

The Impact of Peer Mediation Training on the Management of School and Home Conflicts Author(s): David W. Johnson, Roger Johnson, Bruce Dudley, Marty Ward and Douglas Magnuson

Source: American Educational Research Journal, Vol. 32, No. 4 (Winter, 1995), pp. 829-844

Published by: American Educational Research Association

Stable URL: http://www.jstor.org/stable/1163337

Accessed: 23/01/2014 15:46

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at http://www.jstor.org/page/info/about/policies/terms.jsp

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



American Educational Research Association is collaborating with JSTOR to digitize, preserve and extend access to American Educational Research Journal.

http://www.jstor.org

# The Impact of Peer Mediation Training on the Management of School and Home Conflicts

David W. Johnson, Roger Johnson, Bruce Dudley, Marty Ward, and Douglas Magnuson University of Minnesota

A peer mediation program in a midwestern, suburban school was examined to determine the types of conflicts that occurred, the strategies students used to resolve their conflicts, and the types of resolutions in both school and home settings. The impact of the peer mediation program on the strategies used to manage conflicts and the resolutions of conflicts was also examined. Six classes (one combination second/third grade, one third grade, two fourth grades, and two fifth grades) containing 144 students received 9 hours of training in how to negotiate integrative agreements to their conflicts and how to mediate the conflicts of their classmates. A random sample of 83 students was selected from the untrained students in the third, fourth, and fifth grades as a control group. A peer mediation program was implemented. The role of mediator was rotated equally among all class members. Data were gathered over a 9-week period before, during, and after the peer mediation training. Seven hundred eighty-three conflicts were reported (209 at school, 574 at home). A significant difference between the types of conflict occurring in the school and in the home was found. The training had significant impact on the strategies students used and the resulting resolutions.

DAVID W. JOHNSON is a Professor of Educational Psychology, 60 Peik Hall, University of Minnesota, Minneapolis, MN 55455. His specialization is social psychology.

ROGER JOHNSON is a Professor of Education, 60 Peik Hall, University of Minnesota, Minneapolis, MN 55455. His specialization is science education.

Bruce Dudley is a PhD Candidate, 60 Peik Hall, University of Minnesota, Minneapolis, MN 55455. His specialization is social psychology.

MARTY WARD is an MA Candidate, 60 Peik Hall, University of Minnesota, Minneapolis, MN 55455. His specialization is educational psychology.

Douglas Magnuson is a PhD Candidate, 60 Peik Hall, University of Minnesota, Minneapolis, MN 55455. His specialization is social psychology.

estructively managed conflicts leading to physical and verbal violence seem to be increasing in schools. Guaranteeing students' safety and an orderly environment in which to learn seems to be more and more difficult. While there is a great deal of discussion about conflicts in school, little research has been conducted. It is relatively unknown (a) what specific types of conflict occur in elementary school settings and with what frequency, (b) what strategies elementary age students use to manage their interpersonal conflicts, (c) what outcomes result, (d) whether the conflicts, strategies, and outcomes are unique to school or occur in other settings (such as the home) as well, and (e) whether giving students training in how to manage conflicts will affect the strategies students use and the resolutions of their conflicts.

The first purpose of this study was to determine what types of conflicts occur among elementary age students. Little documentation of the nature and frequency of actual conflicts in natural settings such as schools has taken place. The few studies that have been conducted indicate that frequently occurring conflicts are verbal harassment and teasing (verbal threats, name calling, put-downs, and insults), gossip and rumors, access to or possession of valued resources (such as playground equipment, computers, books), broken friendships, physical aggression (fighting and bullying), jealousy, playground disagreements, academic work conflicts, turn taking, invasion of privacy, and annoying forms of nonverbal communication such as "dirty looks" (Araki, 1990; Burrell & Vogl, 1990; Higgins & Priest, 1990; Johnson, Johnson, & Dudley, 1992; Johnson, Johnson, Dudley, & Acikgoz, 1994; McCormick, 1988). There are at least two problems with many of these studies. Most of the previous studies did not focus on a systematic sample of students in a school. Araki (1990) used subjects who volunteered to be peer mediators. Gentry and Benenson (1992) and McCormick (1988) used as subjects students that teachers selected to be peer mediators because they were class leaders. Johnson, Johnson, and Dudley (1992) and Johnson, Johnson, Dudley, and Acikgoz (1994) used whole classes participating in a peer mediation training program. The subject selection process in other studies is unclear. What is missing is an examination of types and frequencies of conflicts based on a broad and representative sample of elementary school students. Another problem is that the studies tended not to relate their findings to the theoretical frameworks in the field of conflict resolution. Deutsch (1973), for example, differentiates among conflicts based on control over resources, differences in preferences, differences in values, differences in beliefs, and differences in goals for the relationship. Without classifying the conflicts found in schools in theoretical frameworks, much of the potential value of the research is lost because the results cannot be integrated into the ongoing edifice of knowledge about conflicts. In this study, a broad sample of students will be used to determine what conflicts occur, and the findings will be related to Deutsch's theoretical typology of conflicts.

The second purpose of this study was to determine the strategies elementary school students use to resolve their conflicts. Very little is known about the strategies children use to resolve their conflicts, and what is known has

not been placed in a theoretical context. One theoretical framework focused on conflict resolution strategies. Participants in a conflict typically have two concerns—to achieve their goals and to maintain a good relationship with the other person (Johnson & F. Johnson, 1994; Johnson & R. Johnson, 1991). When those two concerns are considered together, theoretically five conflict strategies result: withdrawing (giving up both the goal and the relationship), forcing (ensuring one achieves one's goal without regard for the relationship), smoothing (maintaining the relationship without regard for one's goal), compromising (giving up part of one's goal at some cost to the relationship), and integrative negotiating (striving to arrive at an agreement that meets the needs of both parties, thereby achieving one's goal and maintaining the relationship). It is unknown which of these strategies elementary-aged children use to manage their conflicts.

There is, in fact, very little documentation of the range of strategies children use to resolve their conflicts. The most comprehensive study on how conflicts are managed in schools was conducted by DeCecco and Richards (1974) nearly 20 years ago. They interviewed more than 8,000 students and 500 faculty members in more than 60 junior and senior high schools in the New York City, Philadelphia, and San Francisco areas. Over 90% of the conflicts reported by students were perceived to be unresolved or resolved in destructive ways by either trying to avoid conflict or overpowering the opposition. Decisions were imposed by school authorities 55% of the time. Open negotiation of conflicts were tried in only 17% of the conflicts. Higgins and Priest (1990) found that conflicts in schools were resolved by inhibiting. ignoring, arbitrating, and mediating. Krappman and Oswald (1987) in a study of primary school students in Berlin found that students used coercion or manipulation, offer and reply, and reasoning to resolve their conflicts. Peterson and Peterson (1990) found that both children and adults in schools either avoided the conflict or engaged in a confrontation of the other person to resolve conflicts. Avoidance was used twice as often as confrontation. Optow (1989) interviewed seventh-graders and found that strategies students used were typically reactive rather than thoughtfully selected. Given the methodological problems, unrepresentative sample sizes, and inconsistent results found in most of these studies, however, conclusions have to be tentative. There is a need for a systematic study of what strategies a broad, representative sample of students in a school use to manage their conflicts.

The third purpose of this study was to determine whether a peer mediation training program changed the strategies elementary school students used to resolve their conflicts. The program taught the procedures for both negotiating integrative agreements to conflicts and mediating classmates' conflicts. *Mediation* is a structured process in which a neutral and impartial third party (known as the mediator) assists two or more people in negotiating an integrative resolution to their conflict. *Negotiation* is a process by which persons who have shared and opposed interests and want to come to an agreement try to work out a settlement (Johnson & Johnson, 1991). There are two approaches to negotiation: distributive (concession-convergence)

and integrative (mutual gains) (Johnson & F. Johnson, 1994). The *distributive* approach is based on the belief that gains for the other person can be achieved only at one's own expense. Thus, one's actions are aimed at maximizing one's own gains at the expense of the other person. The *integrative* approach is aimed at maximizing the gains of both oneself and the other person. In cooperative contexts in which relationships are ongoing, such as families and schools, the integrative approach results in the most constructive outcomes (Johnson & Johnson, 1991).

The evidence of the impact of peer mediation programs on the way students resolve conflicts is primarily anecdotal and supplied by teachers and administrators, who report that peer mediation programs reduce suspension and detention rates, referrals to the principal, and absentee rates while increasing students' self-confidence, academic time on task, and academic achievement (Araki, 1990; Davis, 1986; Lam, 1989; Marshall, 1987; Maxwell, 1989; Tolson, McDonald, & Moriarty, 1992). Direct assessment of the way students manage their conflicts with and without the help of a peer mediator is practically nonexistent. In the 14 studies on peer mediation reviewed by Lam (1989), for example, only two included a control group. Despite the lack of evidence, peer mediation programs are gaining popularity (Rifkin, 1991). There is a need for a systematic study with a control group to determine whether the strategies students use to manage their conflicts change as a result of the training.

The fourth purpose of this study was to determine the outcomes of students' conflicts. Almost nothing is known about the outcomes experienced by elementary school students who are involved in conflicts. With secondary school students, DeCecco and Richards (1974) found that over 90% of the conflicts reported by the over 8,000 students they studied were perceived to be unresolved or resolved in destructive ways. Krappman and Oswald (1987) found that 10- and 12-year-old German children only agreed on a solution to their conflicts about half the time, and in those agreements one child forced the other to give in or the conflict remained unresolved. In 45% of the conflicts, the feelings or self-images of one or both students were physically or psychologically hurt even if they eventually worked out a solution to the conflict. Further research is needed to clarify the resolutions resulting from elementary school students' conflicts.

The fifth purpose of this study was to determine whether elementary school-age children face different conflicts and manage them differently in different settings. In the previous studies on children's conflicts, there is almost no attention paid to whether children face different types of conflicts in different settings. It is unknown whether children face different conflicts in the school than in the home, if they use different strategies in the two settings, and if different resolutions result. Knowing what conflicts occurred in elementary school settings would be more helpful if it were also known what conflicts occurred in children's lives in nonschool natural settings such as the home. In this study, therefore, information about conflicts in both school and home settings was elicited so that a comparison could be made.

The sixth purpose of this study was to determine if the conflict resolution training received in school generalized to the way students managed conflicts in their homes. There is no evidence concerning this issue.

The final issue examined was whether male and female elementary-aged students managed conflicts differently. Tolson, McDonald, and Moriarty (1992) found that high school males may be more receptive to mediation than females. Krappman and Oswald (1987) found that 10- and 12-year-old females resolved their conflicts somewhat more frequently than did males and that males may have used a strategy of coercion and manipulation slightly more frequently than did females. Yeates, Schultz, and Selman (in press) found that female elementary age children involved in conflicts acted in ways more consistent with their social-cognitive competence than did males of the same ages. More study is clearly needed.

# Method

# **Subjects**

Two hundred twenty-seven students in a midwestern, suburban school participated in the study. All students were from middle-class backgrounds. One hundred forty-four students (71 males and 73 females) in one combination second/third grade, one third grade, 2 fourth grades, and 2 fifth grades were given the training. The classes were randomly selected from a pool of 22 teachers who expressed interest in the program. Students were heterogeneous in academic achievement with a number of gifted, learning disabled, and special education students in each class. In addition, from the third, fourth, and fifth-grade classes that did not receive the training, three control groups (83 students; 38 males, and 45 females) were randomly selected.

#### Independent Variable

The independent variable was the conflict resolution training. Students were placed in cooperative pairs to learn the procedures and skills taught in the program. A combination of role playing, drill/review exercises, group discussions, and direct teaching was used (Johnson & Johnson, 1991). The training had three parts: (a) what conflict is, (b) how to negotiate, and (c) how to mediate. The negotiation procedure consisted of five steps (jointly defining the conflict, exchanging positions and interests, reversing perspectives, inventing at least three optional agreements for mutual gain, reaching an integrative agreement). The mediation procedure consisted of four steps (ending hostilities, ensuring commitment to mediation, facilitating negotiations, and formalizing the agreement). Six classes were trained. Two classes received 18 training sessions (3 per week) lasting 30 minutes each for a total of 9 hours of training. Four classes received 12 training sessions (2 per week) for 45 minutes each for a total of 9 hours of training. Once the training was completed, the peer mediation program was implemented. Each day the teacher would choose two students to be class mediators. The role of mediator was rotated throughout the class so that each student served as mediator

with equal frequency. The mediators wore mediator T-shirts, patrolled the playground and lunchroom, and were available to mediate any conflicts that occurred in the classroom or school. The peer mediator program was implemented until the end of the school year.

Because the peer-mediation program was quite visible in the school and many of the teachers not in the experimental group wanted to implement the program in their classes, the control group does not represent totally naive and untrained schoolmates. Any differences found between the experimental and control group, therefore, may be viewed as conservative estimates of the impact of the training program.

# Dependent Variables

The dependent variables were type of conflict, strategy used to resolve the conflict, the resulting solution, and the setting in which it took place. These dependent variables were measured by the Conflict Report Form. The *conflict reporting form* asked for the following information: date, student's name, who was involved in the conflict, what the conflict was about, what strategies were used to try to resolve the conflict, and what the solution to the conflict was. Conflict reporting forms were collected from December 1991 to May 1992. The classroom teachers disseminated and collected the forms. Once a week, students were asked to recall a conflict they had had and fill out a conflict reporting form. Students were allowed to record any conflict they were involved in, whether or not it took place in school. Many of the students reported conflicts that occurred in the home. Students were encouraged to request a conflict form and complete it anytime they were involved in a conflict. The school principal also used the forms to record conflicts when students were sent to her for disciplinary reasons.

#### **Analysis**

The information contained in the conflict reporting forms was analyzed into setting, type of conflict reported, strategies used to resolve the conflict, and the resolution. Students reported conflicts in two settings (school or home). Two classification systems were used to determine the type of conflicts occurring in the school. The first was a content analysis based on and extending the categories developed by Johnson, Johnson, and Dudley (1992) and Johnson, Johnson, Dudley, and Acikgoz (1994). The second was Deutsch's (1973) theoretical typology consisting of five types of conflicts: control of resources (such as books, computers, athletic equipment, television sets), preferences (what game to play, what activity to do first), values (what "should be"), beliefs (what "is"), or the nature of the relationship between the individuals involved (who is dominant, what kind of friendship to have).

The strategies students reported were categorized in two ways. The first was a content analysis that was based on and extended the categories developed by Johnson, Johnson, and Dudley (1992) and Johnson, Johnson, Dudley, and Acikgoz (1994). The strategies were placed on a continuum of

0 to 12, from most destructive (physical and verbal aggression and avoidance) to most constructive (invoking norms for appropriate behavior, proposing alternatives, and negotiating). The continuum was built by consensus among two professors and two graduate students in social psychology. The second was the conflict strategies theory presented in Johnson and F. Johnson (1994) and Johnson and R. Johnson (1991) that assumes participants in a conflict have two concerns: achieving their goal and maintaining a good relationship with the other person. When those two dimensions are combined, the five strategies of withdrawing, forcing, smoothing, compromising, and negotiating result. The strategies were placed on a continuum from 0 to 5.

Resolutions of the conflicts reported were classified according to a content analysis. The categories derived were no solution, adult-imposed solution, student's choice imposed, other's solution imposed, forgiving, a new solution (such as a compromise or a decision determined by chance), and an integrative solution that was created by the disputants. The solutions were placed on a continuum of 0 to 6, from most destructive (no solution, authority-imposed solution, winner take all) to most constructive (proposing a new solution or reaching an integrative agreement). The continuum was built by consensus among two professors and two graduate students in social psychology.

All student responses were coded independently by two different coders who were advanced doctoral students in social psychology. Coders were given 2 hours of training. They were blind to condition. An 87% agreement level was found using the ratio of agreements to coded occurrences.

# **Results**

The total number of conflicts reported was 783. Two hundred and nine conflicts occurred at school, and 574 conflicts occurred at home. The types of conflicts were classified in two frameworks. A content analysis was conducted to place each of the reported conflicts into categories (see Table 1). The majority of conflicts reported (74%) were over preferences and possession/access. There were relatively few conflicts involving taking turns, playground issues, and verbal and physical aggression. There was a significant difference between the types of conflicts that occurred in the school and the home, chi-square = 103.10, p < .0001. Conflicts over preferences/values and possession/access were more frequent in the home than the school (82% versus 54%). Physical fights and verbal insults made up 25% of the conflicts at school but only 8% of the conflicts at home. Very few conflicts occurred over academic work in either setting.

When the Deutsch categories were used, the majority of conflicts were over control of resources (41%) and differences in preferences (41%). Some of the conflicts were over differences in goals for the relationship (11%). Very few conflicts involved differences in values (2%) or beliefs (5%). There was a significant difference between conflicts reported in the school and the home, chi-square = 44.47, p < .0001. There were more conflicts over the

Table 1

Types and Frequencies of Conflicts Reported

Category	At school $(n = 209)$	At home $(n = 574)$	Total $(n = 783)$
Content analysis			
Physical aggression	34 (16%)	21 (4%)	55 (7%)
Insults/put-downs	18 (9%)	20 (4%)	38 (5%)
Playground issues	21 (10%)	5 (1%)	26 (3%)
Turn-taking	15 (7%)	54 (9%)	69 (9%)
Possession/access	56 (26%)	211 (37%)	267 (34%)
Preferences	58 (28%)	257 (45%)	315 (40%)
Academic work	7 (3%)	6 (1%)	13 (2%)
Theoretical: Deutsch			
Control of resources	76 (37%)	248 (43%)	324 (41%)
Preferences/nuisances	65 (31%)	258 (45%)	323 (41%)
Values	5 (2%)	8 (1%)	13 (2%)
Beliefs	21 (10%)	15 (3%)	36 (5%)
Relationships	42 (20%)	45 (8%)	87 (11%)
Content analysis: chi-squa	, ,		0, (11,0)
Theoretical: chi-square =			

goals for relationships and beliefs in school than at home. There were somewhat fewer conflicts over differences in preferences in school than at home.

The strategies students used to manage their conflicts were classified within two frameworks (see Tables 2, 3, and 4). When the strategies were classified according to a content analysis, (a) the control group did not differ significantly from the experimental group before training but differed significantly from the experimental group during and after training, and (b). in the experimental group, the pretraining strategies differed significantly from those used during and after training, F(3,775) = 23.87, p < 0.001. Negotiation was used only once in the experimental group before training and never in the control group; during and after training, nearly 40% of the conflicts were resolved by negotiating. Very few conflicts were resolved through physical violence or verbal attack. Although the training took place in school, and focused on school conflicts, there were no significant differences between the strategies used in school and in the home, F(1,775) = 0.38. Students used the strategies learned in school just as frequently in the home as they did in the school. No significant differences were found between males and females in the strategies used to manage conflicts, F(1,775) = 1.59.

When the children's strategies were classified within conflict strategies theory, (a) the control group did not differ significantly from the experimental group before training but differed significantly from the experimental group during and after training, and (b), in the experimental group, the pretraining strategies differed significantly from those used during and after training, F(3,775) = 20.71, p < .0001. In the control group, the most commonly

Table 2
Strategies Used to Resolve Conflicts

Strategy	Control $(n = 138)$	Pretrain $(n = 123)$	During-Train $(n = 211)$	Posttrain $(n = 311)$
Content analysis				
None reported				8 (3%)
Force physically	16 (12%)	13 (10%)	28 (13%)	19 (6%)
Force verbally	11 (8%)	22 (18%)	11 (5%)	22 (7%)
Withdraw negative	16 (12%)	20 (16%)	18 (9%)	39 (13%)
Force: tell adult	10 (7%)	12 (10%)	11 (5%)	7 (3%)
Command/request	6 (4%)	9 (7%)	11 (5%)	4 (1%)
Withdraw positive	22 (16%)	11 (9%)	16 (8%)	26 (8%)
Invoke norms	35 (25%)	19 (16%)	16 (8%)	32 (10%)
Propose alternatives	22 (16%)	16 (13%)	18 (9%)	23 (7%)
Negotiate: minimal intent		1 (1%)	7 (3%)	24 (8%)
Negotiate: intended agreement			17 (8%)	4 (1%)
Negotiate: perspective taking			9 (4%)	7 (2%)
Negotiate: fully coordinated			49 (23%)	96 (31%)
Conflict strategies theory				, , ,
None reported				8 (3%)
Forcing	37 (27%)	47 (38%)	53 (25%)	50 (16%)
Withdrawal	35 (25%)	29 (24%)	31 (15%)	62 (20%)
Smoothing	10 (7%)	17 (14%)	15 (7%)	10 (3%)
Compromising	56 (41%)	30 (24%)	29 (14%)	42 (14%)
Negotiating			83 (39%)	139 (45%)

reported strategy was compromising. In the experimental group, before training, the most frequently reported strategy was forcing, while during and after training the most frequently reported strategy was negotiating. Smoothing was the least used strategy in both the control and the experimental group.

Students were asked to report the nature of the resolution of the conflict (see Tables 5 and 6). The findings were: (a) There were no significant differences between the control and experimental conditions before training,

Table 3
ANOVA for Strategies Used to Resolve Conflicts: Content Analysis

Variable	df	Sum of squares	Mean square	F value	P value
Training	3	148.31	49.44	20.71	<.0001
School-Home	1	2.44	2.44	1.02	.31
Interaction	3	7.10	2.37	.99	.40
Residual	775	1849.69	2.39	.,,	

Fisher's PLSD, p < 0.0001: Control, During; Control, Post; Pre, During; Pre, Post.

Table 4
ANOVA for Strategies Used to Resolve Conflicts: Conflict
Strategies Theory

Variable	df	Sum of squares	Mean square	F value	<i>P</i> value
Training	3	901.75	300.58	23.87	<.0001
School-Home	1	4.80	4.80	.38	.54
Interaction	3	18.44	6.15	.49	.69
Residual	775	9760.23	12.59		

Fisher's PLSD, p < 0.0001: Control, During; Control, Post; Pre, During; Pre, Post.

(b) the control group differed significantly from the experimental group during and after training, and (c), in the experimental group, the pretraining strategies differed significantly from those used during and after training, F(3,775) = 19.16, p < .001. There was no significant difference between resolutions at school and at home, F(1,775) = 1.58. In the control group and in the experimental group before training, many conflicts were left unresolved (29% and 35%, respectively), were arbitrated by adults (16% and 23%, respectively), resulted in one of the parties getting his or her way (my choice plus other's choice = 39% and 16%, respectively), and resulted in a new solution (14% and 24%, respectively). Students in the control group seemed more likely to strive to get what they wanted than did the students in the experimental condition. There were almost no integrative agreements reached. During and after training, conflicts were resolved primarily through reaching integrative agreements (29% and 26%, respectively), creating a new solution (20% and 19%, respectively), and in one party's getting his or her way (my choice plus your choice = 26% and 25%, respectively).

## Discussion

The quality of children's interpersonal relationships is a major determinant of their current and future psychosocial adjustment (Johnson, 1980; Hartup,

Table 5
Solutions to Conflicts

Solution	Control $(n = 138)$	Pretrain $(n = 123)$	During-Train $(n = 211)$	Posttrain $(n = 311)$
No solution	40 (29%)	43 (35%)	26 (12%)	62 (20%)
Adult imposed	22 (16%)	28 (23%)	28 (13%)	22 (7%)
My choice	36 (26%)	9 (7%)	31 (15%)	44 (14%)
Other's choice	19 (13%)	11 (9%)	23 (11%)	34 (11%)
Forgiving	2 (2%)	2 (2%)	0 (0%)	9 (3%)
New solution	19 (14%)	29 (24%)	42 (20%)	59 (19%)
Integrative agreement	0 (0%)	1 (1%)	61 (29%)	81 (26%)

.21

.45

1.58

.88

**ANOVA for Solutions to Conflicts** Sum Mean df of squares square F value P value 87.07 3 261.21 19.16 <.0001

7.17

4.01

4.54

# Table 6

Fisher's PLSD, p < 0.0001: Control, During; Control, Post; Pre, During; Pre, Post.

7.17

12.04

3522.11

1

3

775

Variable

Training

Residual

School-Home

Interaction

1983; Parker & Asher, 1987). Managing conflicts is at the core of the quality of children's interpersonal relationships (Piaget, 1923/1950) as well as their social, cognitive, and moral development (Berndt, 1984; Doise, 1985; Johnson & Johnson, 1989, 1991, 1992; Selman & Schultz, 1990; Smollar-Volpe & Youniss, 1982). Given the importance of children's conflicts, it is surprising how little empirical research has been conducted on conflict among elementary age children. In addressing this area, the present study examined seven questions:

- 1. What types of conflicts occur among elementary age children with what frequency?
- 2. What strategies do the children use to resolve their conflicts?
- 3. Will a peer mediation training program change the strategies students use to resolve their conflicts?
- 4. What resolutions to the conflicts result?
- 5. Are there differences in the types of conflicts that occurred in school and home settings?
- 6. Did the conflict resolution procedures children learned in school transfer to the management of conflicts in the home?
- 7. Were there differences in the strategies males and females used to manage their conflicts?

The first question addressed the types and frequency of the conflicts experienced by elementary-aged children. Theoretically, conflicts may be classified as being over control of resources, differences in preferences, differences in values, differences in beliefs, and differences in goals for the relationships (Deutsch, 1973). In this midwestern, suburban, middle-class sample of elementary-aged children, most of the conflicts reported in both school and home settings were over control of resources (such as, books, computers, athletic equipment, television sets) and preferences (what game to play, what activity to do first). More conflicts were over the nature of the relationship between the children involved (who is dominant, what kind of friendship to have) in school than at home. In both settings, there were few conflicts over values (what "should be") and beliefs (what "is"). Classifying students' conflicts into Deutsch's theoretical framework allows for the begin-

ning of a more systematic understanding of the types of conflicts that occur among children. Because researchers have used a wide variety of ad hoc classification systems in previous studies, it is difficult to integrate the findings of previous studies into a coherent and consistent picture of children's conflicts.

In addition to classifying the conflicts in a theoretical framework, a content analysis was used to determine the types of conflicts occurring among the children studied. More conflicts seemed to occur in the home, mainly over preferences (which TV program do we watch) and possession or access (who gets to use the computer). Physical fights and verbal insults occurred more frequently at school than in the home. The types of conflicts at school were more diverse than were the types of conflicts in the home. These results provide important evidence about the conflicts elementary age children have to face in their school and home environments.

The second question investigated in this study addressed the strategies elementary age children used to resolve their conflicts. Two categorization systems were used to examine children's conflict management strategies. Conflict strategies theory classifies strategies along two dimensions: goal orientation and relationship orientation. Students in the control group and experimental students before training were highly goal oriented, choosing strategies (forcing and withdrawal) that emphasized focusing on one's goals while downplaying the relationship with the other person. These elementary school students focused more on forcing the other to give in or on withdrawing from the situation than on maintaining a good relationship with the other person. During and after training, children in the experimental condition were highly relationship oriented, choosing strategies (negotiating and smoothing) that emphasized focusing on the quality of the relationship. Smoothing, which involves giving up one's own needs for the needs of others, was almost never used by these children. Trained students chose to negotiate in order to reach an integrative agreement that maximized joint outcomes while maintaining the quality of the relationship at a high level. The content analysis results indicated that students in the control group and students in the experimental group before training began used a wide variety of strategies to resolve their conflicts, but they did not negotiate. With training, verbal insults, telling the teacher, commanding the other to give in, invoking norms, and proposing alternatives all decreased while negotiating increased markedly and significantly. These findings provide important evidence that (a) training changes the conflict strategies students use and that (b), when students have a choice, students will choose constructive conflict resolution strategies over destructive ones.

The third question investigated addressed the issue of whether a peer mediation training program could affect the strategies children use to manage their conflicts. The answer seems to be clearly "yes." There were significant differences between the strategies used before and after training in negotiation and mediation procedures. Before training, the children studied employed compromising, forcing, and withdrawal (strategies focused on

achieving one's goals while ignoring the relationship with the other person), while, after training, the children primarily used the integrative negotiation procedure (a strategy focused on achieving one's goals while maintaining a high quality relationship with the other person).

The fourth question addressed the nature of the resolutions of the children's conflicts. How children resolve their conflicts is somewhat of a mystery. The few previous studies that have examined the outcomes of children and adolescents' conflicts have found that the conflicts are often not resolved and that, when they are, the resolutions tend to be withdrawal and aggressive domination (DeCecco & Richards, 1974; Krappman & Oswald, 1987). Without training, the elementary age children either did not resolve their conflicts, had an adult resolve the conflict, derived win–lose solutions (one of the students got his or her way), or found a new solution. During and after training, the children negotiated integrative agreements, derived new solutions, derived win–lose solutions, or failed to resolve the conflict. Overall, these results indicate that elementary age children are able to negotiate integrative agreements to their conflicts that maximize the joint outcomes of disputants when they have been trained in the procedures for doing so.

The fifth question investigated addressed the differences between conflicts at school and at home. Far more conflicts were reported at home. The types of conflicts at school were more diverse than were the types of conflicts in the home. One of the consequences of attending school may be exposure to a wider variety of situations than those experienced in the home and neighborhood. These more diverse situations may result in more varied conflicts with peers. The sixth question addressed was whether the negotiation and mediation procedures would transfer from the school to the home. Once trained, the strategies students used to manage their conflicts and the outcomes achieved did not differ significantly in school and home settings. The negotiation and mediation procedures students were taught in school did in fact transfer to the home. This is important, because previous studies have not addressed the issue of generalization of conflict resolution training.

The seventh question addressed was whether male and female students faced different types of conflicts and used different strategies to manage them. The lack of significant differences between the strategies used by males and females provides evidence that, in elementary-aged children, males and females manage conflicts quite similarly, especially after they have been trained in negotiation and mediation procedures.

This study is limited by the sample of participating children, the nature of the conflict resolution training, and the instrument used to measure the dependent variables. It is also limited by the underlying approach used to study children's conflict resolution behavior. Two of the major approaches to studying conflict resolution behavior of elementary-aged children are the social psychological approach used in this study and the cognitive developmental approach used by Selman and his associates (Selman & Schultz, 1990). Selman classifies children's conflict behavior into four levels (impulsive, unilateral, reciprocal, and collaborative), depending on the developmental

sophistication of the social perspective-taking being employed. One difference between the two approaches is that the social psychological view assumes that under certain conditions students of all ages can be taught to negotiate and mediate (the children participating in this study, who ranged in age from 7- to 12-year-olds, all learned the negotiation and mediation procedures and used them in managing their conflicts), while the cognitive-developmental view assumes that only more physically mature students can negotiate and mediate effectively. Further research is needed that investigates both the training of students in how to negotiate integrative solutions to their conflicts and the reasoning processes children go through in using the procedures.

The most frequently occurring conflicts in the middle-class, midwestern sample studied were over control of resources and differences in preferences. Without training, these conflicts were managed primarily through compromising and forcing the other person to give in, which resulted in either no resolution, winning, or an adult's imposing a solution. Once trained in the negotiation and mediation procedures, the children tended to negotiate integrative and new solutions to these conflicts. Training students to negotiate and mediate changed the strategies students used to manage conflicts and the resulting outcomes. The negotiation procedure learned in school, furthermore, generalized to the home setting. Overall, these results add important empirical confirmation to the anecdotal testimonies to the effectiveness of peer mediation in schools. Few schools have made a commitment to teaching their students the procedures necessary to manage conflicts constructively. Without direct training, many students may never learn. Classrooms need to become places where destructive conflicts are prevented and where constructive conflicts are utilized to improve the quality of classroom life and instruction. Based on the results of this study, schools can develop training programs that will provide students the conflict procedures and skills they need to develop socially, cognitively, and morally.

#### References

Araki, C. (1990). Dispute management in schools. *Mediation Quarterly*, 8, 51–62.
Berndt, T. (1984). The influence of group discussions on children's moral decisions. In
J. Masters & K. Yarkin-Levin (Eds.), *Boundary areas in social and developmental psychology* (pp. 195–219). New York: Academic.

Burrell, N., & Vogl, S. (1990). Turf-side conflict mediation for students. *Mediation Quarterly*, 72, 237–250.

Davis, A. (1986). Dispute resolution at an early age. Negotiation Journal, 2, 287–297.
 DeCecco, J., & Richards, A. (1974). Growing pains: Uses of school conflict. New York: Aberdeen.

Deutsch, M. (1973). *Resolution of conflict*. New Haven, CN: Yale University Press. Doise, W. (1985). Social regulations in cognitive development. In R. Hinde, A. Perret-Clermont, & J. Sevenson-Hinde (Eds.), *Social relationships and cognitive development* (pp. 238–262). Oxford: Clarendon.

Gentry, D., & Benenson, W. (1992). School-age peer mediators transfer knowledge and skills to home setting. *Mediation Quarterly*, 10, 101–109.

- Hartup, W. (1983). Peer relations. In P. Mussen & E. Hetherington (Eds.), *Handbook of child psychology: Volume IV. Socialization, personality, and social development* (pp. 103–196). Chicago: Rand McNally.
- Higgins, A., & Priest, S. (1990). Resolving conflicts between young people. *Education Psychology in Practice*, *6*, 60–64.
- Johnson, D. W. (1980). Group processes: Influences of student–student interaction on school outcomes. In J. McMillan (Ed.), *The social psychology of school learning* (pp. 123–168). New York: Academic.
- Johnson, D. W., & Johnson, F. (1994). *Joining together: Group theory and group skills* (5th ed.). Boston: Allyn & Bacon.
- Johnson, D. W., & Johnson, R. (1989). Cooperation and competition: Theory and research. Edina, MN: Interaction Book Co.
- Johnson, D. W., & Johnson, R. (1991). Teaching students to be peacemakers. Edina, MN: Interaction Book Co.
- Johnson, D. W., & Johnson, R. (1992). Creative controversy: Intellectual challenge in the classroom. Edina, MN: Interaction Book Co.
- Johnson, D. W., Johnson, R., & Dudley, B. (1992). Effects of peer mediation training on elementary school students. *Mediation Quarterly*, 10, 89–99.
- Johnson, D. W., Johnson, R., Dudley, B., & Acikgoz, K. (1994). Peer mediation: Effects of conflict resolution training on elementary school students. *Journal of Social Psychology*, 134, 803–817.
- Krappman, L., & Oswald, H. (1987, March). Negotiation strategies in peer conflicts: A follow-up study in natural settings. Paper presented at the Society for Research in Child Development Convention, Baltimore, MD. (ERIC Reproduction Service, ED 282641)
- Lam, J. (1989). The impact of conflict resolution programs on schools: A review and synthesis of the evidence (2nd ed.). Amherst, MA: National Association for Mediation Education.
- Marshall, J. (1987). Mediation: A new mode of establishing order in schools. *Howard Journal*, 26, 33–46.
- Maxwell, J. (1989). Mediation in the schools: Self-regulation, self-esteem, and self-discipline. *Mediation Quarterly*, 7, 149–155.
- McCormick, M. (1988). Evaluation of the Wakefield pilot peer-mediation program: Summary report. In P. Kestner, V. Kim, & J. Devonshire (Eds.), *Education and mediation: Exploring the alternatives* (pp. 265–273). Washington, DC: The Standing Committee on Dispute Resolution, American Bar Association, Governmental Affairs and Public Services Group.
- Optow, S. (1989, August). *The risk of violence: Peer conflicts in the lives of adolescents.*Paper presented at American Psychological Association Convention, New Orleans. (ERIC Document Reproduction Service, ED316823).
- Parker, J., & Asher, S. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin*, 102, 357–389.
- Peterson, C., & Peterson, J. (1990). Fight or flight: Factors influencing children's and adults' decisions to avoid or confront conflict. *Journal of Genetic Psychology*, 151, 461–471.
- Piaget, J. (1950). *The psychology of intelligence*. New York: Harcourt, Brace, Jovanovich. (Original work published 1923)
- Rifkin, J. (1991). An overview of dispute resolution in educational institutions. *Forum: Dispute resolution in education*. Amherst, MA: National Institute for Dispute Resolution.
- Selman, R., & Schultz, L. (1990). Making a friend in youth. Chicago: University of Chicago Press.

- Smollar-Volpe, J., & Youniss, J. (1982). Social development through friendship. In K. Rubin & H. Ross (Eds.), *Peer relationships and social skills in childhood* (pp. 279–298). New York: Springer.
- Tolson, E., McDonald, S., & Moriarty, A. (1992). Peer mediation among high school students: A test of effectiveness. *Social Work in Education*, 14, 86–93.
- Yeates, K., Schultz, L., & Selman, R. (in press). The development of interpersonal negotiation strategies in thought and action: A social-cognitive link to behavioral adjustment and social status. *Merrill-Palmer Quarterly*.

Manuscript received February 18, 1994 Revision received September 14, 1994 Accepted February 3, 1995