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REDUCING SCHOOL VIOLENCE IN DETROIT:
An Evaluation of an Alternative Conflict Resolution Intervention

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EXECUTIVE SUMMARY

In response to an increasing problem of youth violence, the Wayne County Office on Violence Reduction, in conjunction with the Detroit Public Schools, piloted a conflict resolution program in several Detroit middle schools. Using the Violence Prevention Curriculum for Adolescents developed by Deborah Prothrow-Stith, the Wayne County Office on Violence Reduction introduced this program with the intention of establishing ongoing conflict resolution programs in all of the middle schools in the Detroit Public School system and throughout Wayne County.

Program Description

The conflict resolution program was delivered to seventh grade students in two middle schools with sixth, seventh, and eighth grades. These middle schools were selected on the assumption that seventh graders in these middle schools would be able to have the most positive effect on the school climate. The actual training consisted of ten one-hour sessions designed to provide students with information on the risks of violence and homicide, to teach various alternatives to violence, and to create a classroom and school environment that is nonviolent. The program was first implemented in the two selected middle schools in the Spring of 1994. The ten week sessions were also conducted with different students in the Fall of 1994 and Spring of 1995.

Evaluation Design

The purpose of the evaluation was to assess the effects of the conflict resolution program on variables associated with violence (attitudes toward fighting, attitudes toward school, perceptions of schools safety, self-efficacy, self-reported delinquency, observed delinquency, and victimization). Since the program provided training to groups of students, the evaluation also focused on the ability of the conflict resolution training to affect participants' social competence, self-efficacy, and expectations of the outcome of competent behavior.

There were two strategies employed in this evaluation. First, to measure group differences between program participants and nonparticipants, approximately fifty students from each school were randomly chosen to be interviewed at the end of the first and second school year of program implementation. Comparisons were conducted between students attending the conflict resolution training and students not receiving the training in the same school, and between students who attended a comparison school who also did not receive the training. Second, to measure school-wide programmatic effects on school climate and students' attitudes, surveys were distributed to all middle school students prior to the initial training session, at the end of the first school year of program implementation, and at the end of the second school year of program implementation.
Four Detroit middle schools participated in this evaluation. Two of the schools received the conflict resolution training and two schools did not receive the training. The schools were selected based on their amount of school disciplinary problems, structure (primarily housing 6th, 7th, and 8th grade students), and willingness to participate in the study. A total of 211 students were interviewed and 3,585 students completed the survey.

Results and Conclusions

The findings from the interviews did not provide evidence that supported the effectiveness of the conflict resolution training. Although receiving the training was related to higher problem-solving competence, this relationship was not related to nonviolent conflict resolution. Furthermore, attending a school with the conflict resolution program was related to nonviolent conflict resolution. However, it was difficult to attribute these findings solely to the presence of the training program in the school.

The student surveys also did not reveal findings that could be directly attributed to the conflict resolution program. That is, students’ perception of school safety in the participation schools were not significantly different from the comparison schools at the end of year one or the end of year two. Similarly, the number of students who reported observing weapons in school, bringing weapons in school, participating in fights at school, and witnessing fights at school did not decrease with the introduction of the program. The lack of positive program findings existed when comparing participation to comparison schools as well as comparing program participants to nonprogram participants within the participation schools.

Program effectiveness for conflict resolution programs and other types of education-based interventions is typically related to program intensity, duration, and implementation integrity. The conflict resolution did not appear to be intense, nor did it appear to be long enough. It is difficult to imagine a program having long term effects, especially one attempting to change violent attitudes and behaviors, when program facilitators are with students for one hour a week for ten weeks. In addition, the program was not integrated into the daily operations of the school. While both principals in the participation schools expressed interest in having the conflict resolution program their schools, they did not provide resources or staff support to the program, nor was the program coordinated with school disciplinary activities. For instance, students involved in violence-related behaviors (e.g., bullying, fighting, assaults, weapon-carrying) may have benefited from the conflict resolution program more than the general school population.

There are two measurement issues that may have affected the outcomes of this study. The first measurement issue involved the level of measurement. The school-wide surveys were based on changes in aggregate (school-wide) data rather than individual changes among students attending the program. Using aggregate data did not allow the
assessment of individual program effects. Second, this study did not employ a true experimental design. The school-wide surveys were three cross-sectional measures of various attitudes and behaviors while the interviews were performed using a post-training design. With this type of design, it was not possible to determine the actual amount of pre-program differences between students attending the program and students not attending the program.

The use of school-wide surveys and individual interviews in the four schools was an attempt to control for these weaknesses in the research design. Since both levels of data analysis found no positive effects attributable to the conflict resolution program, it is plausible to suggest that the program did not produce the desired changes in violent attitudes or behaviors.

Implications for Programs and Research

Although this study did not produce supportive results of the conflict resolution program, several recommendations emerged from this research. These recommendations are programmatic, school-based, and research-related.

Conflict resolution programs need to be more intensive and have a longer duration. Ten one-hour sessions are not likely to have far reaching effects on individual students or school environments. Furthermore, these programs may be more successful if they target specific types of students. Rather than lumping together students with a broad range of behavior problems, it may be more important to focus on a relatively small group of students who commit most of the acts of violence in school.

School administrators must create an organizational climate for change. Structures could be established to promote community, student, family, and teacher involvement. One specific weakness of this program was the lack of teacher involvement. Increasing the role of teachers and including other individuals associated with the school would establish "ownership" of the program and help to insure its long term maintenance as well as reinforce "lessons" in the conflict resolution program.

More research utilizing rigorous designs is needed to determine the efficacy of these programs on individual program participants and the overall school environment. These programs have become extremely popular in recent years even though there is little empirical support. Specific recommendations include stronger designs, more attention to program implementation issues, more attention to theoretical program models, and longer follow-up periods on individual program participants and the environments of schools housing these programs. Given the broad program goals, this evaluation was unable to focus on a small number of students, employ a rigorous research design, nor track individual participants. It is our belief that other evaluations of these programs have faced similar problems. Programs that have narrowly defined goals will afford greater opportunities for stronger evaluation designs.
ACKNOWLEDGMENTS

A project of this size and magnitude would not have been completed without the assistance of a large number of individuals. It would be impossible to mention all of the people from the Wayne County Office on Violence Reduction, the Detroit Public Schools, the four middle schools that participated in this study, and from Michigan State University. However, there are a few individuals and organizations who need to be recognized.

The Wayne County Office on Violence Reduction agreed to participate and allow their program to be evaluated. The Director, Alan Tumpkin, was always willing to address the many concerns and problems expressed during this project.

We would also like to acknowledge the four middle schools who agreed to be either participation or control schools, facilitated the data collection process, especially the staffs, who were involved in the project from the beginning. Dr. Rebie Kingston, the Director of the Office of Guidance for the Detroit Public Schools, provided a tremendous amount of support in the early stages of developing this project and identifying the four middle schools.

Finally, the project staff at Michigan State University perhaps deserves the greatest acknowledgment. Sherman Davis assisted throughout the project. He was invaluable in collecting survey and interview data as well as conducting on-site observations. Tracy O’Connell and Beverly Dickinson provided a vast amount of technical assistance and support at every stage of the project.
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Scenario 1  Your mother has been nagging you about getting home immediately after school. One day you get home an hour late and your mother yells at you, "Do you know what time it is? Where have you been?"

CODING CRITERIA

5 — Student expects mother to understand; to not punish; to forgive; to believe. Student does not expect to get in any trouble. Student says nothing will happen.

   Example: She’d say okay and I wouldn’t get in any trouble.

4 — Student expects mother to warn him/her about future occurrences. Student does not expect to get in any trouble.

   Example: She’d tell me to get home earlier next time.

3 — Student does not expect to get in trouble. Mother may/may not be mad. Mother will stop yelling.

   Example: She may or may not be mad.

2 — Mother may yell but student does not expect to get in too much trouble. Mother may check out the truth of the story. Mother may not listen/believe student.

   Example: She’d yell but I probably wouldn’t get into too much trouble.

1 — Student expects to get in trouble

   Example: I’d be grounded.

Scenario 2  A kid you know is a drug dealer. He found out that school security is going to check his locker after the next class. He asks you to keep his stuff in your locker.

CODING CRITERIA

5 — Student expects dealer to leave him/her alone; to find someone else. Student states that the dealer may get in trouble but student is okay. Student will not get in trouble. Nothing dealer could do. Student states that nothing would happen.

   Example: He’d leave me alone.
4 -- Student expects dealer would get mad but student would be okay. Student says dealer may "get an attitude" but leave student alone and find someone else to keep the drugs. Student states dealer would get in trouble.

   Example: He'd get mad at me but I'd be okay.

3 -- Student says dealer would be mad.

   Example: He'd be mad.

2 -- Student says dealer would get mad and not want to be friends. Dealer would continue to try to persuade student. Dealer would bully student.

   Example: He'd keep pestering me to keep his stuff.

1 -- Student expects dealer would fight or threaten to fight. Dealer would tell an authority that the drugs belonged to the student. Dealer would force student to keep the drugs.

   Example: He'd probably hit me and make me do it.

Scenario 3 You think that one of your classmates has recently been telling rumors about you. You don't know this student well, so you don't know why he (she) is telling these rumors. You're upset about the rumors and you want the student to stop telling them.

CODING CRITERIA

5 -- Student expects the rumor-teller to apologize; to stop telling rumors. The student states that the situation is rectified by the rumor-teller denouncing the truth of the rumors.

   Example: She'd apologize and stop telling the rumors.

4 -- Student expects to find out why the rumor-teller was spreading rumors; expects confession from the rumor-teller; gets an explanation.

   Example: She'd tell me why.
3 - Student does not expect situation to change; does not expect the rumor-teller to listen. Student states the outcome would depend upon the person telling rumors. A fight would be avoided; the rumor-teller may or may not explain why he/she is telling rumors. Student states that nothing would happen.

Example: The rumors probably won’t stop.

2 - Student expects that the rumor-teller would have a "bad attitude" and may start cussing or arguing; the rumor-teller would lie or deny the rumor. Student states that the situation might get worse. Student states that he/she would be humiliated or embarrassed.

Example: She’d start yelling and cussing.

1 - Student expects rumor-teller will try to fight or will want to fight.

Example: He’d probably hit me.

Scenario 4 You are walking home alone down a dark street. Two boys (girls) are following you. You don’t know them but they are about your age. They catch up with you and say, "Give us your jacket."

CODING CRITERIA

5 - Student expects to keep the jacket; to be left alone by the two others; to be able to leave the situation; to be safe; able to get home.

Examples: They’d leave me alone.
I’d be safe even if I don’t have my jacket.

4 - Student expects to be in a better position after giving them his/her jacket.

Example: I’d be better off.

3 - Student says they would take the jacket and leave. Student states he/she could get another jacket. Student states that nothing would happen.

Example: They’d leave with the jacket.

2 - Student is not physically hurt but the situation is not over. Student states that he/she is humiliated; that they laugh at him/her; that they bully him/her; that they follow him/her. Student states that he/she would be cold.

Examples: They’d make fun of me.
I'd be cold.

1 -- Student expects that they would try to fight; beat him/her up; want something else; push; knock student down. Student states that he/she would get in trouble at home.

   Examples: They would ask me for my shoes.
   I'd get in trouble with my mom.

Scenario 5 You are sitting with your friends in the lunch room. A boy (girl) you don't know spills his (her) drink on you. One of your friends tells him (her) to apologize and he (she) refuses.

Coding Criteria

5 -- Student expects the drink-spiller to apologize; to offer to clean up the mess. Student is satisfied with the outcome; expresses resolution of the situation.

   Example: She'd apologize and help clean up.

4 -- Student does not expect an apology but states that it does not matter. Student states that a fight would be avoided. Student states that he/she would be left alone.

   Example: He'd go sit down and not apologize but I don't care.

3 -- Student and spiller go separate ways; say nothing; student states that he/she would wipe up the mess him/herself. Student states that it depend upon the person who spilled the drink; says he/she would forget it. Student states that nothing would happen.

   Example: He'd go sit down and I'd wipe up the mess.

2 -- Student states that he/she would be humiliated; that the spiller or the student's friends would make fun of him/her; that he/she would be picked on by spiller or friends. Student states that spiller does not apologize.

   Example: My friends would call me weak.

1 -- Student expects a fight; expects that spiller or his/her friends will spill on him/her again.

   Example: He might do it again.
**Scenario 6.** You are at school and you see another student talking to your boyfriend (girlfriend). They are laughing and smiling and seem to be having fun. Suddenly, your boyfriend (girlfriend) looks at you and turns quickly away.

**CODING CRITERIA**

5 — Student expects to work out the situation with his/her girl/boyfriend. Talk things out. Expects girl/boyfriend to stop talking to the other student. Student expects to become friends with the third student.

   **Example:** She'd wait after school so we could talk about everything.

4 — Student expects to find out who the other student is.

   **Example:** My boyfriend would tell me who she was.

3 — Student states nothing would happen. Says a fight would be avoided. Situation is not better and not worse.

   **Example:** Nothing would get started in school.

2 — Student says that girl/boyfriend would get angry; girl/boyfriend would say "leave me alone"; would walk away; not wait after school. Girl/boyfriend might "get an attitude" or yell. They might or might not talk.

   **Example:** She'd yell and be angry.

1 — Student expects to break up; fight.

   **Example:** She'd dump me.
SESSION 1 - Violence is Everywhere

Goals

- Determine what your students know or don't know about violence.

- Discuss the different "faces" of violence.

Procedure

- Introduce the curriculum, telling students what they will study, why they will study it, why violence occurs and how to prevent violence.

- Reproduce, distribute and discuss the handout, "The Many Names of Violence." Begin by giving a dictionary definition and proceed from there.

- With student participation, list primary and secondary associations of violence, i.e. murder, weapons, injury, robbery, government, racism, etc.

NOTE: Discussion involving students should be non-judgmental!

Questions for Discussion

- Where do we learn violence?

- What’s your favorite movie? Television show?

- How does our country exhibit violence?

SESSION 2 - Violence Among Acquaintances

Goal

- Provide information on the characteristics of violence.
Procedure

- Review Session 1, introduce Session 2. Remind students that this session will focus on physical violence among people who know each other.
- Present newspaper clippings that describe acquaintance violence.
- Ask the question, "How many of you know someone who has been murdered", and have the students discuss their experiences.
- Ask the question, "What is the most frequent types of homicide (intentional killing)?"
- Compare and contrast their responses with actual statistics.
- Discuss Session 2 handouts.

SESSION 3 - Reducing Your Risks

Goals

- Discuss the homicide related risk factors from Session 2.
- Describe the effects of alcohol on the brain and its role in interpersonal violence.

NOTE: Teachers should be prepared to define the following items:

- Autopsy
- Brain stem
- Cortex
- Inhibition
- Limbic system
- Socio-economic status

Procedure

- Review Session 2, introduce Session 3. The purpose of this session is to explore each common risk factor more fully (arguments, alcohol, weapons, and poverty).
- Ask the question, "If 47% of homicides result from arguments, what are some of the reasons people argue?"
CONFLICT RESOLUTION CURRICULUM

- Ask the question, "What role do you think alcohol and drugs play in violence?"
- How does alcohol effect the brain? What about drugs?
- What about weapons? Is it ever "okay" to carry a gun? What role does a gun play in violence?
- What role does poverty play in violence? What about race?

This discussion should help students understand that physical violence is most often found in impoverished conditions. Also, fighting can lead to poverty, i.e., if you fight on the job, you may lose it! Finally, discuss the association between race and violence, i.e., certain minority groups have historically been recipients of violence. Does racial oppression provide answers to the dilemma of violence facing African and Hispanic Americans?

SESSION 4 - The Role of Anger

Goals
- Explain that anger is a normal part of life.
- Describe the physiological changes that occur during anger.

Procedure
- Review Session 3, introduce Session 4. Discuss today's goal: To understand and identify the physiological changes that occur during anger.
- Distribute handout.
- Lead a discussion listing what makes us angry, i.e., what about school makes you angry? Parents, friends, etc.?

SESSION 5 - Different Ways Anger is Expressed

Goal
- Describe both healthy and unhealthy expressions of anger.
Procedure

- Review Session 4, introduce Session 5. Emphasize that anger is normal and that part of becoming an adult is learning how to deal with anger.

- Discuss ways to deal with anger.

**NOTE:** Your success in teaching conflict resolution depends on your ability to evoke student responses. Always brainstorm with them.

- Ask the question, "What options do you have when you are angry, other than violence?"

- List student suggestions on the chalkboard.

- To keep the discussion moving, ask the question, "How do you generally deal with anger?"

- Distribute for homework the anger style inventory handout.

**SESSION 6 - What Do You Gain from Fighting?**

Goals

- Discuss both positive and negative consequences of fighting.

- Show how negative consequences outweigh positive.

Procedure

- Review Session 5, introduce Session 6. State goal: To take a closer look at the consequences of fighting, both positive and negative.

- Review anger style inventory from lesson 5.

- Discuss the inventory, asking the students if it gives a correct assessment of how they deal with anger.
Discuss the difference between conflict and violence, i.e., conflict is a necessary part of life. It is not bad. It causes growth. Violence is a negative reaction to conflict.

- List the positive results of fighting.
- List the negative results of fighting.
- Compare and contrast.
- Ask the question, "Which list is longer?"
- Ask the question, "Which list has short-term consequences? Which, long-term?"
- If there are so many reasons not to fight, why do kids fight?
- Give an example of a situation that results in a fight, i.e., someone speaks negatively about your mother. If you hit the person, what positives would result from the fight? What negatives?

**NOTE:** Your goal is to help the student focus on his/her actions, and the consequences.

**SESSION 7 - Steps to and Results of Fighting**

**Goals**
- Illustrate the steps to fighting.
- Analyze a specific fight situation.

**Procedure**
- Review Session 6, introduce Session 7. The goal of today's session is to analyze the factors leading to a fight.
- Choose two students who will design their own fight situation that will show the steps leading to a fight and the results.
After the role play, give the students terms which describe their simulated fight situation, i.e. the fight begins with a conflict that escalates after one provokes another, leading to an act of aggression.

SESSION 8 - Preventing Violence

Goals

• Determine the ways violence might be prevented through analysis of a fight.
• Discuss the difference between prevention and intervention.
• Identify violence prevention methods that might be effective in school.

Procedure

• Review Session 7, introduce Session 8. Explain that the goal of today’s session is to de-escalate fights and prevent violence.

• Write prevention and intervention on the board and discuss the difference between the two terms; prevention is keeping the fight from occuring; intervention is trying to de-escalate it once it has begun, and often involves a third party.

• Ask the question, "How would you intervene during a fight between two of your friends?"

• Discuss last weeks role plays and conduct a new one. This role play will involve two people on the verge of a fight, and a third party intervening, listening to both sides and offering alternatives to fighting.

• Design several role plays to highlight several solutions.

SESSION 9 - Fighting: Is There Another Way?

Goals

• Emphasize that there are other choices in a conflict than fighting or running.
• Identify obstacles to non-violent conflict resolution.
• De-glamorize violence.
Procedure

- Review Session 8, introduce Session 9. Today's session will focus on how to handle conflicts without fighting or fleeing, and on the obstacles that can prevent us from responding non-violently.

- List fight situations and illustrate "fighting" responses or "discussion" responses, i.e.:

Your friend supposedly told a lie on you. A fight response would be to threaten the friend. A fleeing response would be to simply ignore it, although you are very angry. A discussion response would be to call your friend and attempt to find out the truth, peacefully. If you find out your friend has lied on you, he/she probably wasn’t your friend in the first place.

SESSION 10 - Time to Prevent Fights

Goals

- Practice skills of non-violent conflict resolution.

- Identify alternatives to fighting.

Procedure

- Review Session 9, introduce Session 10. Today’s session will focus on specific strategies for reducing the risk of you getting into fights.

- Emphasize strategies:

During a conflict, stay in control. Don’t let your fear, anger, or defensiveness throw you off balance, and don’t let anyone else force you into fighting. Keep your voice low and calm. Calling someone names, shouting, or swearing will make the other person defensive. Keep the situation from escalating. Try to relate to the other person. Understand what he or she is feeling. Always seek non-violent alternatives. Don’t back a person in a corner. Keep it light, tell a joke; but not at the other’s expense. Finally, be ready to apologize or accept an apology.
NOTE: If the student does not value non-violence, these strategies are meaningless. Your task is to clearly illustrate why it is better to peacefully resolve conflicts than to fight. You must illustrate the consequences of violence, and convince them that their future success depends on their ability to control anger.

- Ask the question, "Is any of our lessons applicable in today’s society?"
- How do you view fighting now that the course is over?
- Summarize the ten week training session, emphasizing that their future successes depend on their ability to control anger.

NOTE: Very few conflict resolution curricula deal with the issue of self-esteem. For many academically and economically disadvantaged youth, fighting is their only source of self-gratification. They do it well. They are good at "dogging" people. They find their self-worth in brute strength. This issue takes more than ten weeks to resolve. However, incorporate in your training topics that build an individual’s self-esteem, i.e., positive cultural/racial history, positive affirmation, etc. Conflict resolution is an ongoing exercise that should be infused in all school curricula, and must be demonstrated by all those teaching it!!

Contributing materials for this curriculum are:

- Violence Prevention Curriculum, Deborah Prothrow-Stith, M.D.
- Conflict Resolution Curriculum, Center for Peace and Conflict Studies, Wayne State University
- Strategies for Successful Mediation, Dispute Resolution Coordinating Council, Detroit, Michigan
APPENDIX B

Student Interview Instrument
Student Survey

Grade in school: (Circle One) 6th 7th 8th  Male / Female (Circle One)  Age _____

Please circle the response which best represents the way you feel.

1. Your teachers really care about you and want you to do well. Strongly Agree Agree Neither Disagree Strongly Disagree
   SA A N D SD

2. Teachers go out of their way to help students. SA A N D SD

3. The teachers and principals don't want you in their school. SA A N D SD

4. The teachers in this school always try to help students. SA A N D SD

5. This school has too many rules. SA A N D SD

6. The rules in this school are unfair. SA A N D SD

7. It's better to talk to someone than to fight. SA A N D SD

8. You have to fight so other students don't think you are weak. SA A N D SD

9. You can talk your way out of a fight. SA A N D SD

10. It is okay to hit someone who makes fun of you. SA A N D SD

11. You should try to stop people from getting into a fight. SA A N D SD

12. Fighting is the only way to solve problems. SA A N D SD

13. It is okay to walk away from a fight. SA A N D SD

14. The teachers are afraid of some students. SA A N D SD

15. I always feel safe at school. SA A N D SD

16. I am afraid to go into the restrooms at school. SA A N D SD

17. I feel safe on the way to school and when going home after school. SA A N D SD

18. People sell drugs around this school. SA A N D SD

19. The school is in gang territories. SA A N D SD

20. I always feel safe in the school cafeteria. SA A N D SD

Please circle the answer which best represents the way you feel.

1. A stranger, about your age, is giving you the eye and purposely bumps into you on the street. Ignoring this stranger is _______ for you. Very Hard Hard Easy Very Easy

2. One of the kids in your school has been telling rumors about your boyfriend/girlfriend. Asking this kid why he or she is telling rumors about you is _______ for you. Very Hard Hard Easy Very Easy

3. You are hanging out with a bunch of your friends. A new kid starts insulting you. Telling this person to stop is _______ for you. Very Hard Hard Easy Very Easy

4. You're pretty sure that one of your classmates is trying to steal your boyfriend/girlfriend. Ignoring this person is _______ for you. Very Hard Hard Easy Very Easy

5. Someone in your school stole your jacket. Telling the principal or a teacher about it is _______ for you. Very Hard Hard Easy Very Easy
6. You and a friend are arguing about what to do after school. Giving in on your plans is _____ for you.

7. Talking about a problem is _____ for you.

8. After you and a friend have an argument, it is _____ for you to make up with that friend.

9. Doing things as well as your friends do is _____ for you.

10. Giving in to someone else to avoid a fight is _____ for you.

Since Easter Break (the beginning of April), how many times have you seen:

1. A fight between students at school. 0 1 2 3 4+
2. A student threaten a teacher. 0 1 2 3 4+
3. A student do something to make a teacher angry. 0 1 2 3 4+
4. A student destroy school property. 0 1 2 3 4+
5. A teacher help a student. 0 1 2 3 4+
6. A student bring a weapon to school. 0 1 2 3 4+
7. The police at school to take someone out of school. 0 1 2 3 4+
8. A student with drugs or alcohol in school. 0 1 2 3 4+
9. A teacher push or hit a student. 0 1 2 3 4+
10. A student bring a gun to school. 0 1 2 3 4+

Since Easter Break (the beginning of April), how many times have you:

1. Been in a fist fight. 0 1 2 3 4+
2. Talked your way out of a fight. 0 1 2 3 4+
3. Hit someone who made fun of you. 0 1 2 3 4+
4. Messed up school property. 0 1 2 3 4+
5. Been sent to the principal's office for bad behavior. 0 1 2 3 4+
6. Carried a gun or a knife to school. 0 1 2 3 4+
7. Stopped people from fighting each other. 0 1 2 3 4+
8. Threatened to hurt someone. 0 1 2 3 4+
9. Been suspended or excluded from school. 0 1 2 3 4+
10. Had someone physically assault or hurt you at school. 0 1 2 3 4+
11. Had someone take something from you using physical force. 0 1 2 3 4+

A. Did you take the Michigan State survey in April? Yes No

B. Did Mr. Eric Saunders come into your class for conflict resolution training? Yes No
   If yes, how many times did Mr. Saunders come into your class? ________

C. Did you participate in the Quest Program? Yes No
STUDENT INTERVIEW

INTERVIEWER: Hi, my name is _____________. I'm from Michigan State University, and we are interviewing students here at __________ to see how you feel about things that happen at school. This is not a test, and there are no right or wrong answers. We're just interested in how you think and feel about things that happen in school. Your answers will not be shared with anyone. Your name will not be used in any way. And, if you do not wish to answer any question(s) please just let me know. Do you have any questions before we begin?

INSTRUCTIONS: WRITE A COMPLETE ANSWER IN THE SPACE PROVIDED FOR OPEN-ENDED QUESTIONS OR CIRCLE THE APPROPRIATE RESPONSE FOR CLOSED-ENDED QUESTIONS.

School: ____________

1) What is your Homeroom Number? ____________

2) What grade are you in? 6th 7th 8th

3) How old are you? ___

INSTRUCTIONS: ANSWER THE FOLLOWING QUESTIONS BASED ON YOUR OBSERVATION. DON'T ASK THE STUDENT UNLESS YOU CAN'T MAKE THE ASSESSMENT YOURSELF.

4) Gender: M F

5) Ethnicity: ____________

6) How long have you attended this school? ____ (YEARS OR SEMESTERS)

7) How much do you like attending this school? (READ RESPONSES)
a. Like it a lot 
b. Like it a little bit 
c. Neither like or dislike it 
d. Dislike it a little bit 
e. Dislike it a lot 

8) What do you like most about this school? ________________________________

9) What do you like least about this school? ________________________________

10) What grades do you mostly get (DON'T READ RESPONSES)? _______

11) Do you think that two students who broke the same rule would be treated differently?
a. No  (IF "NO" GO TO QUESTION 12)
b. Yes  (IF "YES" GO TO QUESTION 11a)

11a) How would these students be treated differently? ________________________________
12) Do you feel safe at school?
   a. No (IF "NO" GO TO QUESTION 12a)
   b. Yes (IF "YES" GO TO QUESTION 13)

12a) Why don't you feel safe at school? ____________________________________________
__________________________________________
__________________________________________
__________________________________________

13) Do you feel safe going to and from school?
   a. No (IF "NO" GO TO QUESTION 13a)
   b. Yes (IF "YES" GO TO QUESTION 14)

13a) Why don't you feel safe? ______________________________________________________
__________________________________________
__________________________________________
__________________________________________

14) How do you get to and from school? (e.g., WALK, BUS, PARENTS)
    ____________________________________________________________
__________________________________________
__________________________________________
__________________________________________

15) How many fights between kids do you see in a week?
   a. None (IF "NONE" GO TO QUESTION 17)
   b. One
   c. Two to three
   d. Four to five
   e. Six or more

16) Why do you think kids get into fights? ___________________________________________
__________________________________________
__________________________________________
__________________________________________

17) Since Easter break (beginning of April), how many fights with other kids have you been in? _____ (IF "ZERO" OR "NONE" GO TO QUESTION 19)

18) Why did you get into these fights? ____________________________________________
__________________________________________
__________________________________________
__________________________________________

19) What are ways to avoid fights? ________________________________________________
__________________________________________
__________________________________________
__________________________________________
20) Do you think students bring weapons to school?
   a. No (IF "NO" GO TO QUESTION 21)
   b. Yes (IF "YES" GO TO QUESTION 20a AND 20b AND 20c)

20a) What kind of weapons? ________________________________

20b) How often are these weapons brought to school? ________________________________

20c) Why do you think students bring these weapons to school? ________________________________

21) Do you know anyone who has been seriously hurt or killed in a fight or with a gun?
   a. No (IF "NO" GO TO SCENARIO 1)
   b. Yes (IF "YES" GO TO QUESTION 21a)

21a) How were they seriously hurt or killed? (E.G., GANG FIGHT, DRIVE-BY SHOOTING, ROBBERY VICTIM, ETC.) WE ARE LOOKING FOR THE GENERAL SITUATION, TRY TO AVOID HAVING THE STUDENT TELL YOU A STORY. ________________________________

STUDENT INTERVIEW SCENARIOS

INTERVIEWER: Now I would like for you to tell me what you would do if you were in the following situations.

SCENARIO 1: A substitute teacher says that you've been disrupting her class and sends you to the principal's office. You think that the teacher is picking on you, because you know that you did not disrupt the class. The principal meets you at the office door.

I. a) What would you say or do now? ________________________________

   ________________________________

   ________________________________

   ________________________________

   ________________________________

   ________________________________

   ________________________________

b) Why would you do that? ________________________________

   ________________________________

   ________________________________

   ________________________________

   ________________________________

   ________________________________

   ________________________________

SCENARIO 2: Your mother has been nagging you about getting home immediately after school. One day you get home an hour late, and your mother yells at you, "Do you know what time it is? Where have you been?"

I. a) What would you say or do now? ________________________________

   ________________________________

   ________________________________

   ________________________________

   ________________________________

   ________________________________

   ________________________________

3
b) Why would you do that?

SCENARIO 3: A kid you know is a drug dealer. He found out that school security is going to check his locker after the next class. He asks you to keep his stuff in your locker.

I. a) What would you say or do now?

b) Why would you do that?

SCENARIO 4: You think that one of your classmates has recently been spreading nasty rumors about you. You don’t know this student well, so you don’t know why she (he) is saying these things. You’re upset about these rumors, and you want the rumors to stop.

I. a) What would you say or do now?

b) Why would you do that?

SCENARIO 5: You are walking home alone down a dark street. Two boys (girls) are following you. You don’t know them, but they are about your age. They catch up with you and say, "We want your jacket."

I. a) What would you say or do now?

b) Why would you do that?
**SCENARIO 6:** You are sitting with your friends in the lunch room. A girl (boy), you don't know, spills her (his) drink on you. One of your friends tells her (him) to apologize, but she (he) refuses.

I. a) What would you say or do now? ____________________________________________

__________________________________________

b) Why would you do that? ____________________________________________

__________________________________________

**SCENARIO 7:** You are at school and you see another student talking to your girlfriend (boyfriend). They are laughing and smiling and seem to be having fun. Suddenly, your girlfriend (boyfriend) looks at you and then turns quickly away.

I. a) What would you say or do now? ____________________________________________

__________________________________________

b) Why would you do that? ____________________________________________

__________________________________________

**PART TWO**

**INTERVIEWER:** I've been asking you about what you would do in certain situations. Now, I want to know what you think about the responses of other students who would be in the same situations. These responses of other student are not right or wrong, they are simply what other students said they would do.

**SCENARIO 1:** A substitute teacher says that you've been disrupting her class and sends you to the principal's office. You think that the teacher is picking on you, because you know that you did not disrupt the class. The principal meets you at the office door.

II. One student said that he (she) would say that it was not him (her) who disrupted the teacher's class.

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
<tr>
<th>Definitely COULD NOT do it</th>
<th>Probably COULD NOT do it</th>
<th>Not sure/ Don't know</th>
<th>Probably COULD do it</th>
<th>Definitely COULD do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
If you tried this, what do you think would happen?

SCENARIO 2: Your mother has been nagging you about getting home immediately after school. One day you get home an hour late, and your mother yells at you, “Do you know what time it is? Where have you been?”

One student said that he (she) would be respectful and explain why he (she) was late.

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
<tr>
<th>Definitely COULD NOT do it</th>
<th>Probably COULD NOT do it</th>
<th>Not sure/Don’t know</th>
<th>Probably COULD do it</th>
<th>Definitely COULD do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Why/Why not?

If you tried this, what do you think would happen?

SCENARIO 3: A kid you know sells drugs. He found out that school security wants to check his locker after the next class. He wants to keep his stuff in your locker.

One student said, “No, I won’t.”

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
<tr>
<th>Definitely COULD NOT do it</th>
<th>Probably COULD NOT do it</th>
<th>Not sure/Don’t know</th>
<th>Probably COULD do it</th>
<th>Definitely COULD do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
If you tried this, what do you think would happen?

---

**SCENARIO 4:** You think that one of your classmates has recently been spreading nasty rumors about you. You don't know this student well, so you don't know why he/she is saying these things. You're upset about these rumors, and you want the rumors to stop.

II. One student said that he/she would ask the student if he/she was spreading rumors, and if so, he/she would ask why he/she was doing this?

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
<tr>
<th>Definitely COULD NOT do it</th>
<th>Probably COULD NOT do it</th>
<th>Not sure/Don't know</th>
<th>Probably COULD do it</th>
<th>Definitely COULD do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Why/Why not?

---

If you tried this, what do you think would happen?

---

**SCENARIO 5:** You are walking home alone down a dark street. Two boys (girls) are following you. You don't know them, but they are about your age. They catch up with you and say, "we want your jacket."

II. One student said that he/she would give the jacket to them.

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
<tr>
<th>Definitely COULD NOT do it</th>
<th>Probably COULD NOT do it</th>
<th>Not sure/Don't know</th>
<th>Probably COULD do it</th>
<th>Definitely COULD do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Why/Why not?
If you tried this, what do you think would happen? ________________________________

SCENARIO 6: You are sitting with your friends in the lunch room. A girl (boy), you don’t know, spills her (his) drink on you. One of your friends tells her (him) to apologize and she (he) refuses.

II. One student said that he (she) would say, "It's no big deal."

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
<tr>
<th>Definitely COULD NOT do it</th>
<th>Probably COULD NOT do it</th>
<th>Not sure/ Don’t know do it</th>
<th>Probably COULD do it</th>
<th>Definitely COULD do it</th>
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<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Why/Why not? ________________________________________________________________

If you tried this, what do you think would happen? ________________________________

SCENARIO 7: You are at school and you see another student talking to your girlfriend (boyfriend). They are laughing and smiling and seem to be having fun. Suddenly, your girlfriend (boyfriend) looks at you and then turns quickly away.

II. One student said that she (he) would wait and talk to boyfriend (girlfriend) after school.

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
<tr>
<th>Definitely COULD NOT do it</th>
<th>Probably COULD NOT do it</th>
<th>Not sure/ Don’t know do it</th>
<th>Probably COULD do it</th>
<th>Definitely COULD do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Why/Why not? ________________________________________________________________
Since Easter break (beginning of April), how many times have you:

<table>
<thead>
<tr>
<th>Event</th>
<th>Zero</th>
<th>Once</th>
<th>Twice</th>
<th>Three</th>
<th>Four or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Been in a fist fight?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>2. Talked your way out of a fight?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>3. Messed up school property?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>4. Been sent to the principal’s office for bad behavior?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>5. Carried a gun/knife to school?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>6. Stopped people from fighting each other?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>7. Threatened to hurt someone?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>8. Been suspended or excluded from school?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>9. Been physically hurt by someone at school?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>10 Had someone take something from you using physical force?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
</tbody>
</table>

11) Did you participate in conflict resolution training at school this semester?  
YES  NO  (IF "YES," GO TO QUESTION 11a)

11a) Who taught the program and what was it called? 

12) Earlier this semester did you participate in a similar interview with someone from Michigan State University?  
YES  NO
APPENDIX C

Student Survey Instrument
APPENDIX D

Conflict Scenarios Coding Manuals
Appendix B

Coding Manual for Scenarios – Outcome Expectations

Definition of Outcome Expectations
Outcome expectations as defined by Bandura (1977), refer to an individual's estimate that a given performed behavior will lead to a desired outcome. Outcome expectations are related to, but separate from, social competence and perceptions of self-efficacy.

Rating Scale

5 -- expectation of a very positive outcome
4 -- expectation of a somewhat positive outcome
3 -- expectation of a neutral outcome
2 -- expectation of a somewhat negative outcome
1 -- expectation of a very negative outcome

Directions: For each scenario, use the following coding schemes to rate responses. For a response to be coded at a level it must be similar to any of the responses described by that level.

Note that the difference between levels of responses often includes specific references to how the student describes the outcome in relation to him/herself. For example, in Scenario 2, level 3 includes, "The dealer would be mad," whereas level 4 includes, "The dealer would be mad but I'd be okay." The difference in level is reflective of the student's attention to him/herself. In the same vein, level 2 includes, "Dealer would be mad and not want to be friends." Again, this response differs from level 3; in level 2 the student's specific reference to him/herself is more negative than in level 3.

More than one response: If the subject gives two or more potential outcomes which would normally receive different scores and does not choose one over the other as a final answer, the final rating should be the score of the lowest response. If the subject gives one or more outcomes in a series or sequence the response should be coded as a totality of its parts according to the elements given.

Note: For the purposes of coding, responses containing words such as "probably," "maybe," "might," etc. will be coded the same as similar responses without such words.

Physical harm: Any response in which the subject states the outcome includes physical harm to him/herself should be scored as a one.
STUDENT INTERVIEW

INTERVIEWER: Hi, my name is ______________. I'm from Michigan State University, and we are interviewing students here at __________ to see how you feel about things that happen at school. This is not a test, and there are no right or wrong answers. We're just interested in how you think and feel about things that happen in school. Your answers will not be shared with anyone. Your name will not be used in any way. And, if you do not wish to answer any question(s) please just let me know. Do you have any questions before we begin?

INSTRUCTIONS: WRITE A COMPLETE ANSWER IN THE SPACE PROVIDED FOR OPEN-ENDED QUESTIONS OR CIRCLE THE APPROPRIATE RESPONSE FOR CLOSED-ENDED QUESTIONS.

School: ____________

1) What is your Homeroom Number? ____________

2) What grade are you in? 6th 7th 8th

3) How old are you? ____________

INSTRUCTIONS: ANSWER THE FOLLOWING QUESTIONS BASED ON YOUR OBSERVATION. DON'T ASK THE STUDENT UNLESS YOU CAN'T MAKE THE ASSESSMENT YOURSELF.

4) Gender: M F

5) Ethnicity: ____________

6) How long have you attended this school? ____ (YEARS OR SEMESTERS)

7) How much do you like attending this school? (READ RESPONSES)
a. Like it a lot
b. Like it a little bit
c. Neither like or dislike it
d. Dislike it a little bit
e. Dislike it a lot

8) What do you like most about this school? ____________________________________________

9) What do you like least about this school? ____________________________________________

10) What grades do you mostly get (DON'T READ RESPONSES)? ____________

11) Do you think that two students who broke the same rule would be treated differently?
a. No (IF "NO" GO TO QUESTION 12)
b. Yes (IF "YES" GO TO QUESTION 11a)

11a) How would these students be treated differently? ___________________________________
12) Do you feel safe at school?
   a. No (IF "NO" GO TO QUESTION 12a)
   b. Yes (IF "YES" GO TO QUESTION 13)

12a) Why don’t you feel safe at school? ____________________________________________

13) Do you feel safe going to and from school?
   a. No (IF "NO" GO TO QUESTION 13a)
   b. Yes (IF "YES" GO TO QUESTION 14)

13a) Why don’t you feel safe? ____________________________________________________

14) How do you get to and from school? (e.g., WALK, BUS, PARENTS)

15) How many fights between kids do you see in a week?
   a. None (IF "NONE" GO TO QUESTION 17)
   b. One
   c. Two to three
   d. Four to five
   e. Six or more

16) Why do you think kids get into fights? __________________________________________

17) Since Easter break (beginning of April), how many fights with other kids have you been in? ________ (IF "ZERO" OR "NONE" GO TO QUESTION 19)

18) Why did you get into these fights? ____________________________________________

19) What are ways to avoid fights? ________________________________________________

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20) Do you think students bring weapons to school?
   a. No (IF "NO" GO TO QUESTION 21)
   b. Yes (IF "YES" GO TO QUESTION 21a AND 21b AND 21c)

20a) What kind of weapons? ____________________________________________

20b) How often are these weapons brought to school? _______________________

20c) Why do you think students bring these weapons to school? ______________

21) Do you know anyone who has been seriously hurt or killed in a fight or with a gun?
   a. No (IF "NO" GO TO SCENARIO 1)
   b. Yes (IF "YES" GO TO QUESTION 21a)

21a) How were they seriously hurt or killed? (E.g., Gang Fight, Drive-by Shooting, Robbery Victim, etc.) We are looking for the general situation, try to avoid having the student tell you a story. _______________________

STUDENT INTERVIEW SCENARIOS

INTERVIEWER: Now I would like for you to tell me what you would do if you were in the following situations.

SCENARIO 1: A substitute teacher says that you've been disrupting her class and sends you to the principal's office. You think that the teacher is picking on you, because you know that you did not disrupt the class. The principal meets you at the office door.

I. a) What would you say or do now? ________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   b) Why would you do that? _______________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

SCENARIO 2: Your mother has been nagging you about getting home immediately after school. One day you get home an hour late, and your mother yells at you, "Do you know what time it is? Where have you been?"

I. a) What would you say or do now? ________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
b) Why would you do that? ______________________________________________________


SCENARIO 2: A kid you know is a drug dealer. He found out that school security is going to check his locker after the next class. He asks you to keep his stuff in your locker.

I. a) What would you say or do now? _____________________________________________

b) Why would you do that? ____________________________________________________

SCENARIO 4: You think that one of your classmates has recently been spreading nasty rumors about you. You don't know this student well, so you don't know why she (he) is saying these things. You're upset about these rumors, and you want the rumors to stop.

I. a) What would you say or do now? _____________________________________________

b) Why would you do that? ____________________________________________________

SCENARIO 5: You are walking home alone down a dark street. Two boys (girls) are following you. You don't know them, but they are about your age. They catch up with you and say, "We want your jacket."

I. a) What would you say or do now? _____________________________________________

b) Why would you do that? ____________________________________________________

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**SCENARIO 6:** You are sitting with your friends in the lunch room. A girl (boy), you don't know, spills her (his) drink on you. One of your friends tells her (him) to apologize, but she (he) refuses.

I. a) What would you say or do now?  

b) Why would you do that?

**SCENARIO 7:** You are at school and you see another student talking to your girlfriend (boyfriend). They are laughing and smiling and seem to be having fun. Suddenly, your girlfriend (boyfriend) looks at you and then turns quickly away.

I. a) What would you say or do now?  

b) Why would you do that?

---

**PART TWO**

**INTERVIEWER:** I've been asking you about what you would do in certain situations. Now, I want to know what you think about the responses of other students who would be in the same situations. These responses of other student are not right or wrong, they are simply what other students said they would do.

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II. One student said that he (she) would say that it was not him (her) who disrupted the teacher's class.

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
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<th>Not Sure/Don't Know</th>
<th>Probably Could Do It</th>
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</thead>
<tbody>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
If you tried this, what do you think would happen? 

SCENARIO 2: Your mother has been nagging you about getting home immediately after school. One day you get home an hour late, and your mother yells at you, "Do you know what time it is? Where have you been?"

II. One student said that he (she) would be respectful and explain why he (she) was late.

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
<tr>
<th>Definitely COULD NOT do it</th>
<th>Probably COULD NOT do it</th>
<th>Not sure/Don't know</th>
<th>Probably COULD do it</th>
<th>Definitely COULD do it</th>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Why/Why not? 

If you tried this, what do you think would happen? 

SCENARIO 3: A kid you know sells drugs. He found out that school security wants to check his locker after the next class. He wants to keep his stuff in your locker.

II. One student said, "No, I won't."

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
<tr>
<th>Definitely COULD NOT do it</th>
<th>Probably COULD NOT do it</th>
<th>Not sure/Don't know</th>
<th>Probably COULD do it</th>
<th>Definitely COULD do it</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>2</td>
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<td>4</td>
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</tr>
</tbody>
</table>

Why/Why not? 

6
If you tried this, what do you think would happen? 

SCENARIO 4: You think that one of your classmates has recently been spreading nasty rumors about you. You don’t know this student well, so you don’t know why she (he) is saying these things. You’re upset about these rumors, and you want the rumors to stop.

II. One student said that he (she) would ask the student if he (she) was spreading rumors, and if so, he (she) would ask why he (she) was doing this?

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
<tr>
<th>Definitely COULD NOT do it</th>
<th>Probably COULD NOT do it</th>
<th>Not sure/Don’t know</th>
<th>Probably COULD do it</th>
<th>Definitely COULD do it</th>
</tr>
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<tr>
<td>1</td>
<td>2</td>
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</tbody>
</table>

Why/Why not? 

If you tried this, what do you think would happen? 

SCENARIO 5: You are walking home alone down a dark street. Two boys (girls) are following you. You don’t know them, but they are about your age. They catch up with you and say, "we want your jacket."

II. One student said that he (she) would give the jacket to them.

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
<tr>
<th>Definitely COULD NOT do it</th>
<th>Probably COULD NOT do it</th>
<th>Not sure/Don’t know</th>
<th>Probably COULD do it</th>
<th>Definitely COULD do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Why/Why not? 

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.
If you tried this, what do you think would happen? ________________________________

SCENARIO 6: You are sitting with your friends in the lunch room. A girl (boy), you don't know, spills her (his) drink on you. One of your friends tells her (him) to apologize and she (he) refuses.

II. One student said that he (she) would say, "It's no big deal."

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
<tr>
<th>Definitely COULD NOT</th>
<th>Probably COULD NOT</th>
<th>Not sure/ Don't know</th>
<th>Probably COULD</th>
<th>Definitely COULD</th>
</tr>
</thead>
<tbody>
<tr>
<td>do it</td>
<td>do it</td>
<td>do it</td>
<td>do it</td>
<td>do it</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Why/Why not? ________________________________________________________________

If you tried this, what do you think would happen? ________________________________

SCENARIO 7: You are at school and you see another student talking to your girlfriend (boyfriend). They are laughing and smiling and seem to be having fun. Suddenly, your girlfriend (boyfriend) looks at you and then turns quickly away.

II. One student said that she (he) would wait and talk to boyfriend (girlfriend) after school.

On a scale from 1 to 5, do you think you could do what that student said?

<table>
<thead>
<tr>
<th>Definitely COULD NOT</th>
<th>Probably COULD NOT</th>
<th>Not sure/ Don't know</th>
<th>Probably COULD</th>
<th>Definitely COULD</th>
</tr>
</thead>
<tbody>
<tr>
<td>do it</td>
<td>do it</td>
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<td>1</td>
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<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Why/Why not? ________________________________________________________________
If you tried this, what do you think would happen?

Since Easter break (beginning of April), how many times have you:

<table>
<thead>
<tr>
<th>Event</th>
<th>Zero</th>
<th>Once</th>
<th>Twice</th>
<th>Three</th>
<th>Four or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Been in a fist fight?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>2. Talked your way out of a fight?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>3. Messed up school property?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>4. Been sent to the principal’s office for bad behavior?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>5. Carried a gun/knife to school?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>6. Stopped people from fighting each other?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>7. Threatened to hurt someone?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>8. Been suspended or excluded from school?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>9. Been physically hurt by someone at school?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
<tr>
<td>10. Had someone take something from you using physical force?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4+</td>
</tr>
</tbody>
</table>

11) Did you participate in conflict resolution training at school this semester?  
    YES  NO  **(IF "YES," GO TO QUESTION 11a)**

11a) Who taught the program and what was it called?  

12) Earlier this semester did you participate in a similar interview with someone from Michigan State University?  
    YES  NO
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INTRODUCTION

Incidence of Youth Violence

Juvenile violence has become a major social and health problem in the United States. The Office of Juvenile Justice and Delinquency Prevention (OJJDP) reported the following statistics for juvenile homicide (1996): the number of juveniles murdered increased 82% between 1984 and 1994; 7 juveniles a day were victims of homicide, compared to 5 per day in 1980; 64% of juvenile homicides were committed by an acquaintance or a family member; and 49% of all juvenile homicides involved the use of a firearm while 76% of 15-17 year olds killed involved a firearm.

Juvenile homicide victims were disproportionately male and African-American (OJJDP, 1996; Centers for Disease Control, 1990; Bell, 1987). The number of African-American juveniles killed rose 97% between 1980 and 1994 while the number of white juveniles killed increased 15% during this same time period (OJJDP, 1996). Bell (1987) found that African-American males had a one-in-21 chance of being a homicide victim compared to one-in-131 for white males, one-in-104 for African-American females, and one-in-369 for white females.

OJJDP also reported an increase in the number of juveniles committing violent crimes. For instance, in 1994, there were 150,200 juvenile arrests for violent crimes (OJJDP, 1996). This represented a 75% increase in juvenile arrests for violent crimes from 1984. For males, this increase was 69% and 128% for females. In comparison, the adult arrest rate for violent crimes increased 48% over the same time period. The Office
of Juvenile Justice and Delinquency Prevention predicted that if these trends continue, juvenile arrest rates for violent crimes will more than double by the year 2010 (OJJDP, 1996).

The deleterious effects of youth violence extend beyond the victim and the offender. Violent incidents and fear of violence are also major problems for schools. OJJDP (1996) reported that a national survey of 6th through 12th grade students found that 12% of the surveyed students had been a victim of a physical attack, robbery, or bullying while at school during the current school year and 71% of the students knew of these types of incidents occurring in their school. In addition, 35% of 6th through 8th grade students and 48% of 9th through 12th grade students reported that students were bringing weapons to school.

These findings are consistent with other studies of school violence. The National Crime Victimization Survey reported that approximately one-in-ten students, ages twelve to nineteen years old, were victims of crime in or near their school in a six month period (Bastian and Taylor, 1991). Additionally, a national survey conducted by the Centers for Disease Control (1992) found that 8% of all students in the 9th through 12th grades had been in at least one physical fight resulting in an injury requiring medical treatment within the previous month. Overall, CDC found that approximately eighteen physical fights per 100 students occurred per month. Further, the incidence of fighting was higher for male students than female students (28 fights per 100 students compared to 7 per 100 students). African-American male students reported the highest incidence (47 per 100 students).
followed by Hispanic males (35 per 100 students) and white males (22 fights per 100 students).

Impact on Schools

Schools that are plagued by high rates of crime and violence can become demoralized organizations (G. Gottfredson, 1987). Teachers in demoralized schools have reported that students have little influence in how the school is operated; that teachers have little or no positive interaction with students outside of school; classrooms are disorderly; and, teacher morale is low in that no one is willing to help to improve the school environment (G. Gottfredson, 1987). Due to a lack of order and productivity in these schools, it can be very difficult to implement programs in demoralized schools (G. Gottfredson, 1987).

Schools with high crime and violence rates are less effective in educating students. Schools with high rates of violence have lower levels of student academic achievement, higher rates of student absenteeism, and more drop outs (Christie and Toomey, 1990). Even in schools having a low percentage of students victimized, a few violent acts can have far reaching detrimental effects for a large number of students. Christie and Toomey suggested that children's educational and psychological development is likely to be inhibited in schools where there is a high fear of victimization.

While many schools have been overwhelmed by the increase in juvenile crime and violence, they can also play a central role in preventing violence (McDonald, 1992). Schools are the primary government institution with the responsibility of socializing youth. Considering the enormous amount of time spent in school, it is doubtful that the
opportunity to provide violence prevention programs to such a large number of students would be possible in any other setting. Given the school setting, programs can be implemented to large groups of students (on a school-wide basis) or smaller groups that are based on predefined risk factors. In addition, teachers see the students on a frequent basis and may be able to detect which students need extra attention over and above that provided by programs (McDonald, 1992). Finally, the costs involved in providing large scale programs in schools tend to be much lower than those provided in alternative settings.

In the past decade, attempts to reduce violence in schools has increased as a result of increasing violence. Schools have implemented a variety of programs to enhance a sense of safety and to curtail violence (Tolan and Guerra, 1994a). Attempts to reduce violence in schools have included physical changes such as installing metal detectors at entrances to schools, altering bathrooms and school hallways, introducing guards into schools, and using intercom systems to speed communication between classrooms and administrative offices (DeJong, 1994; Webster, 1993).

Programmatic attempts to reduce violence have included conflict resolution and violence prevention programs designed to teach and encourage students to use nonviolent methods of resolving interpersonal disputes (Prothrow-Stith, 1991). Such programs stress that conflict is a normal part of interpersonal relationships and teaches students skills to manage conflict constructively. Because statistics indicate that violence occurs more often between adolescents who know each other, these programs commonly address the interpersonal aspect of violence (Tolan and Guerra, 1994a).
In response to the growing concern among educators, there has been a rapid rise in the implementation of violence prevention and conflict resolution curricula and programs in schools (Johnson and Johnson, 1995; Tolan and Guerra, 1994a). Currently, such programs exist in thousands of elementary, middle, and high schools across the country. Some states have considered requiring conflict resolution classes as part of the mandatory curriculum in their public schools (Webster, 1993). The widespread adoption of anti-violence programs reflects a belief in their apparent successes (Johnson and Johnson, 1995; Roth, 1994). However, much of the support for intervention is based on anecdotal accounts of programs and little empirical evidence exists as to whether conflict resolution or violence prevention programs are effective at reducing violence (Johnson and Johnson, 1995; Tolan and Guerra, 1994a). Therefore, further research is necessary to determine whether conflict resolution programs are an effective means of reducing violent responses to interpersonal conflict.

The Wayne County Study

In an attempt to decrease the prevalence of youth violence, the Detroit Public School System and the Wayne County (MI) Office on Violence Reduction piloted a conflict resolution program in several middle schools in Detroit. Using the Violence Prevention Curriculum for Adolescents developed by Prothrow-Stith (1987), the Wayne County Office on Violence Reduction introduced this program with the intention of establishing ongoing conflict resolution programs in all of the middle schools in the Detroit Public School System and throughout Wayne County.
This document presents a report of an assessment of this conflict resolution program in two Detroit middle schools. The focus of this study was to understand how conflict resolution training can reduce violence in schools. The goals of this study were: (1) to describe the prevalence of violence among middle school students, (2) to test the theoretical relationships between risk factors associated with violence in school, and (3) to evaluate the effects of the conflict resolution program on students’ attitudes and behaviors regarding fighting and the use of violence in conflict situations.

The report is presented in seven chapters. The first two chapters discuss the theoretical and empirical background of conflict resolution programs along with an overview of the program being evaluated in this study. Chapter III presents the evaluation design, including a review of the elements of the evaluation, the measures used, and the goals and limitations of the project. The fourth chapter exhibits the descriptive results. That is, it describes the prevalence of violence in the study schools and provides baseline comparisons of the four study schools for the measures selected for this study. While Chapter IV presents the descriptive analyses, Chapter V and VI show the results of the outcome measures used to evaluate program effectiveness. Finally, Chapter VII summarizes and discusses the practical and theoretical implications of the study along with providing suggestions for future programming and research.
CHAPTER I

Violence Prevention Using Conflict Resolution

Several school studies have determined that a majority of interpersonal conflicts in schools result from gossip, disputes over property, invasion of privacy, verbal arguments, and dirty looks (Cameron and Dupuis, 1991; Ariki, 1990, Prothrow-Stith, 1987). It is often these types of altercations which escalate into violent confrontations between students and cause severe injuries or death. Arguments have been found to be the leading precipitant of homicide -- approximately 50% of all homicides followed arguments, compared to only two percent that involved gang activity or sexual assault (Prothrow-Stith and Spivak, 1992).

Conflict resolution programs are based upon the tenants that: (1) violence is a product of interpersonal conflict and (2) that violence is a learned response to conflict. A major goal of violence prevention and conflict resolution programs is to teach and foster students' use of nonviolent and constructive methods of resolving interpersonal disputes. In order to do so, programs present students with the skills required to manage conflicts constructively along with the opportunities to practice and master these skills. Many programs present students with information on the risks of victimization while challenging students' proviolence attitudes by teaching means-end relationships, consequences of social actions, and alternative strategies for resolving interpersonal problems (Crary, 1992; Prothrow-Stith, 1987).
Although scientifically sound evaluations of intervention efforts are lacking, schools that have implemented conflict resolution or dispute management programs reported fewer incidences of interpersonal conflicts between students (Webster, 1993; Hranitz and Eddowes, 1990; Prothrow-Stith, Spivak, and Hausman, 1987). Schools with these programs also reported changes in the overall school environment. Among these changes were increased satisfaction with the school climate reported by students and teachers, increased feelings of safety on school property, increased levels of self-esteem among students, and student reports of feeling more confidence in resolving conflicts constructively and nonviolently (Webster, 1993; Hranitz and Eddowes, 1990; Prothrow-Stith, Spivak, and Hausman, 1987). Despite these findings, few evaluation studies of conflict resolution programs have been conducted without methodological weaknesses, and therefore these results are tenuous (Johnson, Johnson, Dudley, and Acikgoz, 1994).

Given that evaluations of conflict resolution programs have been inconclusive, it is important to consider multiple approaches towards examining the effects of such programs. Furthermore, when trying to understand and reduce violence in schools, it is relevant to explore theories on the underling causes of violent behavior.

Theoretical Background

Many theories explain violence in terms of a multitude of individual and social factors operating in the development of violence, delinquency, and other related problems (Tolan and Guerra, 1994b). Numerous studies have suggested psychological risk factors of violence include: exposure to violent or criminal activity, lack of positive role models, lack of commitment to social norms, harsh or erratic early family experiences, inability to
defer gratification, low academic achievement, poor peer relations skills, and poor coping
skills (Clark, 1994; Elliott, 1994). Theorists have incorporated these risk factors into
explanations of violence. The theories included here are the social learning and ecological
views of violence.

Social Learning Theory

Social learning theory posits that violence is learned through social experiences
and that learning occurs through conditioning (Winfree, Backstrom, and Mays, 1994).
That is, an individual is conditioned by positive and negative social experiences and
mechanisms. Behavior, therefore, is acquired through the effects, outcomes, or
consequences it has on a person's environment and resulting appraisals associated with the
behavior (Akers, 1985).

The primary processes by which conditioning is achieved are reinforcement and
punishment. Behavior is reinforced when repeated episodes are met with a response that
influences the individual to engage in the behavior again under similar circumstances.
Behavior is punished when the response is such that the individual is discouraged from
repeating the behavior under similar circumstances (Winfree et al., 1994). The principles
of reinforcement and punishment have been researched in qualitative studies of gangs and
gang members, and have been found to explain the process by which gang members
regulated the behaviors of their peers (as described in Winfree et al., 1994).

Individuals learn to evaluate behaviors through contact with others. Violent
behavior is more likely to occur when adolescents develop, through reinforcement and
punishment, orientations which are favorable to violence (Winfree et al., 1994). The
social interactions and networks of an individual provide the setting in which favorable (or unfavorable) behavior is defined. Specifically, social interactions and networks, through reinforcement of favorable behavior, and punishment of unfavorable behavior, promote a defined orientation toward various behaviors. In a school setting, an individual's social interactions usually consist of classmates holding similar values and ideas (Luthar, 1995; Elliott, 1994). As a result, adolescents are likely to engage in behaviors similar to those of their friends (Luthar, 1995; Waegal, 1989). Associations with violent peers may increase the likelihood of violent behavior (Waegal, 1989). If violence is considered by a peer group to be a favorable response to conflict, individuals who are part of this group are more apt to resolve conflicts violently.

The process of learning usually occurs by witnessing others perform the behavior. An individual learns a behavior if they see a behavior that is positively reinforced (Bandura, 1982). Violence is one of many responses available and can be learned through observation and imitation. A youth who witnesses someone receiving praise for using violence to resolve a conflict will learn that violence is an acceptable behavior. The youth will then use violence to resolve their interpersonal conflicts. If this behavior is positively rewarded, the youth will continue to exhibit violent tendencies.

Along with social reinforcement or punishment, two additional factors, perceived self-efficacy and the expectations of the outcome of the behavior, are important determinants of an individual's decision to act. These appraisals are the result of direct past experiences, vicarious or modeled experiences, verbal persuasions, and psychological states (Bandura, 1982). Violent responses to interpersonal conflict can be reinforced.
when the individual: (1) has previous experiences in which aggressive behavior led to positive results; (2) has positive perceptions of his or her capability to accomplish the perceived action needed to accomplish their desired outcome using violence; (3) has lower perceived capabilities to accomplish the desired ends through alternative, nonviolent actions; and (4) is in a social setting which reinforces the use of violent responses. In sum, violence may occur in a situation in which an individual lacks experience and/or perceived self-efficacy to generate multiple problem-solving approaches to resolve an interpersonal conflict and to evaluate the consequences of the violent behavior.

Since learning is believed to occur through the processes of observation, modeling, and perception of the outcomes (Bandura, 1977), altering those components that previously promoted violence may reduce violence in interpersonal conflict situations. Therefore, a successful conflict resolution program should (1) create an environment that reinforces nonviolent means of responding to interpersonal conflict, (2) foster the development of alternative social problem-solving and evaluation of consequences of action, (3) boost perceptions of self-efficacy for socially acceptable behavior, (4) improve the expectations of the outcomes of competent behavior, and (5) increase the actual social competence for acting in specific interpersonal conflict situations.

Applying the concepts of social learning theory to conflict resolution programs results in the following proposition. As prosocial conflict resolution techniques are shown to produce positive outcomes and to avoid punishing ones, and as individuals' perceptions of personal efficacy are enhanced, prosocial conflict resolution techniques are likely to be
retained and reinforced in social interactions. As a result, prosocial problem-solving competence in interpersonal conflict situations can be increased.

Programs based upon the principles of social learning theory have successfully promoted social problem-solving competence, enhanced perceptions of self-efficacy and outcome expectations, and reduced high-risk behaviors (Caplan, Weissberg, Grober, Sivo, Grady, and Jacoby, 1992; Allen et al., 1990). Studies on the effects of these programs have demonstrated that social skills training can lead to the development of social competence, self-efficacy, and outcome expectations (Caplan et al., 1992; Allen et al., 1990). They have shown, for example, the relationships between these constructs and growth in coping skills and reductions in self-reported substance use. Because social skills training has successfully reduced other high-risk behaviors, it is relevant to consider and discuss these same constructs in relation to reducing conflict resolution.

If, through violence prevention training, adolescents are provided with the knowledge and opportunities for positive experiences and reinforcement for resolving interpersonal problem situations nonviolently, their perceptions of self-efficacy and expectations of the outcomes of competent behavior may be enhanced. This enhancement, furthermore, may foster adolescents' social problem-solving competence, which in turn will promote nonviolent interpersonal conflict resolution strategies.

Ecological Theory

Bronfenbrenner's (1979) theory of the ecology of human development states that in order to understand human development it is necessary to consider the environment surrounding an individual's immediate setting. It is the interrelationships between the
environment, the individual's behavior, and the social processes that are important in the
development of positive behavior.

Ecological models of violence have characterized violent actions as a result of
individual, interpersonal, and social risk factors (Tolan and Guerra, 1994b). Bronfenbrenner
(1979) described violence as dependent on multiple influences within a person's immediate
surroundings (e.g., the individual, family, peers, school, community) and influences
outside the immediate environment (societal attitudes toward violence). Ecological
models assume that the multiple levels influencing an individual have direct effects on an
individual's risk for delinquent or violent activity (Tolan and Guerra, 1994a). The
ecological model has important implications for conflict resolution and violence prevention
programs. According to this model, interventions must be designed to address all possible
influences of violent behavior (Tolan and Guerra, 1994a; Zigler, Taussig, and Black,
1992). This presumption is supported by Gottfredson and Gottfredson (1985) who found
that schools with high levels of disorder and high failure rates generally have poor climates
while schools with a climate based on positive rewards are more orderly and have less
student misconduct.

School conflict resolution programs often target the individual as the level of
intervention while community-based intervention programs may target multiple systems
for intervention (Tolan and Guerra, 1994a; Tolan and Guerra, 1994b; Commission on
Violence and Youth, 1993). Conflict resolution programs that do not address the school
environment appear to be destined for limited results. Denise Gottfredson (1987) pointed
out that implementation of programs in schools with a high number of problems is difficult.
unless the intervention is also aimed at improving the school as a whole. Research on school environment programs is limited (Lane and Murakami, 1987; D. Gottfredson, 1987), but it has indicated that school improvement programs have been moderately successful in improving the school environment, decreasing the number of suspensions, and decreasing the number of delinquent and drug-related activities in school (D. Gottfredson, 1987).

Implications for Violence Interventions

Two primary implications for school violence interventions emerge from this discussion. First, social learning theory asserts that violence is a learned reaction to conflict situations. Youth resort to violence rather than other alternatives because this has become a learned (and often accepted) and reinforced response to resolving conflicts. Conflict resolution programs help teach youths different ways to respond to situations which could potentially lead to violence. That is, since violence is likely a learned response modeled from external influences, alternative nonviolent behaviors can also be learned and positively reinforced in a similar manner. These programs seek to not only change students' attitude toward violence, but also provide students with the ability to identify a potentially violent situation and choose a nonviolent response (social competence), and help students feel that they can use nonviolent responses in conflict situations (self-efficacy).

Second, any type of violence intervention should be extended beyond the individual students and attempt to affect negative influences on the school environment.
Without positively changing the school climate, it is difficult for school-based programs to have any long term effects (D. Gottfredson, 1987).

Outcomes of Conflict Resolution Studies

While some research exists regarding the effectiveness of social learning based programs in decreasing the prevalence of at risk behaviors in youth, outcome studies of conflict resolution programs are limited (OJJDP, 1995; Johnson and Johnson, 1995). The Office of Juvenile Justice and Delinquency Prevention (1995) released a report which reviewed outcome evaluations of several programs and concluded that more rigorous evaluations needed to be conducted before any clear assessment can be made of these programs. The primary weakness of all of these evaluations was a lack of equivalent comparison groups.

OJJDP’s (1995) review of the evaluations did find that conflict resolution programs with violence prevention curriculums were able to produce positive changes in students’ social skills that were measured using verbal responses to hypothetical conflict situations. However, only one of the four evaluations which looked at changes in student attitudes toward violence found positive effects (Gainer, Webster, and Champion, 1993). This program was different from the other three in that the curriculum included discussions of drugs and violence. The instructors in this program also appeared to have an in-depth knowledge of the violence problem.

Four studies focused upon students’ violent behavior (Bretherton, Collins, and Ferritti, 1993; Hammond and Yung, 1993; Marvel, Moreda, and Cook, 1993). All four suggested some positive changes in aggressive behaviors. However, two studies, using
self-report measures of violent behavior, did not find accompanying changes in attitudes
toward violence (Bretherton, et al., 1993, Webster, 1993). OJJDP noted that several of
these program evaluations suffered from serious methodological weaknesses that clouded
interpretations of the evaluation results.

Even though little research exists which has studied the relationship of these
constructs to conflict resolution programs, several studies have looked at the relationship
to social competence, self-efficacy, and outcome expectations with other types of
problem-solving programs similar to conflict resolution. These studies have generally
found that positive changes in these constructs can lead to a decrease in at risk behaviors.

**Characteristics of Successful Programs**

Lipsey (1992) completed a meta-analysis of 443 juvenile delinquency treatment
programs to examine the relationship between program effects and program
characteristics, subject characteristics, researcher characteristics, and the evaluation
design. Of his many findings, there are two findings that are most relevant to the
effectiveness of conflict resolution programs.

First, Lipsey found that overall program effects were generally small, but an
important finding was that the duration, frequency, and the amount of treatment were
associated with program effects. That is, the longer the program lasts and the longer
youth spend in the program the more likely the treatment program will have positive
effects on influencing program participants’ attitudes and behaviors.

Second, Lipsey found that programs that were more structured, behavior oriented,
and multimodal were more effective than less structured and unfocused approaches. He
found that regardless of whether the treatment was implemented in a juvenile justice setting or a non-juvenile justice setting that behavioral and skill oriented programs fared better than counseling programs. Lipsey attributed this finding to the lack of structure and focus in counseling type programs.

While the intensity and duration of treatments have been found to be directly linked to program effectiveness (Lipsey, 1992), implementation integrity is also a major predictor of program success (Gottfredson, Link, and Gottfredson, 1993). Gottfredson et al. (1993) suggested that there are organizational correlates of program strength. That is, some schools have certain characteristics that positively effect program implementation. These characteristics are effective staff training, teacher participation in the planning and implementation of the program, leadership (principals and office staff) who are responsive to the program and are willing to become involved, adequate resources (time, physical space, and money), organizational capacity for change, and a positive school climate. Understanding the influence of organizational characteristics may explain why programs work in some schools and are not successful in others.
CHAPTER II
Detroit's Conflict Resolution Program

Similar to many large cities, youth violence has become a major problem in Wayne County (MI) and in the Detroit Public Schools. In Wayne County, young African-American males are more likely to be a victim of homicide than anywhere else in the world (Wayne County Office on Violence Reduction, 1993). Between 1980 and 1990, homicides in Wayne County among African-American youth between 15 to 24 years old increased from nine deaths per 100,000 to over seventy deaths per 100,000. During the first four months of 1993, at least 88 youths, ages 16 or younger, were victims of firearm-related incidents; eleven were fatal (Ghannam and Johnson, 1993). Moreover, the firearm homicide rate for African-American males in Wayne County, ages 15 to 19 years of age, significantly increased from 145.1 per 100,000 in 1985 to 220.8 per 100,000 in 1989 (Fingerhut, Ingram, and Feldman, 1992). Also in 1989, Wayne County had the third highest firearm homicide rate for African-American males in the nation (behind the District of Columbia with 227 per 100,000 and Los Angeles with 226 per 100,000).

Additionally, the Detroit Public Schools reported that school code violations for middle schools increased during the first quarter of the 1992-1993 school year. The number of illegal behaviors, prohibited behaviors, and violent acts in the Detroit middle schools increased 59% from the first quarter of the 1991-1992 school year (the rate of these behaviors increased from 1.5 per 100 middle school students to 3.78 per 100 students).
The Detroit Public School System and the Wayne County Office on Violence Reduction introduced a violence reduction program in one middle school during the 1992-1993 school year and developed a schedule to implement the program in ten additional middle schools during the 1993-1994 school year. The long range goal of the Office on Violence Reduction was to establish ongoing programs in all of the middle schools in the Detroit Public School System and throughout Wayne County.

**Description of Program**

The goal of the Wayne County Office on Violence Reduction was to provide conflict resolution training to at least 100 seventh graders in the two targeted middle schools for two years. The conflict resolution program was delivered to seventh grade students in middle schools with sixth, seventh, and eighth grades. These middle schools were selected on the assumption that seventh graders in these middle schools would be able to have the most impact on the school. After the conflict resolution training, seventh grade students would be able to utilize the training and, upon returning as eighth graders, as "seniors" in the middle school, would be instrumental in promoting non-violence throughout the school.

The Wayne County Office on Violence Reduction followed a curriculum developed by Deborah Prothrow-Stith (1987). The *Violence Prevention Curriculum for Adolescents*, is a program consisting of ten sessions designed to provide students with information on the risks of violence and homicide, to teach various alternatives to violence such as conflict resolution techniques, and to create a classroom and school environment that is nonviolent and values preventing violence behavior (Prothrow-Stith, 1987).
The Violence Prevention Curriculum combines information delivery and situation role-plays. The curriculum stresses that while anger is normal, adolescents can be taught to change their responses to anger from violent or destructive to nonviolence and constructive. Through social problem-solving techniques, the curriculum attempts to teach students to be creative in their responses to anger and to determine for themselves the risks and benefits of fighting. Fighting is presented as one choice among many to resolve conflict.

Most of the sessions included role play situations and conversations about interpersonal conflicts that students experienced from one session to the next. The role plays and discussions allowed students the opportunities to learn new responses to interpersonal conflict from their peers and from the facilitator. More specifically, the use of role play situations provided students the opportunity to learn how interpersonal conflict can escalate into violence and the possible avenues for diverting the conflict away from a violent conclusion. Students who acted in the role plays had the opportunity to learn through direct action, and students who watched the role plays had the opportunity to learn through the modeled behavior. Furthermore, all students were witnesses to reinforcement (or punishment) from student and facilitator feedback on the resolution of conflict portrayed in the role plays. Discussions of conflicts students experienced from one week to the next allowed for direct learning and feedback from students and the facilitator. The following paragraphs provide a brief overview of the sessions included in the Violence Prevention Curriculum for Adolescents (Prothrow-Stith, 1987).
Session One of the Violence Prevention Curriculum for Adolescents, "There is a Lot of Violence in Society," aims to determine what information and misinformation students have about violence. Topics discussed during Session One include the causes and effects of violence and the extent and types of violence in society. The overall focus of the Violence Prevention Curriculum for Adolescents (Prothrow-Stith, 1987) is interpersonal violence. The curriculum defines interpersonal violence as accidental or intentional violence that occurs between two or more persons. Intentional violence, as defined in Session One, includes stranger violence, that is, violence between persons who do not know each other, as might occur incidentally during the commission of a crime; sexual violence, such as rape; and acquaintance violence, that is, violence among people who know each other, such as friends, peers, or family members (see Appendix A for the curriculum manual).

Session Two, "Homicide: Statistics and Characteristics," presents statistical data on the characteristics of homicide. Students are challenged to think about the statistical information and the relationships between homicide and weapons, alcohol, and arguments. Homicide is presented as the second leading cause of death for young people ages fifteen to twenty-four (Prothrow-Stith, 1987).

Session Three, "Exploring Risk Factors," presents violence-related risk factors introduced during Session Two, and describes the physiological effects of alcohol on the brain and alcohol's relevance to interpersonal violence. Information on weapons and homicide is presented in detail. In addition, the curriculum provides facilitators with information suitable for a mini-lecture on poverty, race, and homicide. In sum, the
information presents poverty as another factor that contributes to homicide and as a more salient factor than race.

Session Four, “Anger is Normal,” describes anger as a normal and natural part of life. Information is provided on the physiological changes that occur when someone is angry, including the concept of “fight or flight” during an interpersonal confrontation. Students are encouraged to talk about what makes them angry.

Session Five, “There are Healthy and Unhealthy Ways to Express Anger,” builds on the idea presented in Session Four that anger is normal and illustrates the healthy and unhealthy ways to express anger. The session aims to help students understand that there are constructive and destructive ways to deal with anger.

Session Six, “There’s More to Lose than to Gain from Fighting,” challenges students to compare the positive and negative consequences of fighting. The session attempts to demonstrate that the negative consequences of fighting outweigh the positive. To do so, students are asked to make a list of the positive consequences of fighting (e.g., winning, proving a point) and a list of the negative consequences (e.g., getting hurt, being embarrassed).

Session Seven, “What Happens Before, During, and After a Fight,” illustrates the steps that preceded many fight situations. Included in this section is a discussion of the roles of peer pressure, increased emotions, and nonverbal indicators in a fight situation. Students create role plays of fights and are asked to dissect the scenes for cues to how the fights escalated, how emotions were expressed verbally and nonverbally, and the role of peer pressure in the fights (Prothrow-Stith, 1987).
Session Eight, "Preventing Violence," helps students determine ways that violence may be prevented through analyzing a fight. In addition, students discuss the differences between prevention and intervention in a fight situation, and outline methods to prevent violence in a school setting.

Session Nine, "Fighting - What Else is There," emphasizes that there are many choices available to students other than fight or flight when confronted with a conflict. Students are asked to identify obstacles to nonviolent resolutions of conflict, and to describe how violence is glamorized in our society by television, etc. The curriculum includes multiple situations that could lead to conflict and provides students the opportunity to identify the choices available to try to resolve the situations nonviolently.

Session Ten, "Practice Throwing a Curve," provides students with an opportunity to practice the skills of nonviolent conflict resolution. This final session encourages students to be empathetic with their opponents and to identify alternatives to the fight or flight concept discussed in previous sessions. Role play situations are again encouraged. Students are challenged to summarize the perspectives of both parties in the conflict situations, to use the skills from the program in a role-play situation, and to recognize that fighting is only one of the several choices in a conflict situation.

The Violence Prevention Curriculum for Adolescents is based upon the principles of social learning theory. As described earlier, behavior is reinforced when it is met with responses that influence the individual to engage in the behavior under similar circumstances. Behavior is punished when the individual is discouraged from reengaging...
in the behavior under similar circumstances. As a result of punishment, the particular behavior decreases (Winfree et al., 1994).

It is through this process of reinforcement and modeling of behavior that conflict resolution programs, such as the Violence Prevention Curriculum for Adolescents, attempt to increase students’ use of nonviolent conflict resolution techniques. The program attempts to provide adolescents with effective prosocial means of resolving conflict through modeling of nonviolent behaviors. Role play situations are used frequently during training sessions to allow for the acting out and modeling of appropriate ways to resolve conflicts nonviolently. These behaviors are reinforced through discussions in the classroom that provide social contexts and interactions in which students can evaluate the behavior. Furthermore, students are encouraged to talk about conflicts they have seen or experienced during the previous week. This interaction allows for direct feedback (reinforcement or punishment) from other students and from the program facilitator to the person who was involved in the conflict.

The Violence Prevention Curriculum for Adolescents was first implemented in several Boston high schools in 1984. It has since gained acceptance throughout the nation and has been implemented in several other cities. The curriculum has also been used as part of a larger community-wide intervention in Boston that included a mass media campaign and the involvement of community agencies (Hausman, Spivak, Prothrow-Stith, and Roeber, 1992).
Goals of the Program

Individual Participant Goals

Since the Violence Prevention Curriculum for Adolescents provides students with knowledge and opportunities for positive experiences in resolving interpersonal problem situations nonviolently, it would foster the positive development of adolescents’ self-efficacy and outcome expectations for competent behavior in interpersonal conflict situations. As a result, adolescents’ prosocial problem-solving competence would also be enhanced and would mediate the increased use of nonviolent conflict resolution strategies.

It was hypothesized that students who participated in the conflict resolution training would: (1) perceive themselves as more efficacious, (2) have more positive expectations for the outcomes of competent behavior, (3) report more socially competent responses to interpersonal conflict situations, and (4) resolve interpersonal conflict situations nonviolently more frequently than students who did not participate in the program.

School-Wide Goals

By teaching students alternative responses to violence, it was believed that students would have a reduced acceptance of violence as a response to resolve conflicts. It was anticipated that the negative attitudes toward violence of the students attending would have a spillover effect in improving the overall school environment. As a result, students would perceive the school to have a safe and positive learning environment.

It was hypothesized that a positive school environment would have an effect on the amount of school violence. There would be less fights, fewer assaults on students, and a
decrease in the number of weapons brought to school. Moreover, students would likely report being involved in less serious delinquent behavior, both overall and while at school.

**Research on the Violence Prevention Curriculum for Adolescents**

Results of prior evaluations of the *Violence Prevention Curriculum for Adolescents* have been mixed. A study conducted in 1987 showed significant gains in students’ knowledge about violence. School suspension data suggested that suspensions due to violence were reduced (Prothrow-Stith, et al., 1987). However, a study conducted by Spiro, et al. (1989) and discussed by Webster (1993) of tenth-graders at six inner-city schools across the United States reported that no significant changes were found in students’ total post-test knowledge about violence; their attitudes about ways to handle conflicts; acceptance of violence; self-esteem; or self-reported fighting, drug use, or weapon carrying. However, when stratified by school and compared to the control group, the treatment group had greater gains in self-esteem. In two schools, results indicated that students were less likely to believe that people other than themselves were responsible for preventing fights (Webster, 1993). Researchers attributed the apparently contradictory results to the stylistic differences of the individual program implementers. Furthermore, researchers attributed the overall lack of program effectiveness to targeting the program at high school students and not at the preferred middle school population.

Despite inconclusive results, the *Violence Prevention Curriculum for Adolescents* (Prothrow-Stith, 1987) has received positive anecdotal evaluations and continues to be one of the most widely implemented and promising conflict resolution programs in the country (DeJong, 1994; Webster, 1993). The rate at which schools have adopted
programs and the rate at which programs are being funded are both increasing rapidly.

While programs may be inexpensive to implement at an individual school or school system, when considered in aggregate, the program costs add up to considerable personnel and monetary resources (Webster, 1993). In consideration of these efforts and costs, programs need to be closely evaluated to determine the effects they have on schools and students. As a result of this situation, the Prothrow-Stith model was selected for implementation and evaluation in this study.
CHAPTER III

Evaluation Design

The previous chapters have described the theoretical foundation, results of prior research, and the components of the Violence Prevention Curriculum for Adolescents adapted by the Wayne County Office on Violence Reduction for use in the Detroit Public School System. A multiple method approach was adopted to measure the impact of this program. The following chapter outlines the research methodology that was employed in this evaluation by presenting the research questions used to guide the evaluation, a description of the elements of the evaluation, a summary of the sample selection process and the middle schools that participated in this study, a discussion of the instruments and the measures used to collect and analyze data, and an overview of the anticipated outcomes of the study.

Purpose and Focus of the Evaluation

The purpose of this evaluation was to assess the effects of the conflict resolution training program on variables associated with violence. Since the program provided training to groups of students, the evaluation focused on the ability of the conflict resolution training to affect participants' social competence, self-efficacy, and expectations of the outcome of competent behavior. The primary research question was: have students learned non-violent methods of conflict resolution as a result of participating in the conflict resolution program compared to students who did not receive the training?
Research questions also reflected attempts by the conflict resolution program to positively affect the participation schools' overall school climate, as measured through students' perception of school safety and their observations of violence in school. Specifically, these questions were: (1) has the climate of the school been altered to support the intervention; (2) has the overall student perception of school safety positively changed; (3) what is the impact of the intervention on the numbers of fights between students occurring at school; and, (4) has the intervention had effects on school-wide student attitudes regarding fighting, self-efficacy, and their school experience?

Elements of the Evaluation

Research Design

There were two strategies employed in this evaluation. First, to measure group differences between program participants and nonparticipants, fifty middle school students from each school participating in the evaluation were randomly chosen to be interviewed at the end of the first and second school year of program implementation. Comparisons were conducted between students attending the conflict resolution training and students not receiving the training in the same school, and between students who attended a comparison school who also did not receive training in conflict resolution skills. Second, to measure school-wide programmatic effects on school climate and students' attitudes, surveys were distributed to all middle school students prior to the initial training session of the program (Time 1), at the end of the first school year of program implementation (Time 2), and at the end of the second school year of program implementation (Time 3).
Interviews. To measure students' ability to resolve conflicts using nonviolent alternatives, a series of conflict scenarios were constructed asking selected students what they would do in these situations, what the outcome would be if they acted in the way they reported, if they believed they could use nonviolent methods of conflict resolution, and what would happen if they did use nonviolent methods of resolving the conflicts. Revised scenarios from the Adolescent Problem Inventory (API) for boys (Freedman, Rosenthal, Donohoe, Schlundt, and McFall, 1978), Problem Inventory for Adolescent Girls (PIAG) (Gaffney and McFall, 1981), and scenarios developed for this study were used to measure adolescents' social problem-solving competence, expectations of self-efficacy in performing competent behaviors, and outcome expectations for competent behavior in interpersonal conflict situations (the procedure is similar to that used by Allen et al., 1990) (see Appendix B).

Student interviews were conducted in the auditoriums, libraries, or cafeterias of each school during the times when rooms were not occupied by other students. Interviews were conducted by graduate students from Michigan State University and Wayne State University. Interviewers were trained by the investigators in interviewing techniques and were familiar with the instruments before conducting their first interview. As much as possible, interviewers reflected the ethnic background of the student population in the schools.

Each participant was interviewed for approximately thirty minutes during school hours. Interviewers were asked to write verbatim each response given by the students for
each scenario. In exchange for the cooperation of the school administration and the students’ participation, each school received five dollars per student interviewed.

**Surveys.** One of the critical components of the conflict resolution training consisted of attempts to alter the school environment and provide students a safe atmosphere in which to learn. Thus, a school climate survey with particular focus on safety issues was administered to the entire school. The student survey sought to measure students’ attitude toward school (Hirschi, 1968), self-efficacy, perception of school safety (Gottfredson, 1986), attitudes toward fighting, observed delinquency in school, self-reported delinquency (Elliott, Huizuinga, and Ageton, 1980), and victimization (see Appendix C).

After meeting with school officials from the four middle schools participating in the evaluation, it was determined that the surveys would be distributed and collected during the homeroom periods of the school day. These times would be the least intrusive to the school day and satisfied teachers’ concerns that the surveys would not take away from instructional time. Graduate students from Michigan State University and Wayne State University were recruited and trained to distribute and collect the surveys. The graduate students went into each homeroom in the four schools and distributed the surveys to the middle school students. The students were told that Michigan State University was interested in understanding how middle school students felt about a variety of issues pertaining to their school. They were instructed that this was not a test and that completing the survey was strictly voluntary. In addition, the students were told that the surveys were going be used only for this study and that school officials, police, nor parents
would have access to them. To further assure the students of this, they were told not to put their names on the surveys. The teachers of the homerooms were asked to remain in the room for the sole purpose of maintaining order in the classroom. Teachers were not allowed to help students fill out the surveys, nor were they permitted to assist the graduate student in distributing or collecting the surveys.

Selection of Middle Schools

A major component of the evaluation consisted of an assessment of the conflict resolution program in two sample schools compared to two similar schools not receiving the conflict resolution training. Four middle schools were selected to participate in this study. The selection criteria was based upon three issues. First, the schools must have had similar school safety issues (similar amounts of school discipline problems). Second, the schools must primarily house 6th, 7th, and 8th grade middle school students. The Wayne County Office on Violence Reduction expressed concerns regarding the ability of the intervention to have positive school-wide effects if the middle school housed 9th grade students. Third, once a list of potential schools were identified, the head of the Counseling Department of the Detroit Public School System contacted the principals of these schools and asked if the schools would be available and interested in participating in the conflict resolution program as well as an accompanying study.

The first step in selecting schools for this study was to identify those middle schools reporting similar amounts of school code violations. The Detroit Public School System maintains a central computerized data system for reporting violations of the school offense code. These incidents are coded by the specific offense and data were made
available to evaluation staff regarding the number of incidents in each school during the school year before the start of the conflict resolution training (1991-1992).

The Detroit Public School System *Student Code of Conduct* has three categories of improper behavior. Violent acts include possession of a gun, knife, or other lethal weapon, use of a weapon or a dangerous object; battery of an employee; significant destruction of property, sale or distribution of drugs; and, battery upon a student. Illegal acts include threats of violence; battery; possession of drugs or alcoholic beverages; robbery; burglary, theft, or larceny; arson extortion, coercion or blackmail; vandalism or malicious destruction of property; interference with or intimidation of school personnel; false alarms; interference with the movement of pupils in or to and from school; possession of electronic beepers or pagers.

While these types of data are subject to a variety of problems (different reporting systems at each of the schools, under-reporting and over-reporting at some schools, school principals defining these behaviors differently at their schools), it was decided by evaluation staff that these data would provide a starting point for selecting the schools to participate in the study.

Following the compilation of this list, a number of schools were recommended for the study based upon similar numbers of students and school disciplinary problems. This list was presented to the administrator of the Guidance Department for the Detroit Public School System. Evaluation staff met with the administrator to discuss which schools would be asked to participate in the study. In addition to the list of schools with a significant amount of disciplinary problems, other factors were taken into consideration.
such as the physical size of the school, location of the school in the city, schools that already had similar programs which might hinder the ability of the evaluation to measure the effectiveness of this particular conflict resolution program, and the willingness of the principals to allow the evaluation to take place in their schools. The Guidance Administrator for Detroit Public Schools, in conjunction with the Director of the Wayne County Office on Violence Reduction, decided which schools would receive the conflict resolution program.

Table 1 presents the student populations and the number and rate of school code violations of the four schools that were selected to participate in this study. While the two comparison schools were smaller than the two participation schools, there were other similarities that warranted their inclusion in this study. Also, Comparison School B had a much lower school code violation rate than the other three schools. The administrator of the Guidance Department stated that she believed that the principal of that school tried to informally handle school code violations and was less likely to report these than the other principals. She also stated that this school did have similar types of school violence problems compared to the other three schools.

Table 1. Student Populations and School Code Violations for Selected Schools

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th>School Code Violations</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Violent</td>
<td>Illegal</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Participation A</td>
<td>772</td>
<td>4</td>
<td>103</td>
<td>107</td>
<td></td>
</tr>
<tr>
<td>Participation B</td>
<td>838</td>
<td>3</td>
<td>94</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Comparison A</td>
<td>538</td>
<td>4</td>
<td>74</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>659</td>
<td>0</td>
<td>48</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>
Description of the Middle Schools in this Study

The four middle schools in this study had several other common characteristics besides their school violence problems. All four schools were located in residential areas surrounding the downtown area of Detroit. For security purposes, all four schools kept all the doors around the school locked from the inside except for one main entrance. Three of the schools had metal detectors at all the student entrances that were monitored by security guards throughout the school day.

The majority of students in all the schools were African-American. While the ethnic backgrounds of the teachers in these schools were mostly African-American, a high percentage of the teachers were also Hispanic and Caucasian. The following paragraphs present an overview of each of the four schools that participated in this study.

Participation School A. This school was constructed in the late 1960s and had the appearance of many schools built during this time period. It was rectangular shaped and had two floors, with a large "cafetorium" (a room that serves as the cafeteria and a gymnasium) located in the center of the school. The main office was located just inside of the main entrance.

This school housed middle school students (6th, 7th, and 8th grades) and elementary school students (kindergarten through 5th grade), however, the middle school students did not come into contact with the elementary school students at any time during the school day. The middle school was housed in a different wing of the school and the lunch periods were staggered to make sure the middle school and elementary students
never mixed. The principal believed that it was in the best interest of the elementary school students to keep them separated from the older students.

This school was the only school of the four that did not have metal detectors present anywhere in the school. There was a security guard stationed in the school, but this individual was not posted at the front door and mainly patrolled around the school. The principal believed that having metal detectors created a negative image for the students and he relied on students reporting weapons in the school. The informal reporting system appeared to be reliable, in that, during one site visit evaluation staff were with the principal when a student reported a weapon being in a locker of another student. Even though this weapon turned out to be a pellet gun, the principal maintained that the students had become very proactive in reporting other students with weapons and that this system was more efficient than metal detectors.

In addition, the principal created a number of “houses” within the middle school. Houses consisted of small groups of students (between 30 to 35) and teams of teachers (4 to 5 per team) within each of the three grades. These students remained together for each class throughout the school day. The teams of teachers only instructed students within their “house”. Each house was assigned to a particular location within the school and students were not allowed out of that area unless they had permission. The principal believed that by maintaining separate and manageable houses for the students and teachers, the teachers would have a better opportunity of getting to know their students on a personal level. By being able to spend more time with a small group of students,
teachers would be able to help the students more academically and also be able to help
them with other types of problems outside of school work.

Participation School B. This school was different from Participation School A in
several ways. First, this school was a large structure that was built in the 1920s. It was
squared shaped and had three floors. The school had many classrooms that were not in
use and were primarily used for storage space. This school had three main entrances,
however, students and visitors were only permitted to use one of these. A security guard
was stationed at a metal detector at all times during the school day.

This school also housed elementary students and also tried to keep them separate
from the middle school students. The elementary classrooms were located on the first
floor of the school and the middle school classrooms were on the second and third floors.
The principal of this school also believed that it was in the best interest of the elementary
school students to keep them separated from the older students.

This school did not have “houses” within the middle school grades. The school
maintained a more traditional approach of keeping the students together for each of their
classes, but the teachers were not assigned to teams and the classrooms were spread out
throughout the school. Students were permitted to go anywhere in the school between
class periods.

This school was located directly next to a high school and this presented a unique
set of problems for the middle school staff. High school students would often come into
the middle school to socialize with the students. The principal believed that many fights
were the result of high school students being in the middle school. Even though only one
entrance was open from the outside, students in the middle school would often prop doors open at the other entrances. It was difficult for one or two security guards to monitor all the entrances. The school system built an iron-barred fence between the middle school and the high school during the second year of the study. However, several middle school staff did not think that this had very much effect on keeping the high school students out of the middle school.

**Comparison School A.** Comparison School A was also an older school that was built before 1920. This school was also three floors but was much smaller than Participation School B. The building was horseshoe shaped with the main entrance located in the heel of the horseshoe. It was not possible to get across the ends of the horseshoe without going outside. These doors were only open in the morning and afternoon when the students were coming to school or leaving for home. There were metal detectors with security guards at each of the three student entrances. Visitors had to enter the school through the main entrance in the front of the school.

This school also had elementary school students but these grades were housed in temporary classrooms outside the main building. The only middle school students housed in the temporary classrooms were the special education classes. The principal did not say if there were any special reasons the special education classes were separate from the main school.

Similar to Participation School B, this school kept the students together throughout the school day but did not have houses or teams of teachers. Students were permitted to go anywhere in the school during class breaks.
Comparison School B. This school appeared to be constructed during the same
time period as Participation School A and had a similar rectangular shaped structure. The
school classroom structure and security measures were similar to Participation School B
and Comparison School A. That is, students were assigned to homerooms and the
homerooms stayed together for all of their classes. The teachers were not assigned to
teams and students were permitted to move about anywhere in the school during class
breaks. Metal detectors were positioned at the student entrances and security guards
monitored these throughout the school day.

Description of the Study Participants

Interviews. At the conclusion of the conflict resolution training at the participation
schools, middle school students at the participation and comparison schools were recruited
to be interviewed. Evaluation staff randomly selected fifty students from daily attendance
homeroom lists at each school. In the participation schools, evaluation staff attempted to
equally sample those homerooms that received the conflict resolution training and those
that did not. Two-hundred and eleven interviews were completed at the four schools.

At the completion of the interview in the participation schools, students were
asked to identify whether they had participated in the conflict resolution training (Table 2).
In one participation school, 24 students interviewed identified themselves as having
participated in the training; in the other participation school 14 students responded that
they had been trained. A total of 38 students interviewed indicated that they had received
the conflict resolution training. Sixty-five students interviewed at the participation schools
identified themselves as not participating in the conflict resolution training program. Table
2 indicates that the numbers of students who reported being trained in conflict resolution is less than the number of students who gave a homeroom number that corresponded with homerooms receiving training. According to homeroom numbers reported by students during interviews, 67 students in the participation schools reported that they were assigned to homerooms that received training. The discrepancy between self-report data and data of students in specific homerooms may indicate that students were not aware of the kind of program in which they were involved. Another explanation given by school personnel, is that students were often moved in and out of homerooms for academic or disciplinary reasons. Thus, it was likely that students who reported having the conflict resolution training were those that were not moved into or out of the homeroom during the conflict resolution training. Because of the discrepancy, it is difficult to know the true number of interviewed students who participated in the training. It was decided to use the count obtained through self-report in all analyses, that is, 38 students.

Table 2. Students Receiving Conflict Resolution Training
Self-report and Homeroom Assignment Data

<table>
<thead>
<tr>
<th>School</th>
<th>Self-report</th>
<th>Homeroom assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>Trained</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Not trained</td>
<td>65</td>
</tr>
<tr>
<td>Comparison</td>
<td>Not applicable</td>
<td>108</td>
</tr>
</tbody>
</table>

At each of the comparison schools, evaluation staff were given a list of 50 students selected at random. Fifty-two students at one comparison school were interviewed and 56
at the other school. A total of 108 students at the comparison schools participated in the interview process.

**School surveys.** School surveys were distributed and collected at all four middle schools before the conflict resolution (Time 1) and immediately following the training (Time 2). These surveys were collected at three of the four schools one year following completion of the conflict resolution training (Time 3). Surveys were not administered at Comparison School A for Time 3. There was a change in principals at this school during the second year of the study and the new principal felt that the surveys were too intrusive and did not want the students to miss instructional time by completing them.

Table 3 presents the number of school surveys that were collected by school for the three data collection times. There were a total of 3586 surveys collected across the three data collection times. The most surveys were collected during Time 1 (1459). The second data collection period (Time 2) took place one week before the end of the school year and a high number of students had already stopped coming to school. Hence, fewer surveys were collected (1092). The Time 3 surveys were administered toward the end of the school, but early enough to avoid the low numbers of students attending school during the last week of school. Regardless, the average number of surveys collected was lower for the last two time periods most likely because they were administered at the end of the school year when many students had stopped coming to school.
Table 3. School Survey Populations by Data Collection Time

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
</tr>
<tr>
<td>Participation A</td>
<td>332</td>
</tr>
<tr>
<td></td>
<td>(23%)</td>
</tr>
<tr>
<td>Participation B</td>
<td>487</td>
</tr>
<tr>
<td></td>
<td>(33%)</td>
</tr>
<tr>
<td>Comparison A</td>
<td>395</td>
</tr>
<tr>
<td></td>
<td>(27%)</td>
</tr>
<tr>
<td>Comparison B</td>
<td>245</td>
</tr>
<tr>
<td></td>
<td>(17%)</td>
</tr>
<tr>
<td>Totals</td>
<td>1,459</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect column percentages.

The following six tables (Table 4 through 9) present the survey demographic characteristics for each school for each data collection period. The proportion of 6th, 7th, and 8th grade students was similar across the three data collection times for each school (Table 4, Table 5, and Table 6). For example, Participation School A, 32% of the surveys were completed by 8th grade students at Time 1, 32% of the Time 2 surveys were completed by 8th grade students, and 30% of the Time 3 surveys were completed by 8th grade students. The percentage of girls to boys was also consistent across the data collection times (Table 7, Table 8, and Table 9).
Table 4. Time 1: School Survey Populations by Grade in School

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th>6th Grade</th>
<th>7th Grade</th>
<th>8th Grade</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>111</td>
<td>(34%)</td>
<td>110</td>
<td>105</td>
<td></td>
<td>326</td>
</tr>
<tr>
<td>Participation B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>178</td>
<td>(37%)</td>
<td>177</td>
<td>131</td>
<td></td>
<td>486</td>
</tr>
<tr>
<td>Comparison A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>(23%)</td>
<td>166</td>
<td>139</td>
<td></td>
<td>394</td>
</tr>
<tr>
<td>Comparison B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>(50%)</td>
<td>73</td>
<td>49</td>
<td></td>
<td>242</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>498</td>
<td>526</td>
<td>424</td>
<td>1448</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect row percentages.

Table 5. Time 1: School Survey Populations by Gender

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th>Males</th>
<th>Females</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>135</td>
<td>(45%)</td>
<td>163</td>
<td></td>
<td>298</td>
</tr>
<tr>
<td>Participation B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>188</td>
<td>(45%)</td>
<td>233</td>
<td></td>
<td>421</td>
</tr>
<tr>
<td>Comparison A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>174</td>
<td>(47%)</td>
<td>199</td>
<td></td>
<td>373</td>
</tr>
<tr>
<td>Comparison B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>96</td>
<td>(45%)</td>
<td>118</td>
<td></td>
<td>241</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>593</td>
<td>713</td>
<td>1,306</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect row percentages.
Table 6. Time 2: School Survey Populations by Grade in School

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th>6th Grade</th>
<th>7th Grade</th>
<th>8th Grade</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation A</td>
<td>83 (32%)</td>
<td>94 (36%)</td>
<td>84 (32%)</td>
<td></td>
<td>261</td>
</tr>
<tr>
<td>Participation B</td>
<td>92 (34%)</td>
<td>114 (42%)</td>
<td>67 (24%)</td>
<td></td>
<td>273</td>
</tr>
<tr>
<td>Comparison A</td>
<td>70 (25%)</td>
<td>120 (43%)</td>
<td>89 (32%)</td>
<td></td>
<td>279</td>
</tr>
<tr>
<td>Comparison B</td>
<td>97 (39%)</td>
<td>72 (29%)</td>
<td>80 (32%)</td>
<td></td>
<td>249</td>
</tr>
<tr>
<td>Totals</td>
<td>342</td>
<td>400</td>
<td>320</td>
<td></td>
<td>1,062</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect row percentages.

Table 7. Time 2: School Survey Populations by Gender

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th>Males</th>
<th>Females</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>112</td>
<td>137</td>
<td>249</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(45%)</td>
<td>(55%)</td>
<td></td>
</tr>
<tr>
<td>Participation A</td>
<td></td>
<td>110</td>
<td>136</td>
<td>246</td>
</tr>
<tr>
<td>Participation B</td>
<td></td>
<td>(45%)</td>
<td>(55%)</td>
<td></td>
</tr>
<tr>
<td>Comparison A</td>
<td>108 (39%)</td>
<td>168 (61%)</td>
<td></td>
<td>276</td>
</tr>
<tr>
<td>Comparison B</td>
<td>111 (46%)</td>
<td>130 (54%)</td>
<td></td>
<td>241</td>
</tr>
<tr>
<td>Totals</td>
<td>441</td>
<td>571</td>
<td></td>
<td>1,012</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect row percentages.
### Table 8. Time 3: School Survey Populations by Grade in School

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6th Grade</td>
<td>7th Grade</td>
<td>8th Grade</td>
</tr>
<tr>
<td>Participation A</td>
<td>69 (27%)</td>
<td>110 (43%)</td>
<td>78 (30%)</td>
</tr>
<tr>
<td>Participation B</td>
<td>120 (33%)</td>
<td>112 (31%)</td>
<td>133 (36%)</td>
</tr>
<tr>
<td>Comparison A</td>
<td>117 (34%)</td>
<td>125 (36%)</td>
<td>106 (30%)</td>
</tr>
<tr>
<td>Comparison B</td>
<td>306</td>
<td>347</td>
<td>317</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect row percentages.

### Table 9. Time 3: School Survey Populations by Gender

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>Participation A</td>
<td>102 (39%)</td>
<td>157 (61%)</td>
</tr>
<tr>
<td>Participation B</td>
<td>172 (48%)</td>
<td>185 (52%)</td>
</tr>
<tr>
<td>Comparison A</td>
<td>157 (52%)</td>
<td>144 (48%)</td>
</tr>
<tr>
<td>Comparison B</td>
<td>431</td>
<td>486</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect row percentages.
Measures

Interviews

A total of seven scenarios were used, three adapted from the APE or PIAG and four created for this investigation (Table 10). The interpersonal conflict scenarios included social conflicts or potential conflicts with parents, teachers, and peers in situations that an adolescent may experience directly or may be able to imagine experiencing. The content of the scenarios was reviewed by school officials including teachers and principals, students, and psychologists who agreed that the situations were similar to those a student may experience.

Adolescents’ self-reported responses to the conflict situations presented during the student interview were rated to measure social problem-solving competence. Students were asked to consider what they would have done in the conflict situation in comparison to a sample response of how other adolescents responded in the same situation. Perceived self-efficacy and outcome expectations of competent behavior were obtained by rating these responses. Social problem-solving competence and the expectations of the outcomes of competent behavior were rated using coding manuals developed for this study. Perceived self-efficacy was rated on a Likert-type scale.

Development of coding manuals. Two undergraduate psychology students worked with the evaluation staff to develop a coding manual for social problem-solving competence for the seven interpersonal conflict scenarios and to code the interview information according the developed manuals (see Appendix D). Responses collected from the first wave of data collection were used to develop the coding manuals. The
Table 10. Content of Seven Interview Scenarios Presented to Students

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Scenario Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario One</td>
<td>You've been disrupting a substitute teacher's class all week, and she sends you up to the principal's office again. The principal meets you at the door and says, &quot;You have been sent here three times this week and I'm excluding you this time!&quot;</td>
</tr>
<tr>
<td>Scenario Two</td>
<td>Your mother has been nagging you about getting home immediately after school. One day you get home an hour late and your mother yells at you, &quot;Do you know what time it is? Where have you been?&quot;</td>
</tr>
<tr>
<td>Scenario Three</td>
<td>A kid you know is a drug dealer. He found out that school security is going to check his locker after the next class. He asks you to keep his stuff in your locker.</td>
</tr>
<tr>
<td>Scenario Four</td>
<td>You think that one of your classmates has recently been spreading nasty rumors about you. You don't know this student well, so you don't know why she (he) is saying these things. You're upset about these rumors, and you want the rumors to stop.</td>
</tr>
<tr>
<td>Scenario Five</td>
<td>You are walking home alone down a dark street. Two boys (girls) are following you. You don't know them, but they are about your age. They catch up with you and say, &quot;We want your jacket.&quot;</td>
</tr>
<tr>
<td>Scenario Six</td>
<td>You are sitting with your friends in the lunch room. A girl (boy) you don't know spills her (his) drink on you. One of your friends tells her (him) to apologize, but she (he) refuses.</td>
</tr>
<tr>
<td>Scenario Seven</td>
<td>You are at school and you see another student talking to your girlfriend (boyfriend). They are laughing and smiling and seem to be having fun. Suddenly, your girlfriend (boyfriend) looks at you and then turns quickly away.</td>
</tr>
</tbody>
</table>

The process used to develop the coding manuals ensured that all responses included in the coding manuals were ones that were actually given by students asked to respond to the scenarios.
scenarios. Of the original seven scenarios, six were coded using the developed manuals. The remaining scenario (Scenario One as indicated in Table 10) was discarded because initial review of students’ responses indicated that there was no distribution of answers. Instead, the majority of students gave the same or a similar response.

Social problem solving competence. Social problem solving competence is defined as a response that effectively resolves the interpersonal conflict situation at hand and makes it less likely that the subject will experience more problems of this type in the future. As defined by Ford (1982), and applied to this investigation, social competence embodies both social skills and a pro-social orientation. To measure social problem-solving competence, each student was presented with the interpersonal conflict scenarios one at a time and was asked to consider his or her response to the situation. Students were asked to answer the question, “What would you say or do now?” Student responses were written in the interview booklet and were used to code social problem-solving competence.

The manual developed to code social problem-solving competence is similar to a manual used by Allen et al. (1990). In the manual, social competence is rated on a zero to eight scale with a score of zero corresponding to a very incompetent or ineffective response, and a score of eight corresponding to a very competent or very effective response. Maximally competent responses are those which were identified by school administrators and teachers as most likely to resolve the conflict and reduce the chance that the adolescent would experience a similar situation in the future. The midpoint on this scale is a four that corresponds to a response that is neither competent nor
incompetent, i.e., that neither directly helps nor hurts the situation or individual involved in the interpersonal conflict.

Responses to the scenarios gained from the first wave of data collection were reviewed by each coder who used them to create a preliminary ranking of responses using the zero to eight scale. Coders worked on one scenario at a time and reviewed and discussed preliminary coding schemes for each scenario at the weekly meetings. Meetings provided the opportunity for the coders to discuss openly their reasons for placing each response at each level on the scale. This process initially led to the development of a category for each scenario at all nine levels. As more responses were reviewed, the coding manual was revised to reflect more accurately the responses given and the level of social problem-solving competence represented by the response. Levels within scenarios were combined and collapsed if the coders evaluated that two categories represented the same level of social competence. Collapsing levels within scenarios in this manner led to the development of scales with different coding levels per scenario. For example, if scenario had a level six that was determined to represent the same level of social competence as responses originally coded as level five, the two category levels were combined. Because the on-going process led to each scenario having different possible coding levels, the final scores for social problem-solving competence were standardized using the z-statistic procedure.

In the beginning of the coding process, all coders rated the same interviews starting with groups of ten interviews. Any discrepancies on scenario coding levels were discussed at the weekly meetings. Each coder presented her argument for why she coded
the response at a given level. Once interrator reliability was established at over 90% across scenarios for the ten selected interviews, the three coders rated all six scenarios for all student interviews. Percent agreement interrater reliabilities for coding all the interviews were calculated for each scenario and ranged from 89.6 to 97.2 percent. The primary researcher assigned the final coding score to the scenarios in which the three coders were discrepant. In the end, each student interview had codes for each scenario response given. Responses such as "no answer" were excluded as missing data when analyses were performed. The response, "I don’t know," corresponded to a zero or a very ineffective response. A response of "nothing" was coded at different levels for each scenario because in some scenarios doing nothing is an effective response to the situation while in others it is not.

Scale reliability analysis was calculated, using coefficient alpha (Cronbach, 1951), for social problem-solving competence scores on the six scenarios (α = .41). A review of the corrected item-total correlations indicated that Scenario Seven (as indicated in Table 11) was not highly correlated with the other five scenarios. This scenario was discarded for social problem-solving competence. Reliability analysis was conducted on the remaining five scenarios (α = .43). An average social problem-solving scale score was created to account for any missing data in the remaining five scenarios. A total of 204 student interviews were included in the coding process and the final social competence scale; the remaining seven student interviews represent missing data. Missing data may be the result of students declining to answer specific questions. The average scale score was used for all subsequent analyses.
Table 11. Reliability Analysis for Social Problem-Solving Competence

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Corrected Item Total Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 2</td>
<td>-3.17</td>
<td>1.49</td>
<td>.18</td>
</tr>
<tr>
<td>Scenario 3</td>
<td>-.19</td>
<td>.69</td>
<td>.23</td>
</tr>
<tr>
<td>Scenario 4</td>
<td>.34</td>
<td>.88</td>
<td>.23</td>
</tr>
<tr>
<td>Scenario 5</td>
<td>.46</td>
<td>.91</td>
<td>.33</td>
</tr>
<tr>
<td>Scenario 6</td>
<td>-.29</td>
<td>1.07</td>
<td>.14</td>
</tr>
</tbody>
</table>

Outcome expectations. As defined by Bandura (1977), outcome expectations refer to an individual's perception of the likelihood that a given performed behavior will lead to a desired outcome. Adolescents' expectations about the outcomes of competent behavior were obtained by presenting the students with the seven interpersonal conflict situations a second time, followed by a competent hypothetical response of another adolescent to the conflict situation (similar to the process used by Allen et al., 1990). Students were asked to answer the open-ended question, "If you tried this, what do you think would happen?" The response of the hypothetical adolescent was derived from competent responses to the scenarios as evaluated by school officials and psychologists as most likely to resolve the conflict at hand and to reduce the chance that the adolescent would experience a similar situation in the future.

The process for developing the coding manual for outcome expectations was similar to the process described above for social problem-solving competence. Responses designating different levels were again derived from the responses collected during wave
one interviews. Outcome expectations were rated on a one to five scale, with one

corresponding to an expectation of a very negative response, and five corresponding to an

expectation of a very positive outcome. Each scenario had a response category at each of
the five possible levels. The two coders working on the manual initially worked

independently to determine the placement of possible responses on the coding scale and
met weekly to discuss response levels.

All responses were coded by each coder to assure interrater reliability. Percent

agreement interrater reliabilities were calculated and ranged from 88.6 to 94.8%. Scale

reliability analysis was conducted and the initial scale alpha coefficient for the six scenarios
was .53 (Table 12). The corrected item-total correlations indicated that Scenario Two

was removed from the scale producing a more reliable scale of five scenarios (α = .58).

To account for missing data, an average scale score was computed using the remaining
five scenarios. A total of 138 student interviews were included in the coding process; the
remaining 73 student interviews represent missing data. Missing data may be the result of
students declining to answer specific questions. The average scale score was used in the

analyses.

The validity of the two coding manuals was tested using a group of graduate

students in psychology and psychology professors as independent judges. Each judge was

presented with a scenario and with the possible responses to that scenario (i.e., the

responses collected during wave one of interviews. Judges were asked to rank order the

responses for social problem-solving competence and outcome expectations according to
the definitions used in the coding manuals. As such, judges were asked to order the social
Table 12. Reliability Analysis for Expectations of the Outcome of Competent Behavior

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Corrected Item Total Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 3</td>
<td>3.04</td>
<td>1.62</td>
<td>.26</td>
</tr>
<tr>
<td>Scenario 4</td>
<td>3.05</td>
<td>1.49</td>
<td>.45</td>
</tr>
<tr>
<td>Scenario 5</td>
<td>3.03</td>
<td>1.53</td>
<td>.36</td>
</tr>
<tr>
<td>Scenario 6</td>
<td>3.09</td>
<td>1.25</td>
<td>.27</td>
</tr>
<tr>
<td>Scenario 7</td>
<td>3.64</td>
<td>1.59</td>
<td>.35</td>
</tr>
</tbody>
</table>

problem-solving competence responses from zero to eight, with a zero corresponding to a very incompetent or very ineffective response, and a score of eight corresponding to a very competent or very effective response. Responses related to the expectations of the outcomes of competent behavior were rank ordered from one to five with a one corresponding to an expectation of a very negative outcome and a five corresponding to an expectation of a very positive outcome. Judges ordered the responses in the same order as was decided by the original coders. This exercise provided a check on the ordering system used by the original coders.

*Perceived self-efficacy.* As defined by Bandura (1977), an individual’s self-efficacy expectation is one’s conviction in his or her ability to execute a behavior successfully to achieve a desired outcome. To evaluate self-efficacy in performing competent behaviors, adolescents were asked to consider the hypothetical response of the other teenager and to respond to the question, “Do you think you could do what he (she) did if you tried?” Adolescents were asked to rate themselves on a Likert-type scale.
ranging from zero to five where a score of zero corresponded to “definitely could not do it,” and five corresponded to “definitely could do it.”

Using coefficient alpha (Cronbach, 1951), scale reliability was conducted on self-efficacy for the six scenarios ($\alpha = .44$). A review of the corrected item-total correlations indicated that Scenario Three (see Table 13) was not highly related to the other five scenarios and was therefore removed from the scale. Scale reliability analysis was conducted on the remaining five scenarios ($\alpha = .46$). An average perceived self-efficacy scale score was computed to account for any missing data in the five remaining scenarios. A total of 209 student interviews were included in the coding process; the remaining two student interviews represent missing data. Missing data may have resulted from students declining to answer specific questions. The average scale score was used for all analyses.

Table 13. Reliability Analysis for Perceived Self-Efficacy

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Corrected Item Total Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 2</td>
<td>4.56</td>
<td>.88</td>
<td>.19</td>
</tr>
<tr>
<td>Scenario 4</td>
<td>4.45</td>
<td>.83</td>
<td>.27</td>
</tr>
<tr>
<td>Scenario 5</td>
<td>3.97</td>
<td>1.49</td>
<td>.29</td>
</tr>
<tr>
<td>Scenario 6</td>
<td>3.35</td>
<td>1.47</td>
<td>.25</td>
</tr>
<tr>
<td>Scenario 7</td>
<td>3.86</td>
<td>1.47</td>
<td>.25</td>
</tr>
</tbody>
</table>

Nonviolent conflict resolution. Students were asked to respond to a series of ten questions aimed at determining the number and kinds of interpersonal conflicts and antisocial behavior they have been involved in during the ten week period prior to being
interviewed. The ten week time period corresponds to the ten weeks of conflict resolution training at the two participation schools. Students were asked to indicate how many times since winter break (ten weeks prior to being interviewed) they had: (1) been in a fist fight, (2) talked their way out of a fight, (3) messed up school property, (4) been sent to the principal’s office for bad behavior, (5) carried a gun/knife to school, (6) stopped people from fighting each other, (7) threatened to hurt someone, (8) been suspended or excluded from school, (9) been physically hurt by someone at school, and (10) had someone take something from them using physical force. These items included questions on self-report delinquency, victimization, and positive conflict resolution techniques. Reliability analysis conducted on the ten items indicated that five of the items (1, 3, 4, 7, 8) were highly correlated with each other ($\alpha = .74$) (see Table 14). The direction of items was reversed as necessary. An average score for these five items was computed to create a nonviolent scale score for each interviewee.

Table 14. Content of Questions Related to Self-Reported Delinquency

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Since winter break (beginning of March), how many times have you:*</td>
</tr>
<tr>
<td>1. Been in a fist fight</td>
</tr>
<tr>
<td>2. Messed up school property</td>
</tr>
<tr>
<td>4. Been sent to the principal’s office for bad behavior</td>
</tr>
<tr>
<td>7. Threatened to hurt someone</td>
</tr>
<tr>
<td>8. Been suspended or excluded from school</td>
</tr>
</tbody>
</table>

55
School Surveys

There were seven scales constructed from the school-wide surveys. These scales were: attitudes toward school, attitudes toward fighting, self-efficacy, perception of school safety, observed delinquency in school, school victimization, and self-reported delinquency. All of these scales were created by summing the scale items and dividing this sum by the number of items with nonmissing responses. Several items were reverse coded to maintain consistency in the direction of the scale.

Attitudes toward school. The scale of attitudes toward school asked the students how they thought they were viewed by their teachers and principals as well as if they thought the school rules were fair or unfair. This scale sought to determine the extent the students liked or disliked school. Hence, a high scale score signified a positive attitude toward school. The scale was tested for reliability using coefficient alpha. The scale items, corrected item-total correlations, and the coefficient alpha are presented in Table 15.

Attitudes toward fighting. The attitudes toward fighting scale was created to measure the extent to which students believed that fighting was an appropriate way to handle problems. A high scale score represented a positive attitude regarding fighting while a low scale score represented a negative attitude toward fighting. Table 16 presents the individual scale items corrected item-total correlations, and the alpha coefficients for each of the three data collection times.

Self-efficacy. The scale gauging students' self-efficacy was composed of items that asked the students how difficult it would be to use nonviolent methods to resolve
Table 15. Reliability Analysis for Students' Attitude toward School Scale

<table>
<thead>
<tr>
<th>Scale items</th>
<th>Corrected Item Total Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
</tr>
<tr>
<td>1. Teachers really care about you and want you to do well.</td>
<td>.48</td>
</tr>
<tr>
<td>2. Teachers go out of their way to help students.</td>
<td>.44</td>
</tr>
<tr>
<td>3. Teachers and the principal do not want you in their school.</td>
<td>.41</td>
</tr>
<tr>
<td>4. Teachers in this school always try to help students.</td>
<td>.50</td>
</tr>
<tr>
<td>5. This school has too many rules.</td>
<td>.35</td>
</tr>
<tr>
<td>6. The rules in this school are unfair.</td>
<td>.39</td>
</tr>
<tr>
<td>Alpha coefficients</td>
<td>.69</td>
</tr>
</tbody>
</table>
Table 16. Reliability Analysis for Students’ Attitude toward Fighting Scale

<table>
<thead>
<tr>
<th>Scale items</th>
<th>Corrected Item Total Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
</tr>
<tr>
<td>1. It is better to talk to someone than it is to fight.</td>
<td>.53</td>
</tr>
<tr>
<td>2. You have to fight so other students don’t think you are weak.</td>
<td>.36</td>
</tr>
<tr>
<td>3. You can talk your way out of a fight.</td>
<td>.33</td>
</tr>
<tr>
<td>4. It is okay to hit someone who makes fun of you.</td>
<td>.47</td>
</tr>
<tr>
<td>5. You should try to stop people from getting into a fight.</td>
<td>.41</td>
</tr>
<tr>
<td>6. Fighting is the only way to solve problems.</td>
<td>.50</td>
</tr>
<tr>
<td>7. It is okay to walk away from a fight.</td>
<td>.48</td>
</tr>
</tbody>
</table>

Alpha coefficients

|                      | .72    | .76    | .75    |
potential conflicts. The responses were coded as “very hard,” “hard,” “easy,” and “very easy.” A high scale score indicated that a student feels he or she to could avoid conflicts nonviolently while a low scale score indicated that a student could not employ nonviolent methods of conflict resolution. The ten items, corrected-item total correlations, and alpha coefficients are presented in Table 17.

**Perception of school safety.** This scale sought to measure how safe students’ felt in school and in the neighborhood around their school. Items were coded so that a high scale score meant that students feel safe in and around their school while a low scale score suggested that students did not feel safe at or near their school. Table 18 presents the items, corrected-item total correlations, and alpha coefficients for this scale.

**Observed delinquency.** The observed delinquency scale was constructed as a way of measuring how often students witness acts in school that could cause them to feel unsafe. Students were asked to report how many times in the past eight weeks they had witnessed a variety of behaviors including assaults on teachers, school vandalism, students fighting, and students with weapons. The items were coded as zero, once, twice, three times, or four or more times. The actual items and scale reliability measures are presented in Table 19.

**Self-reported delinquency.** Seven items for the self-reported delinquency scale were adapted from Elliott, Huizinga, and Ageton (1980). The items included in this scale pertained to a variety of delinquent and criminal acts. Similar to the observed delinquency scale, students were asked to report how many times in the past eight weeks they had participated in these seven behaviors. These items were coded the same way as the
Table 17. Reliability Analysis for Students' Self-efficacy Scale

<table>
<thead>
<tr>
<th>Scale items</th>
<th>Corrected Item Total Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
</tr>
<tr>
<td>1. A stranger, about your age, is giving you the eye and purposely bumps into you on the street. Ignoring this stranger is _____ for you.</td>
<td>.30</td>
</tr>
<tr>
<td>2. One of the kids in your school has been telling rumors about your boy/girlfriend. Asking this kid why he/she is spreading these rumors is _____ for you.</td>
<td>.35</td>
</tr>
<tr>
<td>3. You are hanging out with a bunch of your friends. A newcomer starts insulting you. Telling this person to stop is _____ for you.</td>
<td>.37</td>
</tr>
<tr>
<td>4. You are pretty sure that one of your classmates is trying to steal your boy/girlfriend. Ignoring this person is _____ for you.</td>
<td>.21</td>
</tr>
<tr>
<td>5. Someone in your school stole your jacket. Telling the principal or teacher about it is _____ for you.</td>
<td>.25</td>
</tr>
<tr>
<td>6. You and a friend are arguing about what to do after school. Compromising on your plans is _____ for you.</td>
<td>.31</td>
</tr>
<tr>
<td>7. Talking about a problem is _____ for you.</td>
<td>.30</td>
</tr>
<tr>
<td>8. After you and a friend have an argument, it is _____ for you to make up with that friend.</td>
<td>.29</td>
</tr>
<tr>
<td>9. Doing things as well as as your friend does them is _____ for you.</td>
<td>.26</td>
</tr>
<tr>
<td>10. Giving in to someone else to avoid a fight is _____ for you.</td>
<td>.24</td>
</tr>
</tbody>
</table>

Alpha coefficients

<table>
<thead>
<tr>
<th></th>
<th>Corrected Item Total Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
</tr>
<tr>
<td></td>
<td>.61</td>
</tr>
</tbody>
</table>
Table 18. Reliability Analysis for Students’ Perception of School Safety Scale

<table>
<thead>
<tr>
<th>Scale items</th>
<th>Corrected Item Total Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
</tr>
<tr>
<td>1. Teachers are afraid of some students.</td>
<td>.25</td>
</tr>
<tr>
<td>2. I always feel safe at school</td>
<td>.44</td>
</tr>
<tr>
<td>3. I feel safe going to and coming from school</td>
<td>.33</td>
</tr>
<tr>
<td>4. People sell drugs around the school.</td>
<td>.33</td>
</tr>
<tr>
<td>5. This school is in gang territory.</td>
<td>.28</td>
</tr>
<tr>
<td>6. I always feel safe in the school cafeteria.</td>
<td>.27</td>
</tr>
<tr>
<td>Alpha coefficients</td>
<td>.58</td>
</tr>
</tbody>
</table>
Table 19. Reliability Analysis for Students’ Observation of Delinquent Behavior Scale

<table>
<thead>
<tr>
<th>Scale items</th>
<th>Corrected Item Total Correlations</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Within the past two months, how many times have you . . .</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Seen a fight between students.</td>
<td>.29</td>
<td>.34</td>
<td>.32</td>
<td></td>
</tr>
<tr>
<td>2. Seen a student threaten a teacher.</td>
<td>.44</td>
<td>.49</td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>3. Seen a student destroy school property.</td>
<td>.46</td>
<td>.50</td>
<td>.44</td>
<td></td>
</tr>
<tr>
<td>4. Seen a student bring a weapon to school</td>
<td>.55</td>
<td>.57</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>5. Seen police officers at school to take someone out of school.</td>
<td>.48</td>
<td>.47</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>6. Seen a student with drugs or alcohol in school.</td>
<td>.54</td>
<td>.54</td>
<td>.51</td>
<td></td>
</tr>
<tr>
<td><strong>Alpha coefficients</strong></td>
<td><strong>.73</strong></td>
<td><strong>.75</strong></td>
<td><strong>.73</strong></td>
<td></td>
</tr>
</tbody>
</table>

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observed delinquency items (0, 1, 2, 3, or 4 or more times). Table 20 presents the seven
items and the scale reliabilities.

School victimization. School victimization was measured using two items. How
many times in the past eight weeks has someone physically assaulted you; and, how many
times has someone physically taken something from you. These items were also coded
with the responses of zero, once, twice, three times, and four or more. The scale items,
item-total correlations, and coefficient alphas for each data collection point are presented
in Table 21.

Research Goals

This research project sought to investigate the effects of a conflict resolution
program on two levels. The evaluation attempted to measure program participant and
nonparticipant differences and school-wide effects of the training. First, the conflict
resolution training attempted to change students’ attitudes toward violence and teach them
ways to avoid potentially dangerous situations. Second, it was believed that the conflict
resolution training would be able to have school-wide effects due to the large number of
students participating in the training.

While it is important to present the research goals and the anticipated outcomes of
the study, it is also necessary to outline the potential drawbacks for this particular research
study. Given the size and scope of this project, there were inherent problems with the
research that limited the extent of the outcomes and conclusions. The following sections
present the anticipated outcomes of the study as well as the limitations of this research.
Table 20. Reliability Analysis for Students' Self-reported Delinquency Scale

<table>
<thead>
<tr>
<th>Scale items</th>
<th>Corrected Item Total Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within the past two months, how many times have you . . .</td>
<td>Time 1</td>
</tr>
<tr>
<td>1. Gotten into a fistfight.</td>
<td>.57</td>
</tr>
<tr>
<td>2. Hit someone who made fun of you.</td>
<td>.41</td>
</tr>
<tr>
<td>3. Messed up school property.</td>
<td>.57</td>
</tr>
<tr>
<td>4. Been sent to the principal's office for bad behavior.</td>
<td>.58</td>
</tr>
<tr>
<td>5. Carried a gun or knife to school.</td>
<td>.54</td>
</tr>
<tr>
<td>6. Threatened to hurt someone.</td>
<td>.53</td>
</tr>
<tr>
<td>7. Been suspended/excluded from school.</td>
<td>.59</td>
</tr>
<tr>
<td>Alpha coefficients</td>
<td>.80</td>
</tr>
</tbody>
</table>
Table 21. Reliability Analysis for Students’ Self-reported Victimization Scale

<table>
<thead>
<tr>
<th>Scale items</th>
<th>Corrected Item Total Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within the past two months, how many times have you . . .</td>
<td></td>
</tr>
<tr>
<td>1. Had someone physically assault and hurt you at school.</td>
<td>.47</td>
</tr>
<tr>
<td>2. Had someone take something from you using physical force.</td>
<td>.47</td>
</tr>
<tr>
<td>Alpha coefficients</td>
<td>.64</td>
</tr>
<tr>
<td>Time 1</td>
<td>.56</td>
</tr>
<tr>
<td>Time 2</td>
<td>.56</td>
</tr>
<tr>
<td>Time 3</td>
<td>.53</td>
</tr>
</tbody>
</table>
Anticipated Outcomes

Interviews. While the school surveys attempted to capture the large scale effects of the program, the interviews sought to measure the amount and type of effects of the conflict resolution training for students who participated in it. These interviews focused on the primary goals of the conflict resolution training: (1) students' self-efficacy, (2) expectations for outcomes of competent behavior, (3) social competence of the responses, and (4) ability to resolve interpersonal conflicts nonviolently. If the program was unable to affect these variables, it is likely that there would be little or no school-wide effects. This part of the evaluation was limited to interviewing students immediately following completion of the training. These are program specific outcomes and any effects of the program would be best found immediately following completion of the training.

School surveys. The school surveys allowed for the understanding of school-wide effects of the conflict resolution program. As previously mentioned, the conflict resolution training was given to approximately 100 students in each of the two participation schools. The administrator of the Wayne County Office on Violence Reduction believed that these students would be able use the skills gained from the conflict resolution training to informally resolve conflicts before they came to the attention of school officials. This would allow the program to have effects well beyond those students who participated in the training. These effects would not be limited to attitudes toward violence, but also include the other aspects of the conflict resolution training such as attitude toward school, perception of school safety, and self-efficacy. As a result of
changes in these attitudes and perceptions, students would see fewer acts of delinquency in school, be victimized fewer times, and participate in fewer delinquent acts.

The school-wide surveys attempted to capture these types of effects by surveying the sixth, seventh, and eighth grade students prior to the conflict resolution training (Time 1), at the end of the first school year (Time 2), and at the end of the second school year that the conflict resolution training was implemented in the participation schools (Time 3). The Time 1 surveys allowed for the construction of baseline measures at each of the four schools. The purpose of establishing baseline measures is threefold. First, it provided a way to make general comparisons across the four schools participating in this study. Second, it provided a way to compare changes in all four schools across time. Third, it was a viable way to understand the need for a conflict resolution program by asking students how much of a role violence plays in their everyday lives.

The Time 2 surveys administered at the end of the first school year of the project allowed for the assessment of immediate program effects on students’ attitude toward school, perception of school safety, self-efficacy, attitude toward fighting, the amount of delinquent acts students witness and participate in, and the number of times they are victimized at school. The results of the Time 2 surveys were not expected to be large or widespread. Changing attitudes and behaviors usually does not occur instantaneously, hence, it would be unrealistic to expect this program to have large and sweeping effects over an eight to ten week period. However, if the program is able to have immediate effects, these will likely occur for the attitudinal scales (teachers, fighting, and self-
efficacy) than for the behavioral scales (observed delinquency, self-reported delinquency, and victimization).

The Time 3 surveys sought to measure the longer effects of the conflict resolution program. Since this program was administered to seventh grade students who would be returning to the school for their eighth grade year, the largest program effects would likely be observed at the end of the second year than at the end of the first year. The elapsed time period of one year would account for the students who attended to conflict resolution training to informally change the attitudes and behaviors of other students in the school. Hence, the largest school-wide effects would most likely be present at this point rather than the end of the first year.

Limitations of the Research

Considering the type of research design used in this study, there are two general limitations that need to be discussed. First, a major component of this study assessed school-wide effects of the conflict resolution program rather than individual effects. The emphasis is placed on the school rather than the individual. This is why all the students in each of the four schools were surveyed three times rather than attempting to match individual surveys at each of the three time periods. The original goal of evaluation was to track all of the students in the four schools, however, due to constraints of time and resources it was not possible to track more than 1000 students for a one year period. Therefore, it is not possible to determine the if this program changed individual attitudes from one data collection point to another. Rather, this study can determine if differences between the sample schools existed at the three data collection periods.
Second, the schools were not randomly selected to participate in the conflict resolution program. The Administrator for the Guidance Department for the Detroit Public Schools and the Administrator for the Wayne County Office on Violence Reduction decided which schools would receive the training and which two would be comparison schools. Because this study does not have a true experimental design, it was difficult to determine if differences in the survey responses could be directly attributed to the conflict resolution program. To account for this limitation, the study did not directly compare scale scores across the four schools. Comparisons across the four schools were made by presenting scale score trends across the three data collection times.

Overview of the Study

The remaining chapters of this report present the findings of the interviews and school surveys as well as summarize these findings and make recommendations for future research and programming. The results of this research will be presented in three separate chapters. Chapter IV provides a description of violence in the four middle schools participating in this study. Using the Time 1 school surveys, selected items were chosen that asked specific questions about school violence. These results were presented across the four schools and across genders. This chapter also presented baseline scale scores for attitude toward school, attitude toward fighting, self-efficacy, perception of school safety, observed delinquency, self-reported delinquency, and victimization. Comparisons were made across schools and genders.

Chapter V compares the interview responses of students participating in the conflict resolution training to students not receiving the training. Comparisons were made
regarding problem solving competence, self-efficacy, competent behavior, and use of
nonviolence behavior. In addition, interview data was used to test a theoretical program
model.

Chapter VI used school survey data to assess changes in student perceptions and
attitudes across the three data collection times. This step was included to identify possible
trends that may be associated with the conflict resolution program. This results chapter
contained several types of analyses such as looking for changes in selected survey items,
changes in scale scores across the four schools, and differences in scale scores for students
in the participation schools who attending the conflict resolution program.
CHAPTER IV

Descriptive Results

The results of this study are presented in three separate chapters of the report. The first chapter, Chapter IV, provides a description of violence in the sample middle schools and presents baseline comparisons among the four schools that participated in this study. The purpose of this chapter is to describe problems that students confront while at school and to further describe the schools that participated in this study.

Description of Violence in Detroit Middle Schools

Officials at the Wayne County Office on Violence Reduction and the Detroit Public Schools believed that the problems facing students in the four participating schools were comparable to national statistics on school violence. That is, violence in school was considered a regular part of students academic lives, as a witness to violent acts, a participant, or a victim of violence. To compare the four study schools to national statistics, students were surveyed on several individual items that are commonly asked in other school violence studies. These items pertained to gangs in school, perceptions of school safety, witnessing fights, observing weapons at school, participation in physical fights, carrying weapons to school, and being physically assaulted.

It is important to note three caveats when comparing this study to other research. First, the comparisons were general observations and not rigorous statistical comparisons. It was our intention to establish a general understanding of violence in the four sample schools. It was not our intention to say that these four schools, or any schools in the
Detroit Public School System, are more or less violent than the national averages.

Second, many of these items were not phrased identically to the items in other research. Therefore, the ability to directly compare statistics across studies is limited. For example, we asked students if their school was located in gang territories while other studies asked if gangs operated in the school. The third caveat is that the sample in this study may differ demographically from samples used elsewhere. This study consisted of sixth, seventh, and eighth graders, but other studies involved samples of high school students (9th through 12th grades), middle and high school students (6th through 12th grades), and all students (kindergarten through 12th grades).

Gangs

The Office of Juvenile Justice and Delinquency Prevention reported that the number of students concerned about gangs in the school varied by grade level. For instance, 19% of sixth graders, 36% of seventh graders, and 38% of eighth graders reported that there were gangs in their schools (OJJDP, 1996). Unfortunately, the study did not report an overall percentage across the three grade levels.

Of the students who responded to the survey, 60% reported that their school was in a gang territory (Table 22). Participation School B and Comparison School A both reported the highest percentages (67% in each school), while Comparison School B reported the lowest percentage (43%). In three of the four schools, a higher percentage of males than females reported that their school was in gang territory (62% and 58% respectively). Considering the responses to the question, a majority of students believed that there were gangs around their school.
Table 22. Time 1: Number and Percent of Students Agreeing to the Statement that Their School is Located in Gang Territories

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>Participation A</td>
<td>76</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>(57%)</td>
<td>(50%)</td>
</tr>
<tr>
<td>Participation B</td>
<td>119</td>
<td>147</td>
</tr>
<tr>
<td></td>
<td>(67%)</td>
<td>(67%)</td>
</tr>
<tr>
<td>Comparison A</td>
<td>118</td>
<td>126</td>
</tr>
<tr>
<td></td>
<td>(67%)</td>
<td>(66%)</td>
</tr>
<tr>
<td>Comparison B</td>
<td>42</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>(46%)</td>
<td>(40%)</td>
</tr>
<tr>
<td>Totals</td>
<td>355</td>
<td>401</td>
</tr>
<tr>
<td></td>
<td>(62%)</td>
<td>(58%)</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect percentages of students in that particular group.

School Safety

Furlong and Morrison (1995) reported that 18% of inner-city students and 10% of suburban students felt unsafe at school. Their sample consisted of California students and they did not report grade levels of the sample. A higher percentage of students in this study reported feeling unsafe in school than the Furlong and Morrison (1995) study. For instance, of those students surveyed in the four middle schools in this study, 59% disagreed with the statement that they always feel safe while at school (Table 23). There were small nonsignificant differences across the four schools as well as between males and females.
Table 23. Time 1: Number and Percent of Students Disagreeing with the Statement that They Always Feel Safe at School

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>Participation A</td>
<td>67</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>(50%)</td>
<td>(60%)</td>
</tr>
<tr>
<td>Participation B</td>
<td>107</td>
<td>139</td>
</tr>
<tr>
<td></td>
<td>(58%)</td>
<td>(61%)</td>
</tr>
<tr>
<td>Comparison A</td>
<td>105</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>(62%)</td>
<td>(60%)</td>
</tr>
<tr>
<td>Comparison B</td>
<td>57</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>(62%)</td>
<td>(64%)</td>
</tr>
<tr>
<td>Totals</td>
<td>336</td>
<td>430</td>
</tr>
<tr>
<td></td>
<td>(58%)</td>
<td>(61%)</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect percentages of students in that particular group.

Witnessing Fights Between Students

OJJDP reported that 33% of sixth through twelve grade students had witnessed an incident in which another student was physically attacked or bullied (OJJDP, 1996). While this question did not ask about actual fights, it does provide some understanding of physical violence between students. The percentage of students in our survey that had witnessed a fight between students was remarkably high compared to what OJJDP reported.

Over 90% of all students in the school-wide survey had witnessed at least one fist fight between other students in the two month period before taking the Time 1 survey (Table 24). There were small differences between males and females seeing at least one
fight in school. Interestingly, in Comparison School B, 117 out of 118 females (99%) witnessed at least one fight.

Table 24. Time 1: Number and Percent of Students that Witnessed at Least One Fight Between Students in the Past Two Months

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td>Totals</td>
</tr>
<tr>
<td>Participation A</td>
<td>125 (93%)</td>
<td>156 (96%)</td>
<td>281 (94%)</td>
</tr>
<tr>
<td>Participation B</td>
<td>169 (90%)</td>
<td>218 (94%)</td>
<td>403 (92%)</td>
</tr>
<tr>
<td>Comparison A</td>
<td>162 (93%)</td>
<td>184 (92%)</td>
<td>346 (93%)</td>
</tr>
<tr>
<td>Comparison B</td>
<td>92 (96%)</td>
<td>117 (99%)</td>
<td>209 (98%)</td>
</tr>
<tr>
<td>Totals</td>
<td>548 (92%)</td>
<td>675 (95%)</td>
<td>1,239 (95%)</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect percentages of students in that particular group.

Seeing Students with Weapons in School

OJJDP reported that almost half of the students reported seeing weapons in their schools (1996). When looking at the percentages across middle school grade levels, 24% of sixth graders, 38% of seventh graders, and 44% of eighth graders observed students with weapons in school.

These percentages were much higher for students in our sample. Overall, a large percentage of the students (66%) reported seeing a student bring a weapon to school within two months before answering the survey (Table 25). There were also differences in
these percentages across the four schools. Comparison School B had the highest percentage of students seeing weapons (71%) and Participation School A had the lowest percentage (60%). Across all four schools, a higher percentage of males consistently reported seeing weapons in school than females (70% to 62%). The differences between males and females were similar across the four schools.

Table 25. Time 1: Number and Percent of Students that Witnessed a Student with a Weapon at School

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td>Totals</td>
<td></td>
</tr>
</tbody>
</table>
| Participation A | 88     | 91       | 179    | (60%)
|               | (65%)   | (56%)    |        |     |
| Participation B | 131    | 147      | 278    | (66%)
|               | (70%)   | (63%)    |        |     |
| Comparison A   | 126    | 122      | 248    | (64%)
|               | (72%)   | (61%)    |        |     |
| Comparison B   | 72     | 79       | 151    | (71%)
|               | (75%)   | (67%)    |        |     |
| Totals         | 417    | 439      | 856    | (66%)
|               | (70%)   | (62%)    |        |     |

Note: Values in parentheses reflect percentages of students in that particular group.

Participation in Fist Fights

Studies of students' participation in fist fights have primarily consisted of high school students. These studies have found that approximately 30% (Centers for Disease Control, 1992) to 50% (DeJong, 1994) of high school students are involved in fist fights...
per month. Although the students in this study were middle school students, their involvement in fights closely resembled those findings of studies of high school students.

Almost 50% of all the students at Time 1 admitted participating in at least one fist fight with another student in the two month period before taking the survey (Table 26). These percentages varied little across the four schools. The lowest percentage of students who admitted participating in fights was in Participation School A (44%) and the highest was in Participation School B (51%). Males in all four schools reported a much higher rate of involvement in a fist fight at school than females (58% and 40% respectively).

Table 26. Time 1: Number and Percent of Students who Reported Being in at Least One Fist Fight in the Past Two Months

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>Participation A</td>
<td>76   (56%)</td>
<td>55   (34%)</td>
</tr>
<tr>
<td>Participation B</td>
<td>115   (61%)</td>
<td>101   (43%)</td>
</tr>
<tr>
<td>Comparison A</td>
<td>100   (57%)</td>
<td>78    (39%)</td>
</tr>
<tr>
<td>Comparison B</td>
<td>52   (54%)</td>
<td>52    (44%)</td>
</tr>
<tr>
<td>Totals</td>
<td>343   (58%)</td>
<td>286   (40%)</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect percentages of students in that particular group.
Bringing a Weapon to School

The National Crime Victimization Survey for students between the ages of 12 and 19 years old found that 2% of students reported carrying a weapon to school for protection (1989). However, Furlong and Morrison (1995) presented more recent research that has found 3% to 6% of secondary school students reported that they possessed a weapon at school during the year before being surveyed.

The percentage of students in our study who reported bringing a weapon to school within two months before answering the Time 1 survey was an alarming 20% (Table 27). The lowest percentage of students who reported carrying a weapon to school was in Participation School A (14%) and the highest was in Comparison School A (21%).

Similar to the number of students reporting being in a fight, a much higher percentage of males reported bringing a weapon to school than females (26% and 12% respectively) across all four schools. The percentages of males and females who reported carrying a weapon were consistent across schools (22% to 29% for males and 7% to 16% for females).

Physically Assaulted

OJJDP (1996) reported that 4% of the sixth through twelfth grade students had been a victim of a physical attack. Of the students surveyed, almost 25% had been assaulted in school during the two month period before taking the survey (Table 28). Participation School A had the lowest percentage of students who reported being assaulted at school (16%) and both Participation School B and Comparison School A had
the highest percentage (27%). Across all four schools, a higher percentage of males reported being assaulted than females (28% and 19% respectively).

Table 27. Time 1: Number and Percent of Students who Reported Bringing a Weapon to School in the Past Two Months

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th>Males</th>
<th>Females</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>30 (22%)</td>
<td>12 (7%)</td>
<td>42 (14%)</td>
<td></td>
</tr>
<tr>
<td>Participation B</td>
<td>52 (28%)</td>
<td>26 (11%)</td>
<td>78 (18%)</td>
<td></td>
</tr>
<tr>
<td>Comparison A</td>
<td>50 (29%)</td>
<td>27 (14%)</td>
<td>77 (43%)</td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>23 (24%)</td>
<td>19 (16%)</td>
<td>42 (20%)</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>155 (26%)</td>
<td>84 (12%)</td>
<td>239 (18%)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect percentages of students in that particular group.

Summary

In comparing the results of our Time 1 survey to similar studies, it appears that the school-related problems of students in the four study schools were comparable to or more prevalent than those reported on a national scale. Frequencies of responses to selected survey items have indicated that violence was common in the lives of the students who participated in this study. That is, a majority of the students reported that their school was in gang territories (60%), a low percentage of students reported always feeling safe at school (28%), almost all of the students had witnessed a fight in school in the past two
months (95%), many students had seen another student bring a weapon to school (66%),
amost one-half had been in a fist fight in the past two months (48%), approximately 20%
had brought a weapon to school, and almost one-in-four students had been the victim of
an assault at school (23%). While males tended to be more involved in these activities
(e.g., fighting, carrying a weapon to school), the differences between males and females
were not large. In addition, the percentages were similar across the four middle schools.

Table 28. Time 1: Number and Percent of Students who Reported
Being Physically Assaulted at School in the Past Two Months

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Students</td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation A</td>
<td>27 (20%)</td>
<td>20 (12%)</td>
<td></td>
</tr>
<tr>
<td>Participation B</td>
<td>59 (31%)</td>
<td>53 (23%)</td>
<td></td>
</tr>
<tr>
<td>Comparison A</td>
<td>56 (32%)</td>
<td>44 (22%)</td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>25 (26%)</td>
<td>21 (18%)</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>167 (28%)</td>
<td>138 (19%)</td>
<td>305 (23%)</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect percentages of students in that particular group.

Examination of the Relationship Between Program Constructs

The first step in the analysis compared individual survey items to similar items
from other studies of school violence. The responses to these items generally reflected
those from other studies. While this provided a helpful description of the students in our
sample, it also provided general construct validity to these data. Next, we examined the correlations of the scale constructs to further assess the validity of these data. This step was undertaken as an additional test of the data to eliminate the possibility that the findings from the evaluative analyses were skewed by ill-conceived constructs.

The conflict resolution program proposed to improve the school climate by changing students’ attitude toward fighting, delinquent behavior, and school safety. The correlational analysis tested programmatic beliefs regarding the relationship between fighting, delinquency, and school safety. For instance, self-reported delinquency was expected to be correlated with attitude toward fighting (youth who believe that fighting is a positive way to resolve issues will also likely participate in other types of delinquent acts), attitude toward school (students with a low attachment and/or commitment to school will likely participate in delinquency), observed delinquency (students who participate in delinquent acts will likely see others participate in delinquent acts), and victimization (youth who participate in delinquent acts are more likely to be victimized than nondelinquents).

In addition, self-efficacy was expected to be negatively correlated with attitude toward fighting (students who believe they can control various situations will not likely view fighting as a way to resolve problems). Attitude toward fighting was believed to be negatively correlated with attitude toward school (students who believe fighting is appropriate will not like school) and perception of school safety (students who believe they have to fight will not feel safe at school). Perception of school safety was expected to be positively correlated with attitude toward school (students who like school also feel
safe) and negatively correlated with observed delinquency (the more delinquent acts a student observes the less he/she will feel safe).

Table 29 presents the correlations at Time 1. As expected, self-reported delinquency was highly correlated with attitude toward fighting (.40), attitude toward school (-.27), observed delinquency (.38), and victimization (.47). Furthermore, self-efficacy was moderately correlated with attitude toward fighting (-.11). Attitude toward fighting was correlated with attitude toward school (-.50) and perception of school safety (-.24). Perception of school safety was related to attitude toward school (.28) and negatively correlated with observed delinquency (-.31).

Baseline Comparisons of the Four Study Schools

Since the schools were not randomly assigned to participate in this study out of a larger sample of schools, nor were schools randomly picked to receive the conflict resolution training, it was necessary to explore baseline differences between the study schools. Determining pre-program differences between the schools would aid in making conclusions regarding the ability of the program to have positive effects on the participation schools. We examined Time 1 scale scores for each of the schools involved in this study and tested for scale score differences across the four schools and between males and females within each school.

Attitude Toward School

Table 30 presents the overall scale scores for the four schools along with the scores for males and females in each school. The two comparison schools had lower attitude toward school scale scores than the participation schools. Comparison School B
Table 29. Correlations of Scales for Time 1 Data

<table>
<thead>
<tr>
<th>Construct</th>
<th>Self-Reported Delinquency</th>
<th>Self-Efficacy</th>
<th>Attitude Toward Fighting</th>
<th>Perception of School Safety</th>
<th>Attitude Toward School</th>
<th>Observed Delinquency</th>
<th>Victimization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Reported Delinquency</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>-.05</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude Toward Fighting</td>
<td>.40**</td>
<td>-.11**</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perception of School Safety</td>
<td>-.18**</td>
<td>.08**</td>
<td>-.24**</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude Toward School</td>
<td>-.27**</td>
<td>.09**</td>
<td>-.50**</td>
<td>.28**</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed Delinquency</td>
<td>.38**</td>
<td>.00</td>
<td>.20**</td>
<td>-.31**</td>
<td>-.18**</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Victimization</td>
<td>.47**</td>
<td>-.07**</td>
<td>.12**</td>
<td>-.07**</td>
<td>-.10**</td>
<td>.19**</td>
<td>1.0</td>
</tr>
</tbody>
</table>

** p < .05
was significantly lower than the other three schools, and Comparison School A was significantly lower than Participation A. There were statistically significant differences between the scale scores males and females in two of the four schools. In both Participation School B and Comparison School B, males had a lower attitude toward school than females.

Table 30. Time 1: Scale Scores for Attitude toward School

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Overall</th>
<th>Scale Score Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>3.79</td>
<td>3.76</td>
<td>3.82</td>
</tr>
<tr>
<td>Participation B</td>
<td>3.66</td>
<td>3.57*</td>
<td>3.74</td>
</tr>
<tr>
<td>Comparison A</td>
<td>3.55**</td>
<td>3.47</td>
<td>3.62</td>
</tr>
<tr>
<td>Comparison B</td>
<td>3.29*</td>
<td>3.17*</td>
<td>3.39</td>
</tr>
</tbody>
</table>

*Statistically significantly lower than other three school means (p. < .05).
**Statistically significantly lower than Participation A (p. < .05).
+Statistically significant differences between males and females (p. < .05).

Perception of School Safety

For the perception of school safety scale, one statistical difference was found across schools such that students in Participation School A had a significantly higher perception of school safety than students in Participation School B and Comparison School A (Table 31). There were no significant differences between males and females in any of the four schools.
### Table 3.1: Scale Scores for Perception of School Safety

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Overall</th>
<th>Scale Score Males</th>
<th>Scale Score Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>2.97*</td>
<td>2.98</td>
<td>2.96</td>
</tr>
<tr>
<td>Participation B</td>
<td>2.77</td>
<td>2.82</td>
<td>2.73</td>
</tr>
<tr>
<td>Comparison A</td>
<td>2.76</td>
<td>2.73</td>
<td>2.78</td>
</tr>
<tr>
<td>Comparison B</td>
<td>2.83</td>
<td>2.80</td>
<td>2.85</td>
</tr>
</tbody>
</table>

Statistically significantly higher than Participation B and Comparison A (p < .05).

**Attitude Toward Fighting**

Students' attitude toward fighting was significantly higher in Comparison School B than the other three schools (Table 32). In other words, students in Comparison School B were more likely to feel that fighting was a positive way to solve problems than students in the other three schools. The attitude toward fighting score was significantly higher for males than females except in Comparison School B. This higher scores for females probably accounts for the higher score of Comparison School B compared to the other schools.

**Self-Efficacy**

For self-efficacy, there was one statistically significant difference across the four schools. Students in Participation School B had lower self-efficacy than students in Comparison School A (Table 33). There were no significant differences between the self-efficacy of males and females in any of the four schools.
Table 32. Time 1: Scale Scores for Attitude toward Fighting

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Overall</th>
<th>Scale Score Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>2.31</td>
<td>2.48*</td>
<td>2.17</td>
</tr>
<tr>
<td>Participation B</td>
<td>2.35</td>
<td>2.54*</td>
<td>2.20</td>
</tr>
<tr>
<td>Comparison A</td>
<td>2.35</td>
<td>2.52*</td>
<td>2.20</td>
</tr>
<tr>
<td>Comparison B</td>
<td>2.52*</td>
<td>2.49</td>
<td>2.56</td>
</tr>
</tbody>
</table>

*Statistically significantly higher than other three school means (p. < .05).

*Statistically significant differences between males and females (p. < .05).

Table 33. Time 1: Scale Scores for Self-Efficacy

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Overall</th>
<th>Scale Score Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>2.66</td>
<td>2.68</td>
<td>2.65</td>
</tr>
<tr>
<td>Participation B</td>
<td>2.64*</td>
<td>2.60</td>
<td>2.68</td>
</tr>
<tr>
<td>Comparison A</td>
<td>2.74</td>
<td>2.70</td>
<td>2.77</td>
</tr>
<tr>
<td>Comparison B</td>
<td>2.69</td>
<td>2.65</td>
<td>2.72</td>
</tr>
</tbody>
</table>

*Statistically significantly lower than Comparison A (p. < .05).

Observed Delinquency

There was one statistically significant difference across the four schools in the amount of delinquent acts that students reported seeing in their school. Students in Participation School A observed fewer delinquent acts in their school (Table 34). There were no significant differences between males and females in the amount of delinquent acts observed.
Table 34. Time 1: Scale Scores for Observed Delinquency

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Scale Score Overall</th>
<th>Scale Score Males</th>
<th>Scale Score Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>8.51*</td>
<td>8.39</td>
<td>8.61</td>
</tr>
<tr>
<td>Participation B</td>
<td>10.08</td>
<td>9.85</td>
<td>10.27</td>
</tr>
<tr>
<td>Comparison A</td>
<td>9.72</td>
<td>9.83</td>
<td>9.61</td>
</tr>
<tr>
<td>Comparison B</td>
<td>9.57</td>
<td>9.53</td>
<td>9.60</td>
</tr>
</tbody>
</table>

*Statistically significantly lower than other three school means (p. <.05).

Self-Reported Delinquency

For self-reported delinquency, there were statistically significant differences across the four schools and between males and females (Table 35). Comparison School A had significantly higher levels of self-reported delinquency than the participation schools. Comparison School A also had a higher score than Comparison School B, but this difference was not statistically significant. In three of the four schools, males reported participating in more delinquent acts than females. In Comparison School B, there was no significant differences in self-reported delinquency between males and females.

Self-Reported Victimization

There was one statistical difference in self-reported victimization across the four schools (Table 36). Participation School A had lower self-reported victimization than Comparison School A. Comparison School A had higher self-reported victimization than the other three schools but the difference was only statistically significant for Participation School A. In each of the four schools, males reported being victimized more than females.
Table 35. Time 1: Scale Scores for Self-Reported Delinquency

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Overall</th>
<th>Scale Score</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>4.58*</td>
<td>6.05*</td>
<td>3.36</td>
</tr>
<tr>
<td>Participation B</td>
<td>4.62*</td>
<td>5.76*</td>
<td>3.70</td>
</tr>
<tr>
<td>Comparison A</td>
<td>5.82</td>
<td>6.93*</td>
<td>4.84</td>
</tr>
<tr>
<td>Comparison B</td>
<td>4.99</td>
<td>5.68</td>
<td>4.42</td>
</tr>
</tbody>
</table>

*Statistically significantly lower than Comparison A (p.<.05).
*Statistically significant differences between males and females (p.<.05).

Table 36. Time 1: Scale Scores for Victimization

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Overall</th>
<th>Scale Score</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>.85*</td>
<td>1.09*</td>
<td>.64</td>
</tr>
<tr>
<td>Participation B</td>
<td>1.19</td>
<td>1.48*</td>
<td>.95</td>
</tr>
<tr>
<td>Comparison A</td>
<td>1.46</td>
<td>1.79*</td>
<td>1.17</td>
</tr>
<tr>
<td>Comparison B</td>
<td>1.14</td>
<td>1.47*</td>
<td>.88</td>
</tr>
</tbody>
</table>

*Statistically significantly lower than Comparison A (p.<.05).
*Statistically significant differences between males and females (p.<.05).

Summary

While there were some statistically significant differences for the scale scores, there were no consistent differences between the participation and the comparison schools. Across the four schools, students attending Participation School A reported a more positive perception of school safety, a lower level of observed delinquency, and lower levels of victimization than students in the other three schools. These differences,
however, did not exist for Participation School B. The differences between males and females were also similar across the participation and comparison schools.

The presence of Time 1 differences among the four middle schools were not unexpected. Although these schools were considered to be similar by the administration of the Detroit Public Schools, there were some inherent differences that would likely have existed across any four schools in the school district. For example, these schools are located in different parts of the city, have principals with different management and educational philosophies, and have different building structures (refer to the school descriptions for a more detailed comparison).
CHAPTER V

Interview Results

The following chapter assessed the utility of the program to teach students conflict resolution skills. The results are presented in two sections. The first section evaluated the theoretical program model of the conflict resolution training curriculum. The second section tested for group differences between those students receiving the training and those that did not.

Test of a Theoretical Program Model

Previous literature has suggested that conflict resolution training is positively related to perceived self-efficacy and to higher expectations of the outcomes of competent behavior. Furthermore, perception of self-efficacy and expectations of the outcomes of competent behavior are positively related to social problem-solving competence. Finally, social problem-solving competence is positively related to nonviolent conflict resolution.

A theoretical program model was constructed from the literature and from discussions with conflict resolution program facilitators that provided an understanding of how the program would lead to nonviolent conflict resolution (Figure 1). This model suggests that participation in the conflict resolution training will lead to an increase in self-efficacy and an increase in positive outcome expectations. These changes will produce an increase in students' social problem-solving competence, promoting the use of nonviolent conflict resolution. A series of hierarchical multiple regressions were used to analyze the proposed model predicting nonviolent conflict resolution from the conflict resolution training,
Figure 1. Proposed Program Model

- Conflict Resolution Training
- Perceived Self-Efficacy
- Social Problem-Solving Competence
- Nonviolent Conflict Resolution
- Outcome Expectations
perceived self-efficacy, expectations of the outcomes of competent behavior, and social problem-solving competence.

Four hierarchical multiple regression equations were used to test the proposed model. These equations tested the following components:

Equation 1: Conflict resolution training would increase perceived self-efficacy in interpersonal conflict situations.

Equation 2: Conflict resolution training would increase positive expectations of the outcomes of competent behavior in interpersonal conflict situations.

Equation 3: Perceived self-efficacy and the expectations of the outcomes of competent behavior would positively affect social problem-solving competence (controlling for conflict resolution training).

Equation 4: Social problem-solving competence would increase the use of nonviolent conflict resolution in interpersonal conflict situations (controlling for conflict resolution training, perceived self-efficacy, and outcome expectations).

In addition, when using hierarchical regression to test mediated effects, equations must be inverted and run backwards to double check the effects of variables or blocks of variables entered into the equation. To do this, Equation 4 was reversed: social problem-solving competence was entered into the equation with nonviolent conflict resolution as the criteria; perceived self-efficacy and outcome expectations were entered in the second block; and participation group was entered into the equation in block three.
For these analyses, the program group was dummy coded along two dimensions:

(1) whether students received training in conflict resolution, and (2) school setting.

Therefore, the group “In Program” received conflict resolution training in a participation school was coded (1,1). The group “Not in Program” that did not receive conflict resolution training but was in a participation school was coded (0,1). Finally, the group that received no conflict resolution training and was in a comparison school was coded (0,0).

As identified previously, Equation 1 tested the direct effect of the conflict resolution training on perceptions of self-efficacy. Results indicated that conflict resolution training did not have a significant effect on perceived self-efficacy (Table 37).

Equation 2 evaluated the direct effect of conflict resolution training on the expectations of the outcome of competent behavior. Again, no significant effects were found (Table 38).

The tables present the beta weights and tests of significance for variables in these equations as well as the overall tests of the model.

<table>
<thead>
<tr>
<th>Table 37. Prediction of Perceptions of Self-Efficacy - Equation 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Group</strong></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>In Program</td>
</tr>
<tr>
<td>Not in Program</td>
</tr>
</tbody>
</table>

Model Statistics:
- F = .605, ns
- R² = .006
- R² change = .006, ns
Table 38. Prediction of Perceptions of Outcome Expectations - Equation 2

<table>
<thead>
<tr>
<th>Program Group</th>
<th>$r$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$t$ Sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Program</td>
<td>.04</td>
<td>.038</td>
<td>.420</td>
<td>.675</td>
</tr>
<tr>
<td>Not in Program</td>
<td>.03</td>
<td>.033</td>
<td>.365</td>
<td>.716</td>
</tr>
</tbody>
</table>

Model Statistics:
- $F = .116, \text{ ns}$
- $R^2 = .002$
- $R^2$ change = .002, ns

Equation 3 tested the direct effects of perceived self-efficacy and the expectations of the outcomes of competent behavior on social problem-solving competence with conflict resolution training as the control variable. This block had a significant direct effect on social problem-solving competence as indicated by a significant change in the squared multiple $R$. Simultaneous testing of the two variables as indicated by the beta weights (Table 39) showed that perceived self-efficacy was a significant predictor of social problem-solving competence whereas expectations of the outcomes of competent behavior was not. Perceived self-efficacy accounted for most of the variance associated with this block of variables. In addition, program participation was a significant predictor of problem-solving competence.

Finally, Equation 4 evaluated the direct effects of social problem-solving competence on nonviolent conflict resolution, controlling for perceived self-efficacy, outcome expectations, and participation in conflict resolution training. Results indicated that social problem-solving competence had no effect on nonviolent conflict resolution above and beyond the variance accounted for by the other variables in this equation (Table 94).
40). However, both perceived self-efficacy and outcome expectations were significant predictors of nonviolent conflict resolution. Furthermore, attending the conflict resolution training was a significant predictor of use of nonviolent conflict resolution.

Table 39. Prediction of Social Problem-Solving Competence - Equation 3

<table>
<thead>
<tr>
<th>Program Group</th>
<th>$r$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$t$ Sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Program</td>
<td>.30</td>
<td>.260</td>
<td>2.89</td>
<td>.005</td>
</tr>
<tr>
<td>Not in Program</td>
<td>-.15</td>
<td>.087</td>
<td>.97</td>
<td>.333</td>
</tr>
<tr>
<td>Outcome Expectations</td>
<td>.50</td>
<td>.093</td>
<td>1.27</td>
<td>.207</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>1.09</td>
<td>.519</td>
<td>7.09</td>
<td>.000</td>
</tr>
</tbody>
</table>

Model Statistics for Block 1 (Program Groups):
$F = 4.07$, $p < .05$
$R^2 = .059$
$R^2$ change $= .059$, $p < .05$

Model Statistics for Block 2 (Outcome Expectations and Self-Efficacy):
$F = 18.65$, $p < .05$
$R^2 = .365$
$R^2$ change $= .305$, $p < .05$

Table 40. Prediction of Nonviolent Conflict Resolution - Equation 4

<table>
<thead>
<tr>
<th>Program Group</th>
<th>$r$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$t$ Sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Program</td>
<td>.14</td>
<td>.242</td>
<td>2.71</td>
<td>.007</td>
</tr>
<tr>
<td>Not in Program</td>
<td>.21</td>
<td>.260</td>
<td>2.92</td>
<td>.004</td>
</tr>
<tr>
<td>Outcome Expectations</td>
<td>.44</td>
<td>.201</td>
<td>2.45</td>
<td>.016</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>.45</td>
<td>.247</td>
<td>3.01</td>
<td>.003</td>
</tr>
<tr>
<td>Social Competence</td>
<td>.43</td>
<td>.023</td>
<td>.236</td>
<td>.814</td>
</tr>
</tbody>
</table>
Model Statistics for Block 1 (Program Groups):
F = 4.07  p. < .05
R² = .059
R² change = .059, p. < .05

Model Statistics for Block 2 (Outcome Expectations and Self-Efficacy):
F = 18.65, p. < .05
R² = .365
R² change = .305, p. < .05

Model Statistics for Block 3 (Social Competence):
F = 6.89, p. < .05
R² = .212
R² change = .0003, ns

An additional regression was conducted to reassess the four equations described above. Equation 4 was reversed, i.e., social problem-solving competence was entered first into the equation with nonviolent conflict resolution as the criteria. This analysis indicated that when entered into the equation first, social problem-solving competence had a significant effect on nonviolent conflict resolution (see Table 41). Perceived self-efficacy and outcome expectations accounted for variance above and beyond what social problem-solving competence and each demonstrated a significant direct effect on nonviolent conflict resolution. Finally, when the participation group was entered into the equation there was a significant change in the squared multiple R.

The results of the hierarchical regression did not support the mediated relationships in the hypothesized program model. Instead, there were direct effects between perceived self-efficacy and nonviolent conflict resolution; between outcome expectations and nonviolent conflict resolution; and nonviolent conflict resolution for students trained in conflict resolution skills and for students attending a participation
school who were not trained in conflict resolution. Furthermore, there is a direct relationship between conflict resolution training and social problem-solving competence. Figure 2 shows a revised model of the direct effects between participation school, perceived self-efficacy, outcome expectations, and nonviolent conflict resolution.

Table 41. Prediction of Nonviolent Conflict Resolution - Equation 4 in Reverse Order

<table>
<thead>
<tr>
<th></th>
<th>r</th>
<th>β</th>
<th>t</th>
<th>t Sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Competence</td>
<td>.43</td>
<td>.252</td>
<td>2.99</td>
<td>.003</td>
</tr>
<tr>
<td>Outcome Expectations</td>
<td>.44</td>
<td>.201</td>
<td>2.35</td>
<td>.020</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>.45</td>
<td>.206</td>
<td>2.07</td>
<td>.040</td>
</tr>
<tr>
<td>Program Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Program</td>
<td>.14</td>
<td>.214</td>
<td>2.47</td>
<td>.015</td>
</tr>
<tr>
<td>Not in Program</td>
<td>.21</td>
<td>.252</td>
<td>3.00</td>
<td>.003</td>
</tr>
</tbody>
</table>

Model Statistics for Block 1 (Social Competence):
- F = 8.97, p. < .05
- R² = .063
- R² change = .063, p. < .05

Model Statistics for Block 2 (Outcome Expectations and Self-Efficacy):
- F = 7.24, p. < .05
- R² = .143
- R² change = .079, p. < .05

Model Statistics for Block 3 (Program Groups):
- F = 6.89, p. < .05
- R² = .212
- R² change = .069, p. < .05
Figure 2. Revised Program Model

Conflict Resolution Training

Perceived Self-Efficacy

Outcome Expectations

Nonviolent Conflict Resolution
Responses to Conflict Scenarios

The interviews sought to measure students' ability to resolve conflicts using nonviolent alternatives by presenting selected students with a series of conflict scenarios and asking them what they would do in these situations, what the outcome would be if they acted in the way they reported, if they believed they could use nonviolent methods of conflict resolution, and what would happen if they did use nonviolent methods of resolving the conflicts.

A series of analyses of variance were conducted to investigate the effect of the conflict resolution training on the students' social problem-solving competence, perceived self-efficacy in social conflict situations, expectations of the outcome of competent behavior, and use of nonviolent conflict resolution. Scheffe post hoc multiple comparison tests were used to further examine group differences (see Table 10 for the conflict scenarios).

Problem-Solving Competence

The first analysis of variance compared the social problem-solving competence for students attending the conflict resolution program, students who did not attend the conflict resolution training but were enrolled in a participation school, and students who attended a comparison school. The ANOVA model was statistically significant ($p < .05$) and the Scheffe post hoc comparison procedure indicated that the mean social problem-solving competence scale score for students attending the conflict resolution program was significantly higher than either group of students not trained in conflict resolution (Table 42). There were no statistically significant differences between the mean social problem-
solving competence scale scores for students attending a participation school who were
not trained in conflict resolution and students attending a comparison school.

Table 42. Scores for Social Problem-Solving Competence, Social Self-Efficacy,
Outcome Expectations and Nonviolent Conflict Resolution

<table>
<thead>
<tr>
<th>Scale</th>
<th>Part. School Trained</th>
<th>Part. School No Training</th>
<th>Comparison Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-Solving Competence*</td>
<td>.22</td>
<td>-.08</td>
<td>-.03</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>4.10</td>
<td>4.09</td>
<td>3.99</td>
</tr>
<tr>
<td>Competent Behavior</td>
<td>3.22</td>
<td>3.20</td>
<td>3.13</td>
</tr>
<tr>
<td>Nonviolent Conflict Resolution*</td>
<td>3.48</td>
<td>3.49</td>
<td>3.07</td>
</tr>
</tbody>
</table>

Self-Efficacy

The second analysis investigated differences among the three groups of students
for self-efficacy for performing competent behaviors in interpersonal conflict situations.
Results indicated that there were no statistically significant differences between the groups
concerning perceived self-efficacy scale scores (Table 42).

Competent Behavior

The third analysis was conducted to test for differences expectations about the
positive outcomes of performing competent behavior in interpersonal conflict situations.
Program participation groups did not differ significantly with students’ expectations of
the outcomes of competent behavior (Table 42).
Use of Nonviolent Behavior

The analysis of variance tests conducted to investigate the effects of the conflict resolution program on nonviolent conflict resolution found that students trained in conflict resolution skills and students who attended the participation schools but did not receive the training were significantly more likely to use nonviolent resolution than students who attended a comparison school (Table 42). There were no differences between groups of students who attended the participation schools regarding nonviolent conflict resolution.

Summary

The test of the theoretical program model found that the expected mediated relationships between the constructs did not exist. However, social problem-solving, self-efficacy, and competent behavior were directly related to nonviolent behaviors. These findings support the viability of the conflict resolution program to produce the desired effects. That is, if students attending the conflict resolution program have increased either problem-solving skills, self-efficacy, or prosocial competent behavior, then the use of nonviolent behavior to resolve conflicts is likely.

The ANOVA tests found significant differences in problem-solving and use of nonviolent behavior for students who attended the program. In addition, students in participation schools not receiving the training also reported more use of nonviolent behavior than students in comparison schools. It is conceivable that there was a spillover effect for students receiving the training. Students who received the training acquired prosocial problem-solving skills that resulted in the use of nonviolent behavior to resolve
conflicts. Students not receiving the training but who were in the participation schools learned to use nonviolent behavior from those students in the program.

It is important to further point out that pre-program data was not collected because the evaluation did not focus on individual changes. Therefore, results could be due to pre-program differences between those students who attended the conflict resolution training and those students who did not receive the training.
CHAPTER VI

Survey Results

The following section evaluated differences in student perceptions and attitudes across the four schools at each data collection time. One of the primary goals of the conflict resolution program was to produce school-wide changes in the students' attitude toward violence, the amount of violence they witnessed in and around their school, and in the behaviors of the students in the participation schools. While the program was provided only to seventh graders, it was hoped that these students would influence the attitudes of other students in their respective school.

There are two parts in this chapter. The first part compared students' responses to selected survey items across the four schools in this study. These items were the same as those used in the baseline descriptions of each school. The second part compared survey scale scores of the four study schools and focused on the participation schools. Using the scale scores across the three data collection times, students who reported attending the conflict resolution program were compared to students who reported that they did not attend the conflict resolution training.

One caveat needs to be explained before discussing the outcome results of the school surveys. Due to the nature of this aspect of the evaluation, it was not possible to analyze individual differences across the three data collection times. That is, the analysis consisted of testing for across school differences on three occasions. We were unable to survey the same students at each data collection time. There were two primary reasons
why the same students were not surveyed. First, it was beyond the resources of this project to track and survey more than 1400 students over a fifteen month time period. Second, officials from the Wayne County Office on Violence Reduction and school officials were more concerned about school-wide effects of the program over study period rather than attitudinal and behavioral changes of individual students.

Survey Items across Schools by Time

The following sections present the frequencies and percentages of students who responded to the items: “I always feel safe at school,” “number of times you have witnessed a fight between students at school in the past two months,” “number of times you have seen a student with a weapon at school in the past two months,” “number of times you have been in a fist fight at school in the past two months,” “number of times you have carried a gun or knife to school in the past two months,” and “the number of times you have been physically assaulted at school in the past two months.”

School Safety

Table 43 presents the frequencies and percentages of students who reported that they always felt safe at school. There was a Time 1 difference for this item. A significantly higher percentage of students in Participation School A always felt safe in school than the two comparison schools (34% to 24% and 21%). However, at Time 2, there were no significant differences between the schools. The difference between Participation School A and Comparison School B reappeared at Time 3.
Table 43. Number and Percent of Students Agreeing to the Statement that They Always Feel Safe at School

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation A</td>
<td>112</td>
<td>69</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(34%)</td>
<td>(28%)</td>
<td>(29%)</td>
<td></td>
</tr>
<tr>
<td>Participation B</td>
<td>141</td>
<td>68</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(30%)</td>
<td>(26%)</td>
<td>(23%)</td>
<td></td>
</tr>
<tr>
<td>Comparison A</td>
<td>93</td>
<td>71</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(24%)</td>
<td>(25%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>51</td>
<td>53</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(21%)</td>
<td>(20%)</td>
<td>(19%)</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>397</td>
<td>261</td>
<td>204</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(28%)</td>
<td>(25%)</td>
<td>(23%)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect percentages of students in that particular group.

Witnessing Fights between Students

Table 44 presents the number and frequency of students who had witnessed at least one fight between students in the two month period before completing the survey. In all schools, over 90% of the students witnessed at least one fist fight at school. These percentages remained consistent at Times 2 and 3. The only statistically significant difference was at Time 3. A lower percentage of students reported seeing fights in Participation School B than in Comparison School B. Given the high percentage of students seeing fights, it is doubtful that the program had any effect on fights between students.
Table 44. Number and Percent of Students that Witnessed at Least One Fight Between Students in the Past Two Months

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>315</td>
<td>234</td>
<td>253</td>
</tr>
<tr>
<td>(95%)</td>
<td>(90%)</td>
<td>(93%)</td>
<td></td>
</tr>
<tr>
<td>Participation B</td>
<td>448</td>
<td>247</td>
<td>361</td>
</tr>
<tr>
<td>(92%)</td>
<td>(91%)</td>
<td>(89%)</td>
<td></td>
</tr>
<tr>
<td>Comparison A</td>
<td>367</td>
<td>263</td>
<td></td>
</tr>
<tr>
<td>(93%)</td>
<td>(90%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>295</td>
<td>244</td>
<td>339</td>
</tr>
<tr>
<td>(96%)</td>
<td>(91%)</td>
<td>(95%)</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>1365</td>
<td>988</td>
<td>953</td>
</tr>
<tr>
<td>(94%)</td>
<td>(91%)</td>
<td>(92%)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect percentages of students in that particular group.

Witnessing Other Students with Weapons at School

The next survey item asked the students to report the number of times they had seen a student bring a weapon to school in the two months before completing the survey (Table 45). Sixty-six percent of all students surveyed had seen a student possess a weapon at school. There was one statistically significant difference at Time 1. A lower percentage of students at Participation School A saw a student with a weapon than students at Comparison School B (72% to 61%). These differences were not present at Time 2 or Time 3.
Table 45. Number and Percent of Students that Witnessed a Student with a Weapon at School

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
<td>Time 3</td>
</tr>
<tr>
<td>Participation A</td>
<td>201 (61%)</td>
<td>151 (58%)</td>
<td>165 (61%)</td>
</tr>
<tr>
<td>Participation B</td>
<td>323 (66%)</td>
<td>176 (65%)</td>
<td>257 (64%)</td>
</tr>
<tr>
<td>Comparison A</td>
<td>261 (66%)</td>
<td>189 (65%)</td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>177 (72%)</td>
<td>173 (65%)</td>
<td>249 (70%)</td>
</tr>
<tr>
<td>Totals</td>
<td>962 (66%)</td>
<td>689 (63%)</td>
<td>671 (65%)</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect percentages of students in that particular group.

Participation in Fist Fights

Table 46 presents the frequency and percentages of students who reported being involved in at least one fist fight two months before completing the survey. There were no significant differences in these percentages at Time 1 or Time 2. However, Both participation schools were significantly lower than Comparison School B at Time 3. In teaching students how to avoid conflict situations, it is possible to suggest that the Time 3 differences may be attributable to the conflict resolution program.
Table 46. Number and Percent of Students who Reported being in at Least One Fist Fight in the Past Two Months

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation A</td>
<td></td>
<td>152</td>
<td>109</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(46%)</td>
<td>(42%)</td>
<td>(40%)</td>
</tr>
<tr>
<td>Participation B</td>
<td></td>
<td>259</td>
<td>127</td>
<td>149</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(53%)</td>
<td>(47%)</td>
<td>(37%)</td>
</tr>
<tr>
<td>Comparison A</td>
<td></td>
<td>188</td>
<td>116</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(48%)</td>
<td>(40%)</td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td></td>
<td>123</td>
<td>111</td>
<td>179</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(50%)</td>
<td>(42%)</td>
<td>(50%)</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>722</td>
<td>463</td>
<td>437</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(50%)</td>
<td>(42%)</td>
<td>(42%)</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect percentages of students in that particular group.

Bringing Weapons to School

Table 47 presents the frequency and percentages of students who reported bringing a gun or knife to school. Approximately 20% of all students reported carrying a weapon to school at least once for the three data collection times. Similar to participation in fist fights, there were no statistical differences between the schools at Time 1 and Time 2. However, a lower percentage of students in Participation School A carried a weapon to school at Time 3 when compared to Comparison School B.
Table 47. Number and Percent of Students who Reported Bringing a Gun or Knife to School in the Past Two Months

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
<td>Time 3</td>
</tr>
<tr>
<td>Participation A</td>
<td>53 (16%)</td>
<td>50 (19%)</td>
<td>40 (15%)</td>
</tr>
<tr>
<td>Participation B</td>
<td>99 (20%)</td>
<td>74 (27%)</td>
<td>75 (19%)</td>
</tr>
<tr>
<td>Comparison A</td>
<td>83 (21%)</td>
<td>62 (21%)</td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>52 (21%)</td>
<td>71 (27%)</td>
<td>85 (24%)</td>
</tr>
<tr>
<td>Totals</td>
<td>287 (21%)</td>
<td>257 (24%)</td>
<td>200 (18%)</td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect percentages of students in that particular group.

Physical Assaults

There were different patterns in the percentages of students who reported that they had been physically assaulted at each of the data collection times (Table 48). At Time 1, Participation School A had a lower percentage than Participation School B and Comparison School A (18% compared to 28%). At Time 2, this difference disappeared but Participation School A had a lower percentage of students assaulted than Comparison School B. The Time 3 differences were similar to participation fist fights, that is, both participation schools had lower percentages than Comparison School B.
Table 48. Number and Percent of Students who Reported Being Physically Assaulted at School in the Past Two Months

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Number of Students</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>60 (18%)</td>
<td>50 (19%)</td>
<td>56 (21%)</td>
<td></td>
</tr>
<tr>
<td>Participation B</td>
<td>136 (28%)</td>
<td>80 (29%)</td>
<td>97 (24%)</td>
<td></td>
</tr>
<tr>
<td>Comparison A</td>
<td>109 (28%)</td>
<td>77 (27%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>57 (23%)</td>
<td>87 (33%)</td>
<td>117 (33%)</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>362 (23%)</td>
<td>294 (27%)</td>
<td>270 (26%)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Values in parentheses reflect percentages of students in that particular group.

Survey Scale Scores Across Schools by Time

Program effects were further assessed using cross-sectional analyses of variance for the survey scales. Tests were conducted for each data collection time for the scales of attitude toward school, perception of school safety, attitude toward fighting, self-efficacy, observed delinquency, self-reported delinquency, and victimization. Two separate sets of analyses were conducted on the survey scale scores. First, comparisons were made across the four schools for each of the three data collection times. Time 3 scale scores were not available for Comparison School A. Second, comparisons were made within the two participation schools for students who reported having participated in the conflict.
resolution training and students who reported not being involved in the conflict resolution training.

**Scale Score Differences Between the Schools**

**Attitude toward school.** The scores for attitudes toward school scale are presented in Table 49. At Time 1, students attending Comparison School B had a statistically significantly lower attitude toward school than students at the other three schools. In addition, the students at Comparison School A had a statistically significant lower attitude toward school than the students at Participation School A.

At Time 2, students at Comparison School B still had significantly lower attitudes toward school than students at the other three schools, and students at Comparison School A still were significantly lower than students at Participation School A. The significantly lower attitudes toward school of students at Comparison School B remained at Time 3.

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Time 1</th>
<th>Scale Score Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>3.79</td>
<td>3.59</td>
<td>3.66</td>
</tr>
<tr>
<td>Participation B</td>
<td>3.66</td>
<td>3.40</td>
<td>3.42</td>
</tr>
<tr>
<td>Comparison A</td>
<td>3.55**</td>
<td>3.38***</td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>3.29*</td>
<td>3.03*</td>
<td>3.11***</td>
</tr>
</tbody>
</table>

*Statistically significantly lower than other three school means (p. <.05).
**Statistically significantly lower than Participation A (p. <.05).
***Statistically significantly lower than other two school means (p. <.05).
Perception of school safety. Table 50 presents the mean scale scores across the three time times for students' perception of school safety. For Times 1 and 2, Participation School A had a statistically significant higher perception of school safety than Participation School B and Comparison School A. At Time 3, Participation School A had a statistically significant higher perception of school safety than Participation School B and Comparison School B.

Table 50. Scale Scores for Perception of School Safety

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Scale Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
</tr>
<tr>
<td>Participation A</td>
<td>2.97*</td>
</tr>
<tr>
<td>Participation B</td>
<td>2.77</td>
</tr>
<tr>
<td>Comparison A</td>
<td>2.76</td>
</tr>
<tr>
<td>Comparison B</td>
<td>2.83</td>
</tr>
</tbody>
</table>

*Statistically significantly higher than Participation B and Comparison A (p. <.05).
**Statistically significantly higher than other two school means (p. <.05).

Attitude toward fighting. Table 51 presents the results of the scale scores for attitudes toward fighting. At Time 1, Comparison School B was statistically significantly higher than the other three schools on the attitude toward fighting scale. Students at Comparison School B were more likely to believe that fighting was the best way to solve problems than students in the other three schools.

At Time 2, students at Comparison School B still had a more positive attitude toward fighting than students in the other three schools. At Time 3, there were no statistically significant differences between students at Comparison School B and students...
at Participation School B. However, the scale score for Participation A was statistically significantly lower than both Participation School B and Comparison School B.

Table 51. Scale Scores for Attitude toward Fighting

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Scale Score Time 1</th>
<th>Scale Score Time 2</th>
<th>Scale Score Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>2.31</td>
<td>2.51</td>
<td>2.27**</td>
</tr>
<tr>
<td>Participation B</td>
<td>2.35</td>
<td>2.48</td>
<td>2.49</td>
</tr>
<tr>
<td>Comparison A</td>
<td>2.35</td>
<td>2.52</td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>2.52*</td>
<td>2.73*</td>
<td>2.63</td>
</tr>
</tbody>
</table>

*Statistically significantly higher than other three school means (p. < .05).
**Statistically significantly lower than other two school means (p. < .05).

Self-efficacy. The scale scores for self-efficacy are presented in Table 52. For all three time periods, there was only one statistically significant mean difference between schools. At Time 1, students at Participation School B had significantly lower self-efficacy than students at Comparison School A. This difference disappeared at Time 2 and Time 3.

Table 52. Scale Scores for Self-Efficacy

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Scale Score Time 1</th>
<th>Scale Score Time 2</th>
<th>Scale Score Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>2.66</td>
<td>2.62</td>
<td>2.67</td>
</tr>
<tr>
<td>Participation B</td>
<td>2.64*</td>
<td>2.61</td>
<td>2.67</td>
</tr>
<tr>
<td>Comparison A</td>
<td>2.74</td>
<td>2.68</td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>2.69</td>
<td>2.65</td>
<td>2.63</td>
</tr>
</tbody>
</table>

*Statistically significantly lower than Comparison A (p. < .05).

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Observed delinquency. The scores for observed delinquency are presented in Table 53. At all three data collection times, the students at Participation School A reported statistically significantly lower observed delinquency than students in the other three schools.

Table 53. Scale Scores for Observed Delinquency

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Time 1</th>
<th>Scale Score Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>8.51*</td>
<td>8.06*</td>
<td>8.28*</td>
</tr>
<tr>
<td>Participation B</td>
<td>10.88</td>
<td>9.72</td>
<td>9.28</td>
</tr>
<tr>
<td>Comparison A</td>
<td>9.72</td>
<td>9.76</td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>9.57</td>
<td>9.26</td>
<td>9.50</td>
</tr>
</tbody>
</table>

*Statistically significantly lower than other school means (p. <.05).

Self-reported delinquency. Table 54 presents the scale scores for self-reported delinquency. At Time 1, the two participation schools had significantly lower self-reported delinquency than Comparison School A. At Time 2, self-reported delinquency was higher in the two participation schools so that there were no statistically significant differences between schools. At Time 3, there was a significant difference between the two participation schools and Comparison School B.
Table 54. Scale Scores for Self-Reported Delinquency

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Scale Score</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>4.58*</td>
<td>4.81</td>
<td>4.41</td>
<td></td>
</tr>
<tr>
<td>Participation B</td>
<td>4.62*</td>
<td>5.16</td>
<td>4.52</td>
<td></td>
</tr>
<tr>
<td>Comparison A</td>
<td>5.82</td>
<td>5.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>4.99</td>
<td>5.76</td>
<td>5.99**</td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significantly lower than Comparison A (p. <.05).
**Statistically significantly higher than other two school means (p. <.05).

Self-reported victimization. Table 55 presents the scale scores for self-reported victimization. At Time 1, students in Participation School A had significantly lower self-reported victimization than students in the other three schools. This difference was not present at Time 2. At Time 3, students in Participation School A reported significantly lower amounts of victimization than students in Comparison School B.

Table 55. Scale Scores for Victimization

<table>
<thead>
<tr>
<th>Middle School</th>
<th>Scale Score</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>.85*</td>
<td>1.12</td>
<td>.89**</td>
<td></td>
</tr>
<tr>
<td>Participation B</td>
<td>1.19</td>
<td>1.41</td>
<td>1.03**</td>
<td></td>
</tr>
<tr>
<td>Comparison A</td>
<td>1.46</td>
<td>1.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison B</td>
<td>1.14</td>
<td>1.70</td>
<td>1.59</td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significantly lower than Comparison A (p. <.05).
**Statistically significantly lower than Comparison B (p. <.05).
Scale Score Differences within Participation Schools

The conflict resolution program was provided to seventh grade students in the two participation schools. A program goal was to teach students skills to avoid violent conflicts which would lead to a better attitude toward school, a higher perception of school safety, a negative attitude toward fighting, higher self-efficacy, less observed and self-reported delinquency, and less victimization than students who did not receive the training. While the previous section tested for school-wide differences between the study schools, it was also necessary to assess differences between those students who reported attending the conflict resolution program and those students who reported that they did not attend the conflict resolution program. These analyses consisted of assessing scale differences between groups within each school. Separate analyses were preferred to control for possible differences of program implementation between the two participation schools.

In Participation School A, 46% of the students surveyed reported that they had participated in the conflict resolution program (Table 56). A higher percentage of students reported being in the program at Time 2 than Time 1 (49% to 43%). The same percentage of students in Participation School B stated that they were involved in the program (41%).

Attitude toward school. Table 57 presents the scale scores for attitude toward school. The first column represents the overall score for that school at Time 1. The next two columns give the separate scores for program participants and nonprogram participants. Significance tests were conducted only within each school.
Table 56. Students Receiving Training in Participation Schools based on Self-Reports

<table>
<thead>
<tr>
<th>School</th>
<th>Time 2</th>
<th>Not in Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>124 (49%)</td>
<td>131 (51%)</td>
</tr>
<tr>
<td></td>
<td>111 (43%)</td>
<td>150 (57%)</td>
</tr>
<tr>
<td>Total</td>
<td>235 (46%)</td>
<td>281 (54%)</td>
</tr>
<tr>
<td>Participation B</td>
<td>154 (41%)</td>
<td>223 (59%)</td>
</tr>
<tr>
<td></td>
<td>112 (41%)</td>
<td>161 (59%)</td>
</tr>
<tr>
<td>Total</td>
<td>266 (41%)</td>
<td>384 (59%)</td>
</tr>
</tbody>
</table>

For Participation School A, students who attended the conflict resolution program had significantly better attitudes toward school at Time 2 than those who did not participate in the program. This difference, however, was not found at Time 3. For Participation School B, there were no statistically significant differences in attitudes toward school between those who attended the program and those that did not at either of the two data collection times.

Table 57. Scale Scores for Attitude toward School by Self-Reported Program Participation

<table>
<thead>
<tr>
<th>Participation Group</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>In program</td>
<td>3.79</td>
<td>3.73*</td>
<td>3.64</td>
</tr>
<tr>
<td>Not in program</td>
<td>3.48</td>
<td>3.69</td>
<td></td>
</tr>
<tr>
<td>In program</td>
<td>3.66</td>
<td>3.37</td>
<td>3.46</td>
</tr>
<tr>
<td>Not in program</td>
<td>3.42</td>
<td>3.41</td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significantly different than the “Not in program” respondents from that school (p. < .05).
Perception of school safety. Table 58 presents the scale scores for perception of school safety. There were no statistically significant differences in perceptions of school safety between the students who reported attending the conflict resolution program and those who did not attend the program at either school.

Table 58. Scale Scores for Perception of School Safety by Self-Reported Program Participation

<table>
<thead>
<tr>
<th>Participation Group</th>
<th>Time 1</th>
<th>Scale Score Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>In program</td>
<td>2.97</td>
<td>2.80</td>
<td>2.82</td>
</tr>
<tr>
<td>Not in program</td>
<td>2.87</td>
<td>2.65</td>
<td></td>
</tr>
<tr>
<td>In program</td>
<td>2.77</td>
<td>2.73</td>
<td>2.65</td>
</tr>
<tr>
<td>Not in program</td>
<td>2.68</td>
<td>2.71</td>
<td></td>
</tr>
</tbody>
</table>

Attitude toward fighting. There was one significant difference in the scale scores for attitude toward fighting (Table 59). For Participation School A, students who attended the conflict resolution program had a more positive attitude toward fighting (they favored fighting) at Time 3 than students who did not attend the program. There were no statistically significant differences between groups for Participation School B.

Self-efficacy. There were no statistically significant differences in the self-efficacies of students who attended the conflict resolution program and those students who did not attend the program in either participation school (Table 60).
Table 59. Scale Scores for Attitude toward Fighting by Self-Reported Program Participation

<table>
<thead>
<tr>
<th>Participation Group</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>2.31</td>
<td>2.44</td>
<td>2.39*</td>
</tr>
<tr>
<td>In program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not in program</td>
<td>2.57</td>
<td>2.17</td>
<td></td>
</tr>
<tr>
<td>Participation B</td>
<td>2.35</td>
<td>2.53</td>
<td>2.43</td>
</tr>
<tr>
<td>In program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not in program</td>
<td>2.45</td>
<td>2.49</td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significantly different than the “Not in program” respondents from that school (p. < .05).

Table 60. Scale Scores for Self-Efficacy by Self-Reported Program Participation

<table>
<thead>
<tr>
<th>Participation Group</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation A</td>
<td>2.66</td>
<td>2.67</td>
<td>2.66</td>
</tr>
<tr>
<td>In program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not in program</td>
<td>2.59</td>
<td>2.68</td>
<td></td>
</tr>
<tr>
<td>Participation B</td>
<td>2.74</td>
<td>2.57</td>
<td>2.73</td>
</tr>
<tr>
<td>In program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not in program</td>
<td>2.63</td>
<td>2.65</td>
<td></td>
</tr>
</tbody>
</table>

Observed delinquency. Table 61 presents the scale means for observed delinquency. For Participation A, there were no statistical differences between the two groups at either of the final data collection times. For Participation B, the students attending the conflict resolution program reported seeing less delinquency than students who did not attend the program at Time 2. This difference, however, was not present at Time 3.
### Table 61. Scale Scores for Observed Delinquency by Self-Reported Program Participation

<table>
<thead>
<tr>
<th>Participation Group</th>
<th>Scale Score</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In program</td>
<td>8.51</td>
<td>7.82</td>
<td>8.62</td>
<td></td>
</tr>
<tr>
<td>Not in program</td>
<td></td>
<td>8.25</td>
<td>7.93</td>
<td></td>
</tr>
<tr>
<td>Participation B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In program</td>
<td>10.08</td>
<td>9.08*</td>
<td>9.36</td>
<td></td>
</tr>
<tr>
<td>Not in program</td>
<td></td>
<td>10.16</td>
<td>9.08</td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significantly different than the “Not in program” respondents from that school (p. < .05).

**Self-reported delinquency.** For self-reported delinquency, there was one significant difference between groups (Table 62). For Participation School A, students who attended the conflict resolution program reported committing more delinquent acts than students who did not attend the program at Time 3. For Participation School B, there were no statistical differences between the two groups at either time.

### Table 62. Scale Scores for Self-Reported Delinquency by Self-Reported Program Participation

<table>
<thead>
<tr>
<th>Participation Group</th>
<th>Scale Score</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In program</td>
<td>4.58</td>
<td>4.58</td>
<td>4.89*</td>
<td></td>
</tr>
<tr>
<td>Not in program</td>
<td></td>
<td>4.99</td>
<td>3.79</td>
<td></td>
</tr>
<tr>
<td>Participation B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In program</td>
<td>4.62</td>
<td>4.90</td>
<td>4.18</td>
<td></td>
</tr>
<tr>
<td>Not in program</td>
<td></td>
<td>5.34</td>
<td>4.33</td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significantly different than the “Not in program” respondents from that school (p. < .05).
Self-reported victimization. Table 63 presents the scores for self-reported victimization. There were no statistically significant differences in self-reported victimization between students who attended the conflict resolution program and those who did not attend in either of the two participation schools.

Table 63. Scale Scores for Victimization by Self-Reported Program Participation

<table>
<thead>
<tr>
<th>Participation Group</th>
<th>Time 1</th>
<th>Scale Score</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
<td>Time 3</td>
</tr>
<tr>
<td>Participation A</td>
<td></td>
<td>.85</td>
<td>1.14</td>
<td>.77</td>
</tr>
<tr>
<td>In program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not in program</td>
<td></td>
<td></td>
<td>1.10</td>
<td>.95</td>
</tr>
<tr>
<td>Participation B</td>
<td></td>
<td>1.19</td>
<td>1.48</td>
<td>.98</td>
</tr>
<tr>
<td>In program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not in program</td>
<td></td>
<td>1.36</td>
<td></td>
<td>.91</td>
</tr>
</tbody>
</table>

Summary

The previous section evaluated changes in student perceptions and attitudes across the four schools for selected survey items and for the seven scales. The analysis consisted of two steps. The first step compared student responses to selected survey items at each time period across the four schools. There were no distinct patterns between the schools for the items regarding school safety, observed fist fights, and observed weapon. There were results that indicated that the participation schools were significantly different from the comparison schools. For instance, Time 3 differences did exist between the two participation schools and the comparison school for percentage of students involved in a fist fight and students being assaulted at school. For the item of carrying weapons to
school, there was a Time 3 difference between Participation School A and the comparison school.

The second step of the analysis compared survey scale scores in the four schools across the three times of data collection. There were Time 3 differences between the participation schools and Comparison School B for all the scales except self-efficacy. However, these differences were present at Time 1 as well.

The third step of the analysis focused only on the two participation schools. Using the scale scores across the three data collection times, students who reported attending the conflict resolution program were compared to students who reported that they did not attend the conflict resolution training. There were no significant differences between the two groups at either of the participation schools for attitude toward school, perception of school safety, self-efficacy, observed delinquency, and victimization. For attitude toward fighting and self-reported delinquency, there were differences between the students in Participation School A but were in the wrong direction. Students who attended the conflict resolution program had a more positive attitude toward fighting and a higher level of self-reported delinquency than students who did not attend the program.
CHAPTER VII
Summary and Conclusions

Program Description and Goals

In an attempt to decrease the prevalence of youth violence, the Detroit Public School System and the Wayne County (MI) Office on Violence Reduction piloted a conflict resolution program in several middle schools in Detroit. The Wayne County Office on Violence Reduction introduced this program with the intention of establishing ongoing conflict resolution programs in all the middle schools in the Detroit Public School System and throughout Wayne County.

The conflict resolution program was delivered to seventh grade students in middle schools with sixth, seventh, and eighth grades. Program facilitators believed seventh graders in these middle schools would be able to have the most impact on the school. These students were targeted because, after the conflict resolution training, they would be able to utilize the training as eighth graders ("seniors" in the middle school) and would be instrumental in promoting non-violence throughout the school.

The conflict resolution training program was delivered to seventh grade students in the form of weekly one-hour sessions for ten weeks. Program facilitators, employed by the Wayne County Office on Violence Reduction, went into seventh grade classes in the two participation schools for ten weeks. The goal of the Wayne County Office on Violence Reduction was to provide conflict resolution training to at least 100 seventh graders in the two targeted middle schools for two years. The Wayne County Office on
Violence Reduction promoted the use of a curriculum similar to the Violence Prevention Curriculum for Adolescents (Prothrow-Stith, 1987).

The program attempted to provide students with an understanding that most incidents of violence begin with a conflictual situation over a minor problem, the skills and knowledge of how to avoid conflicts, and the opportunities to practice resolving problem situations nonviolently. These activities focused on: (1) providing students with the belief that they could avoid conflictual situations or resolve arguments nonviolently by using conflict resolution skills, (2) providing students with the understanding that using conflict resolution skills would increase the likelihood that conflictual situations could be resolved nonviolently, (3) promoting more socially competent responses to conflictual situations, and (4) resulting in students resolving interpersonal conflict situations nonviolently more frequently than students who did not participate in the program.

The Office on Violence Reduction hoped that by teaching students alternative responses to violence, students attending the conflict resolution program would be less accepting of violent solutions to interpersonal problems. It was further anticipated that negative attitudes toward violence held by students who attended the program would have a spillover effect in changing other students’ attitude toward violence. As a result, there would be less fights, fewer assaults on students, and a decrease in the number of weapons being brought to school. Students would report involvement in lower amounts of delinquent behavior, both overall and while at school. All of these changes would ideally create a safer and more positive learning environment within the school.
Summary of Evaluation Outcomes

The purpose of this evaluation was to assess the effects of the conflict resolution training program through the use of interviews and surveys. The research questions reflected attempts by the conflict resolution program to positively affect the participation schools' overall school climate, as measured through students' perception of school safety and their observations of violence in school. The interview research questions were: (1) did students attending the schools that received the conflict resolution training and the students who participated in the program have higher self-efficacy than students who did not receive the training, (2) did students in the program have more positive expectations for the outcomes of competent behavior, (3) did students in the program report more socially competent responses to interpersonal conflict situations, and (4) did these students resolve interpersonal conflict situations nonviolently more often than students who did not participate in the conflict resolution training?

In addition, the school-wide surveys were based on: (1) did the climate of the school change to support the intervention; (2) did the overall student perception of school safety positively change; (3) what was the impact of the intervention on the numbers of fights between students occurring at school; and, (4) did the intervention have effects on school-wide student attitudes regarding fighting, self-efficacy, and school?

Interview results. The findings from the interviews did not provide evidence that supported the effectiveness of the conflict resolution training. Although receiving training in conflict resolution skills was related to higher problem-solving competence, this relationship was not related to nonviolent conflict resolution. Furthermore, attending a
school with the conflict resolution program was related to nonviolent conflict resolution. It is difficult to attribute these findings solely to the presence of the training program in the school. It is possible, however, that both students who attended the conflict resolution training and students who did not receive the training in the participation schools displayed less violent conflict resolution techniques because students who were not in the program learned nonviolent conflict resolution techniques from their peers who participated in the program. In other words, the conflict resolution program could have had widespread effects whereby students who received the training positively influenced the school environment and their friends who did not directly participate in the program. It appears more likely that the apparent increase in nonviolent conflict resolution can be explained by the fact that there were differences between the participation and comparison schools prior to implementation of the conflict resolution program.

**School survey results.** The student surveys did not reveal findings that could be directly attributed to the conflict resolution program. That is, students' perception of school safety in the participation schools were not significantly different from the comparison schools at the end of year one or the end of year two. Similarly, the number of students who reported observing weapons in school, bringing weapons in school, participating in fights at school, and witnessing fights at school did not decrease with the introduction of the program. The lack of positive program findings existed when comparing participation to comparison schools as well as comparing program participants to nonprogram participants within the participation schools.
Factors Influencing Outcomes

Two issues need to be addressed when attempting to explain findings of the study. These issues involve program implementation and measurement.

Program operational issues. Program effectiveness for conflict resolution programs and other types of education-based interventions is typically related to program intensity, duration, and implementation integrity. Lipsey (1992) indicated that two important factors influenced a program's ability to produce positive effects, intensity (exposure) and duration (length). The conflict resolution did not appear to be intense, nor did it appear to be long enough. It is difficult to imagine a program having long term effects, especially one attempting to change violent attitudes and behaviors, when program facilitators are with students for one hour a week for ten weeks. Due to the small amount of time per week, program facilitators were often pressed for time and unable to complete their lesson plan, did not have adequate time for developing and explaining role plays, and were not able to review out of class assignments. In addition, several sessions were interrupted or canceled by school assemblies, students arriving late to class, student field trips, and facilitators not coming to school.

The program was further hindered by the number of students attending the sessions. The average number of students in the classroom was thirty. In some cases, there were close to forty students in attendance. The program facilitators often spent a significant portion of their time maintaining order in the classroom. The large number of students also made it impossible to properly conduct role plays.
While the intensity and duration of these types of programs have been found to be related to program success, implementation integrity is also a major factor (Gottfredson, Link, and Gottfredson, 1993). Gottfredson et al. (1993) suggested that there are organizational correlates of program strength. That is, some schools have certain characteristics that have a positive effect on program implementation. These characteristics are effective staff training, teacher participation in the planning and implementation of the program, leaders (principals and office staff) who are responsive to the program and are willing to become involved, adequate resources (time, physical space, and money), organizational capacity for change, and a positive school climate.

Understanding the influence of organizational characteristics that may affect program implementation may explain why programs succeed in some schools but not in others. These characteristics may also help explain the findings in this study.

First, there was no staff orientation for the program as well as no staff conflict resolution training. The original intent of the Wayne County Office on Violence Reduction was to provide an overview of the program and conflict resolution training to school staff during faculty meetings and orientation. It is unclear if school staff received any information about the program before its inception. School staff did not receive conflict resolution training from the Office on Violence Reduction. The lack of any staff orientation seemed to lead to a lack of communication between program facilitators and teachers. The program facilitators were seen as outsiders coming into the schools to provide a program for the students. Classroom teachers did not appear to understand their role in the program. Some teachers remained in the classroom during the program.
while other teachers viewed this program as a way to get out of the classroom for one hour a week.

Second, teachers were not asked for input regarding program implementation. On several occasions, teachers approached the evaluation staff who were conducting on-site observations to discuss their ideas for improving the program. These discussions were relayed to the program facilitators and it is unknown if the facilitators utilized this information. This was the only forum which afforded the opportunity for school staff to provide input about the program.

Third, the program was not integrated into the daily operations of the middle school. While both principals in the participation schools expressed interest in having the conflict resolution program their schools, they did not provide resources or staff support to the program, nor was the program coordinated with school disciplinary activities. For instance, students involved in violence-related behaviors (e.g., bullying, fighting, assaults, weapon-carrying) may have benefited from the conflict resolution program more than the general school population. Group sessions could have been provided for these students in addition to the general program.

Given the daily duties, time constraints, and other obligations of school principals, it is easy to understand why they could not be more involved in the program. However, program facilitators were often left to fend for themselves in dealing with problem students, finding meeting places for students apart from the classroom sessions, and obtaining supplies for program projects. These factors appeared to have limited the ability of the program facilitators to adequately teach conflict resolution skills to the students.
Measurement issues. There are several measurement issues that may have affected the outcomes of this study. The first measurement issue involves the level of measurement. The school-wide surveys were based on changes in aggregate (school-wide) data rather than individual changes among students attending the program. Using aggregate data did not allow the assessment of individual program effects. For example, the conflict resolution training could have been very beneficial for students who received the training, but these students may not have been able change the attitudes or behaviors of their peers. In addition, it was difficult to determine which students actually attended the program. This information was obtained through self-reported program attendance on the surveys and there were no records of who attended which sessions. It is possible that many students did not remember attending the program or could not recall the name of the program so they reported that they did not receive the training. This could have skewed the results when comparing program participants to nonprogram participants within the participation schools.

Second, this study did not employ a true experimental design. The school-wide surveys were three cross-sectional measures of various attitudes and behaviors while the interviews were performed using a post-training design. With this type of design, it was not possible to determine the actual amount of pre-program differences between students attending the program and students not attending the program. The surveys revealed that there were initial differences between the four schools and it appeared that these differences remained throughout the duration of the study. The nonrandomness of assigning program participants also influenced our ability to access program effectiveness.
It was not possible to randomly select the schools receiving the conflict resolution program or the assignment of students to the program.

Third, the different data collection times may have also affected the results of the study, especially the surveys. The Time 1 (pre-program) data collection took place during the middle of March. The Time 2 and Time 3 data were collected in late May or early June, during the last month of the school year. Many students had stopped coming to school by the time these data were collected. The lateness of the Time 2 and Time 3 data collection was believed to be directly related to the sample sizes being remarkably different at each data collection point. It is also more likely that the students remaining in school during the last month of the school year were the more well behaved students. If this was the case, the increase in positive attitudes toward school, negative attitudes toward fighting, high self-efficacy, lower observed delinquency, and lower self-reported delinquency may have been a result of a different population of respondents for Time 2 and Time 3.

The use of school-wide surveys and individual interviews in the four schools was an attempt to control for these weaknesses in the research design. Since both levels of data analysis found no positive effects attributable to the conflict resolution program, it is plausible to suggest that the program did not produce the desired changes in violent attitudes or behaviors.
Implications for Future Violence-Based Programs and Research

Although this study did not produce supportive results of the conflict resolution program, several recommendations emerged from this research. These recommendations are programmatic, school-based, and research-related.

Program. This study is among several that failed to find positive effects of conflict resolution programs (see Brewer, Hawkins, Catalano, and Neckerman, 1995). A large number of the conflict resolution programs operate with low intensity (usually one hour on a once a week basis) and limited duration (10 weeks to 6 months). Based on these findings, along with the concepts of social learning theory that suggest that the extent to which a behavior is learned or unlearned depends on the frequency and duration of the experience, conflict resolution programs need to be better developed and implemented on a more intense basis.

Johnson and Johnson (1995) also suggest that conflict resolution programs should target specific types of students. Rather than lumping together students with a broad range of behavior problems, it is important to focus on a relatively small group of students who commit most of the acts of serious violence in school.

Program goals need to be better defined and more specific. The goals of the conflict resolution program that was evaluated in this study were to decrease the level of violence in Detroit schools, change the overall school climate in the participation schools, and to stop youth from resorting to violence. While these are commendable goals, they are broad, difficult to assess, and create opportunities for failure. Further, the limited duration and low intensity of these programs do not allow for a large amount of success.
School. The school can play the biggest role in implementing programs that deal with school violence. School administrators must create an organizational climate for change. One aspect of this recommendation is to allocate more resources to organizational and programmatic strategies that focus on school safety issues and less on metal detectors and security guards. While the latter are important protections against school violence, the school in this study that had the higher student perception of school safety was Participation School A, which was the only school without metal detectors and security guards posted at the front doors. The principal of this school believed that organizational structure, strict disciplinary measures, and a relying on students to report interpersonal problems between students were more effective in curbing school violence.

There are other ways that schools can become more proactive in the implementation of conflict resolution strategies. Schools should offer violence prevention as a long-term program. Making conflict resolution a part of the school curriculum would address issues of intensity and duration as well as organizational support for violence prevention programs. Structures could be established to promote community, student, family, and teacher involvement (Coben, Weiss, Mulvey, and Dearwater, 1994). One specific weakness of this program was the lack of teacher involvement. Increasing the role of teachers and including other individuals associated with the school would establish “ownership” of the program and help to insure its long term maintenance as well as reinforce “lessons” in the conflict resolution program.

Research. More research utilizing rigorous designs is needed to determine the efficacy of these programs on individual program participants and the overall school
environment. These programs have become extremely popular in recent years even though there is little empirical support. Specific recommendations include stronger designs, more attention to program implementation issues, more attention to theoretical program models, and longer follow-up periods on individual program participants and the environments of schools housing these programs. Given the broad program goals, this evaluation was unable to focus on a small number of students, employ a rigorous research design, nor track individual participants. It is our belief that other evaluations of these programs have faced similar problems. Programs that have narrowly defined goals will afford greater opportunities for stronger evaluation designs.

Conclusion

The prevalence of youth violence and its effect on schools and students is indisputable. Conflict resolution programs have become a popular way of dealing with the increase in school violence. The program evaluated in this study employed an educational model that is commonly used in many schools. However, there is a lack of empirical evidence that school conflict resolution programs effectively reduce violent resolutions to interpersonal conflict (Brewer et al., 1995; Guerra, 1994a). The majority of the evidence suggesting that these programs are effective is anecdotal, with little discussion as to what makes these programs effective (Tolan and Guerra, 1994a). It is doubtful that these programs will have widespread success in reducing youth violence until they become more intense and are provided over a long period of time. Because personnel and budgetary resources continue to be devoted to school-based conflict resolution programs, and because in-school violence can have such far-reaching effects, future research is needed
that provides definitive conclusions regarding the viability of these programs to have long
lasting effects on youth violence.
LIST OF REFERENCES


Wayne County Office on Violence Reduction. (1993). Goals for a safer Wayne County. (Available from [The Office on Violence Reduction, 2501 South Merriman, Westland, MI 48185])


APPENDIX A

Violence Prevention Curriculum for Adolescents