program were added to the population (i.e., were not enrolled in 1994-95, were enrolled in 1995-96)

- Students that had received the Conflict Resolution Program had left the population (i.e., were enrolled in 1994-95, were not enrolled in 1995-96).

In order to adhere to reasonable rules of "before and after" testing, steps were taken to ensure that the testing population was homogenous. This was achieved by analyzing and comparing the student rosters of each class for the 2 academic years. Any students that were not enrolled for the entire duration of both years (i.e., full participants in the experiment) were excluded from the hypothesis analysis and testing.

The second realization was that the 6th grade of the 1994-95 school year had graduated, and was no longer enrolled for the 1995-96 school year. In addition, the kindergarten class of 1995-96 was "new" to the school, and therefore had not received the Conflict Resolution Program during the 1994-95 school year. In order to remove these extraneous student data points (i.e., they were not fully part of the experiment, participating in both the "before" and "after" aspects), these 2 groups of students were excluded from the analysis.

This refinement of the gross data provided a population that was truly accurate for *before* and *after* testing purposes, and provided 6 groups of data. The

student population that was homogenous throughout the entire experiment is reflected in the following table:

Table 3 - Simpson School Test Participants / Student Count

1994 – 1995 Grade	1995 – 1996 Grade	Student Count
Kindergarten	First	84
First	Second	85
Second	Third	81
Third	Fourth	74
Fourth	Fifth	88
Fifth	Sixth	76
	Total	488

With a proper testing population established, the number of disciplinary referrals associated with each group, for each of the academic years, needed to be identified. As indicated earlier, disciplinary referrals are tracked and tallied by the Simpson principal's office each time a student is referred to the office by a staff member for disciplinary reasons. The following table reflects the count of disciplinary referrals for each year for the test population; it is the data used for the statistical analysis of the hypothesis:

Table 4 - Conflict Resolution Program Data (Disciplinary Referrals)

Group	1994-95 Grade	Disciplinary Referrals	1995-96 Grade	Disciplinary Referrals
1	Kindergarten	30	First	28
2	First	36	Second	29
3	Second	33	Third	31
4	Third	48	Fourth	36
5	Fourth	52	Fifth	44
6	Fifth	44	Sixth	33

While it was expected that discipline referrals would be reduced through the Conflict Resolution Program, what was surprising is that for every group, the count of referrals was reduced year to year. Now that data had been collected, and was consistent with expectations, the actual statistical testing was necessary to confirm that the reduction in discipline referrals was not simply coincidence, but was rather statistically significant and indicative that the Conflict Resolution Program had been successful.

Procedure

Upon analysis of the data, the most straightforward test is a "Paired T-Test." By pairing the samples, extraneous sources of information, such as variation due to sex of the student or family income, can be removed. As a consequence, the sampling error made in estimating the difference between the population means (i.e., before and after the Conflict Resolution Program) will generally be smaller. The test is essentially a comparison of each grade prior to providing the Conflict Resolution Program and after providing the Conflict Resolution program. The variable being analyzed is the number of disciplinary referrals. The following table reflects the test data, in the format used for the statistical analysis.

Table 5 - Grouped Test Data

Group	Without CRP (94-95 School year) x_1	With CRP (95-96 School year) x_2	Paired Difference $d = x_1 - x_2$	d^2
1	30	28	2	4
2	36	29	7	49
3	33	31	2	4
4	48	36	12	144
5	52	44	8	64
6	44	33	11	121
Totals	243	201	42	386

Statement of null and alternative hypothesis

$H_{0: \mu1 = \mu2}$ (mean disciplinary referral with Conflict Resolution Program is not less)

$H_{a: \mu1 > \mu2}$ (mean disciplinary referral with Conflict Resolution Program is less)

Where $\mu1$ denotes the mean disciplinary referrals *without* the Conflict Resolution

Program, and $\mu2$ denotes the mean disciplinary referrals *with* the Conflict

Resolution Program. The logic behind performing the hypothesis test using the

paired differences is as follows: if the null hypothesis is true, then the paired

differences of the disciplinary referrals for the classes sampled should average out

to about zero. The sample mean of the paired differences is

$$\bar{d} = \frac{\sum d}{n} = 7 \text{ referrals.}$$

On average, conflict referrals per group were reduced by 7 after implementing the CRP.

The question from this raw data is whether the mean decrease in disciplinary referrals should be attributed to sampling error, or whether it is large enough to indicate that, on the average, the Conflict Resolution Program reduced disciplinary referrals. To answer this question, the probability distribution of the random variable $\overline{d}$ is needed. The test was performed at the 5% significance level (i.e., have a 95% confidence with the results). Thus, **α = 0.05;** since there are 6 pairs in the sample (Degrees of Freedom = n-1 = 6-1 = 5), the critical value is $t_{0.05} = 2.015$. Next, the test statistic was computed, based upon the following formulas:

Equation for the sample mean is: $\overline{d} = \dfrac{\sum d}{n} = \dfrac{42}{6} = 7$

Equation for the sample standard deviation is: $s_d = \sqrt{\dfrac{n(\sum d^2) - (\sum d)^2}{n(n-1)}} = 4.29$

Consequently, the value of the test statistic is: $t = \dfrac{7}{4.29/\sqrt{6}} = \dfrac{7}{1.75} = \mathbf{4}$

Since the value of the test statistic falls in the rejection region (4 > 2.015), reject **H₀.**

Chapter 4

Results

As indicated above, the data provide sufficient evidence to conclude that the mean disciplinary referrals with the Conflict Resolution Program is less than the mean disciplinary referrals without the Conflict Resolution Program. In other words, with 95% statistical confidence, the Conflict Resolution Program was effective in reducing disciplinary referrals at Simpson Elementary School.

Chapter 5

Discussion

The test results were consistent with expectations – the Conflict Resolution Program had a clear and measurable effect in reducing disciplinary referrals. Each class, year to year, had a reduction in the number of disciplinary referrals. The data is consistent with what Clark (1994) indicated: conflict resolution programs are said to decrease frequency of fights, suspensions, and disciplinary referrals.

While this study and data confirmed initial assumptions, there were certain limitations to the study. The study looked at groups, before and after, and did not look directly at individuals. In addition, the analysis looked only at a discrete population (i.e., the students that were in class both before and after the conflict resolution program), and did not look at other variables that may have had an impact on the effectiveness of the program. Some of the variables that might provide additional insight include sex of the student, intelligence quotient of the student, income of the student's family, age of the student, race of the student, divorced, married, or single parentage, presence of certain "high discipline referral students" in a group and their effect upon other students in the group, geography, instructor presenting the Conflict Resolution Program, and amount of instruction in the Conflict Resolution Program.

As can be seen, given enough time and research dollars, there is an unlimited number of variables that could be included and analyzed for impact on

the efficacy of a conflict resolution program. In addition, acknowledgment must be made that this experiment took place in a school district with demographics of rural, white, middle class, and a high level of school attendance. Johnson et al. (1994) have indicated that at this time, there are no conflict resolution studies based on a broad and representative sample of students over an expansive period of time.

Simpson School, in general, is not faced with the challenges that many urban districts face, such as guns, drugs, and gangs. In addition, Simpson is racially homogenous. According to Stephens (1994), students are increasingly coming from dysfunctional families with special needs. A test that incorporates several of the above variables, and compares both rural and urban districts would present the most thorough treatment of the efficacy of a conflict resolution program.

In the final analysis, the literature supports the success of conflict resolution programs, in particular, within rural schools. This study is consistent with prior research. According to Gentry and Beneson (1993) the majority of children are very capable of resolving their own conflicts when given the opportunity and some helpful tools to use. In addition, this study, at the gross level, also demonstrated that the conflict resolution program was successful across the entire test population; specifically, each of the class groups showed a decrease in disciplinary referrals after the conflict resolution program, independent of age. However, the author of the present study does recognize that a more thorough

analysis of age as a variable could refine the best and most effective age for

implementing a conflict resolution program.

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