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PEER MEDIATION: AN EMPIRICAL EXPLORATION EMPOWERING  
ELEMENTARY SCHOOL CHILDREN TO RESOLVE  
CONFLICTS CONSTRUCTIVELY

DISSERTATION

Presented to the Graduate Council of the  
University of North Texas in Partial  
Fulfillment of the Requirements  
For the Degree of

DOCTOR OF EDUCATION

By

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Denton, Texas

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Conflict is inevitable in school and in life. Many children lack skills necessary to resolve daily conflicts constructively. Without knowledge of positive ways to manage conflicts, violence may result. Limited research suggests that involvement in a peer mediation program may have a positive influence on children.

This study assessed effects peer mediation training and mediation experience had on student mediators. The pretest-posttest, control-group, and quasi-experimental study investigated the effects of a year long peer mediation program implemented in a suburban elementary school.

Both qualitative and quantitative data collections were utilized to determine changes in self control, self concept, and locus of control of peer mediators. Further investigation studied effects the peer mediation program had on mediators labeled "disruptive". Semistructured interviews were conducted and coded to reveal similarities, differences, and anomalies. Personal and social adjustments of students were assessed by the Index of Personality Characteristics (IPC) and The Children's Personality Questionnaire (CPQ), 1985.

Findings of this study revealed that students involved in the peer mediation program benefited from both peer mediation training and mediation experience. Statistically significant increases in self control, self concept, and locus of control were discovered

for children who were involved in the program. Positive effects were also detected when comparing peer mediators to a comparison group at their same school. Peer mediators who had been identified as disruptive showed even larger increases in self control, self concept, and locus of control.

The results of this study offer encouraging implications for practice. Children who learned and applied conflict resolution skills tended to have more self control, a better self concept, and an increase in the power they feel they have over daily occurrences. Mediation is one small part of a larger school goal; to teach children to be self managing individuals. Although peer mediation cannot promise an end to all of children's problems or violence, it may be one powerful preventative technique.

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## CHAPTER 1

### INTRODUCTION

According to a national study conducted by the National School Boards Association (NSBA), 75% of 700 school districts reported that school violence is worse now than it was five years ago (Sautter, 1995). The Phi Delta Kappa/Gallup Poll (1994) reported that the category "fighting, violence, and gangs," and "lack of discipline" were the biggest problems confronting public schools. In 1995 and 1996, the Phi Delta Kappa/Gallup Poll reported that "fighting, violence, and gangs" and "lack of discipline" were among the top three major problems facing public schools (Elam, Rose, & Gallup, 1996). Student behavior is widely seen as becoming more of a problem in the public schools. Students, as a whole, are more disrespectful, violent, and often disinterested in the act of learning.

Teachers and administrators spend a large amount of time dealing with conflicts that arise at school or that carry over from before or after school hours. Fifty years ago, main disciplinary problems included running in the halls, chewing gum, and talking out of turn. Today's transgressions include physical and verbal violence, drug abuse, and assault (Johnson & Johnson, 1995).

Although the lack of self control on the part of students tends to stem from home and society, the school, more often than not, is the organization that is expected to find a solution to the problem. Six main reasons appear to be responsible for the problems that inhibit social and emotional development of children: poverty, disintegrating home environment and the changing patterns of family life, child abuse, violent culture,

materialistic culture, and the pressures children feel to achieve (Toch, 1993, Sautter, 1995).

One of the sources of the troubling code of conduct of youth is the hopelessness of poverty. Poverty, often intensified by discrimination, lays the foundation for discontent, anger, and violence. The disintegration of the family unit is also cause for concern. Approximately one third of all American babies - and 68% of African-American infants - are born to unwed mothers. Broken homes and two-income families leave an estimated one in five students home alone after school. Too often, such statistics translate into neglect, abuse and troubled kids (Toch, 1993).

#### Children in a Troubled World

Student attitudes, beliefs, and behaviors are formed at home, and the traditional role of the family was to ensure that their children learn acceptable societal values. Unfortunately, children do not always learn behavior that is considered appropriate. This happens for a variety of reasons. First, parents and other family members set poor examples for their children. Children who witness family members stealing, lying, being verbally and physically abusive, and being disrespectful to people, learn the ways of their family. The response from many students that are involved in hitting another student is "he hit me first" or "she made me mad." They have learned that it is acceptable to hurt someone if they have a good reason. According to the FBI, juvenile arrests for murder, robbery and assault all increased by 50 % between 1988 and 1992 (Toch, 1993). Meanwhile, some children who become violent are not safe in their own homes and are regularly victimized by the adults entrusted to care for them. There is a direct and indisputable connection between violence in the home or against children in the home and subsequent violent behavior by those children. Psychologists confirm that children exposed to violence are sometimes as traumatized as children in war zones. To many

youngsters, their American childhood has literally become a war zone in which they are entrapped - forced to run for cover and to avoid playgrounds, front yards, neighborhood streets, and even their own homes (Sautter, 1995, p. K3).

The result of being surrounded by violence is that children have been taught by example to be violent when faced with conflict and stress.

Children may have parents and family members that try to instill morals and values in them but are either too busy to spend time helping or unaware of how to help their children to become good citizens. Parents are sometimes blind to the needs of their children. They may not seek help for themselves or their children if they do not perceive the need. Parents must first realize that conflict resolution skills exist before they can conceive of teaching these to their children. Children that do come from a supportive, nurturing home have a better chance of learning how to be respectful, caring people who may resolve conflicts and behave in an appropriate way. When confronted with other children that do not have similar values they may feel threatened by or even exhibit inappropriate behavior to be like their peers or to seek attention. If school settings can provide children with a feeling of safety as well as support, children are empowered to resolve conflicts nonviolently.

The American Psychological Association (Sautter, 1995) suggests that early childhood intervention is essential to prevent the escalation of conflicts into violence. Children who show signs of antisocial behavior must be targeted in their early years for intervention. This intervention is needed "not only to teach them new ways to resolve social conflicts, but also to ensure that their aggressive tendencies do not interfere with their potential for educational achievement and so contribute to even greater social and learning problems later" (Sautter, 1995, p. K7).

Not only is the family responsible for raising a child, society is too. Watching the news, movies, television shows, or even commercials, as well as reading a book, magazine or newspaper gives students the message that violence is a way to solve problems or get what you want. One recent study cited by Sen. Byron Dorgan (D.-N.D.) recorded 1,000 violent acts on television each week. Without critical lenses to filter this barrage of antisocial behavior, children begin to have unreal and destructive social expectations and desires (Sautter, 1995, p. K6). A study of 700 school districts that was conducted by the National School boards Association (NSBA) in 1994 concluded that the increasing depiction of violence in the media and in popular music are leading causes of violence in public schools (Sautter, 1995). When a neighbor steals a bicycle from another neighbor and no consequences are forthcoming the child learns a lesson. The youth of today choose role models such as Bart Simpson and The Terminator rather than Martin Luther King Junior, George Washington, or Mother Theresa.

Historically, extended families or tribes have provided social bonds that when thoroughly attached, children learn trust, competence, self-management, and prosocial behavior (Brendtro, 1995). Gang membership has become increasingly attractive to children in need of a feeling of belonging. Children need to feel a sense of belonging; so instead of turning to their family, school, or church for this support they join gangs. Once a member, children internalize the gang's values and beliefs. Violence increases; appropriate behavior, according to society, decreases. Emotionally stressful school environments are counterproductive, whereas they can reduce students' ability to learn (Sylwester, 1994). The neighborhood schools must foster a sense of belonging for children by offering membership in clubs or by teaching cohesiveness and cooperation in the classroom. A positive classroom atmosphere helps students learn how to effectively solve problems in stressful situations.

### Schools and Student Conflict

Students' behavior often leads to problems that interfere with teaching and learning. Consequences for inappropriate behavior, such as loss of privileges, detention, suspension, expulsion, do not always deter the behavior. Nor do rewards for appropriate behavior, such as more privileges, recognition, and material rewards, regularly increase appropriate behavior. Many students seem to lack the skills necessary to monitor their own behavior. Despite stated goals of citizenship and self discipline, school personnel resort to imposing consequences rather than teaching students skills that will aid in their social and emotional development. Students are not empowered with knowledge and skills needed to exist cooperatively with others.

School conflicts arise between students, students and teachers, and students and staff members. Many elementary school children do not have a repertoire of skills needed to resolve their daily conflicts constructively. Conflict resolution skills are often not taught at home, and many schools do not include these skills in their curriculum. The structure of elementary schools teaches children that adults are needed to help them resolve their conflicts without emphasizing the need for self regulation (Johnson, Johnson, Dudley & Burnett, 1994). When conflicts and disruptive behavior interfere with teaching academics, teaching conflict resolution strategies is required. Instead of hoping for a magical solution, school personnel need to teach children to resolve their disputes by educating them in conflict resolution and social skills development. Training students in conflict resolution helps schools become orderly and peaceful places in which high-quality education can take place (Johnson, 1995). If students learn negotiation and mediation skills and are capable of resolving conflicts, this knowledge and skill may reduce the number of incidents that impede the academic learning and feeling of safety of students.

Research reported by the National Association for Mediation Education, Benson, and Benson (1993) documents that peer mediation programs reduce administrators' and teachers' time in dealing with students' conflicts. Peer mediation programs also lessen the level of violence and crime in school and enhance self-esteem, grades, and attendance of students trained as mediators. Couple these positive outcomes with the fact that students are learning life skills of solving problems through communication and critical thinking, and it becomes apparent that peer mediation programs are effective and worthy of focus in our schools (Benson & Benson, 1993). "Clearly, conflict resolution and peer mediation offer viable opportunities for an entire school community to create a safer, more harmonious world" (Stomfay, 1994, p. 281).

#### Statement of the Problem

Conflict is a natural part of living which may have many detrimental consequences on individuals and society. Changes in family, neighborhood, and societal life have resulted in youth who are not socialized into constructive patterns of conflict management and who have learned to deal with conflicts with violence and aggression (Johnson & Johnson, 1995). How can teachers help students deal constructively with conflict? The focus of this study was to identify, implement, and evaluate techniques and strategies that enable children to deal constructively with conflict.

#### Purpose of the Study

Identifying effective conflict resolution strategies which aid students in managing conflicts is crucial to preparing them to successfully manage conflicts in school and out of school. Learning conflict resolution strategies and skills provides a positive alternative in conflict situations to violence. The purpose of this study was to investigate the effects of an elementary school peer mediation program used to teach a group of fifth grade students conflict resolution skills. Once taught how to manage conflict effectively,

students applied their acquired knowledge and skills in real life situations. The effects of the program were investigated by looking at changes in self-control, self-concept, and locus of control of mediators, the difference in the number of conflict referrals to school administrators, and the percentage of successful mediations.

### Research Questions

1. What effects will peer mediation training and mediation experience have on mediators' self-control? How are the effects similar or different for students who are not trained as mediators?
2. What effects will peer mediation training and mediation experience have on mediators' self-concept? How are the effects similar or different for students who are not trained as mediators?
3. What is the relationship between peer mediation training and mediation experience and mediators' locus of control? How are the effects similar or different for students who are not trained as mediators?
4. If effects of peer mediation training and mediation experience are found, how are the effects similar or different for mediators who are considered to be "disruptive" students?
5. What is the relationship between being a peer mediator and number of conflicts referred to school administrators?
6. How effective is peer mediation in achieving mutually satisfying resolutions as perceived by disputants?

### Limitations of the Study

The two schools used for this study are located in a low socioeconomic area in a suburban Texas school district, and therefore the extent to which results can be generalized to all elementary schools is restricted. Although students were randomly selected to be trained as peer mediators not all selected students secured permission from

their parents or chose to participate in the program. Therefore the attrition rate was high in all groups. The peer mediation program was in effect for slightly less than one full school year. An extended peer mediation program may have yielded different results.

### Definition of Terms

#### Conflict

A conflict exists when the actions or activities of one individual prevents another individual from achieving a want, need, goal, or interest Johnson and Johnson (1995). define a want as "a desire for something" and a need is "a necessity for survival". A goal is "an ideal state that we value and work to achieve". An interest is defined as "a potential benefit to be gained by achieving goals".

#### Constructive Conflict

A constructive conflict occurs when both disputants work together to achieve their wants, needs, and goals. They experience feelings of satisfaction, respect, and trust.

#### Destructive Conflict

A destructive conflict occurs when one disputant is perceived as the winner and the other as the loser. Disputants feel angry, resentful, hurt, and distrustful.

#### Disruptive Student

Students that are evaluated by their teacher from the previous year and the current year as having an abundance of discipline infractions that caused the student to be referred to the school administrator will be described as disruptive.

#### External Locus of Control

Individuals who believe they have control over environmental forces have an external locus of control.



### Internal Locus of Control

Individuals who accept responsibility for their behavior have internal locus of control. They are apt to accredit themselves with more ability and responsibility for control of their behavior than they ascribe to circumstance or other people.

### Negotiation

Negotiation is the process by which individuals who have opposing interests work together to resolve the situation.

### Peer Mediator

Peer mediators are neutral people, near the same age as disputants, who help others resolve conflicts by assisting them through the negotiating process to reach an agreement that disputants believe is fair and workable (Johnson, 1995). Peer mediation involves two trained student mediators who are facilitators of the process.

### Self Concept

Self Concept is the perception of self worth.

### Self Control

Self control is the disposition to reduce and control the expressions of emotion.

## CHAPTER 2

### REVIEW OF LITERATURE

The nature of this study was to investigate the effects of a peer mediation program used as the means to teach intermediate level elementary school children conflict resolution skills. Peer mediation draws on several theoretical bases. Four theoretical frameworks support peer mediation training as a viable means to teach conflict resolution skills as well as the importance of teaching these skills. After the theoretical ideas are presented, a review of conflict and conflict resolution strategies is given. Both the nature of conflict and ways conflict can be resolved are discussed. Finally, empirical research which highlights children's need for conflict resolution strategies and the effectiveness of peer mediation programs is documented. Further research is reported concerning effects of mediation training and experience on mediators' self-control, self-concept, and locus of control.

#### Theoretical Frameworks of Conflict Resolution and Mediation

Several theories support the implementation of a peer mediation program to teach students how to resolve conflicts constructively. Lewin's Field Theory (Lewin, 1948) posits that internalization of conflict resolution skills motivates children to approach and manage conflict. Kohlberg's Theory of Moral Development (Kohlberg, 1981) promotes the teaching of values and skills that contribute to a psychologically healthy and self-fulfilling life. Maslow's Hierarchy of Needs contributes to the explanation of why children are motivated to handle conflicts in certain ways (Maslow, 1954). Glasser's

Control Theory (Glasser, 1984) explains behavior as a sum of four parts--all of which contribute to feelings and actions on the part of children. Children want control over their lives and are willing to use knowledge and skills to gain desired power. Johnson and Johnson's (Johnson & Johnson, 1989, 1991, 1994, 1995) work with cooperative learning offers a sound basis for working together to solve problems. Taken together, these theorists offer a theoretical basis for implementing a peer mediation program.

#### Kurt Lewin's Theory of Conflict

Kurt Lewin views human action in terms of field theory which describes and predicts personality and social behavior. Based on his analysis of the individual and the individual's life space, Lewin posits that behavior is the function of person and environment,  $B = f(p, e)$ . A need is the desire for something, or an intention to do something. Needs release energy, increase tension, and are represented as valences. A situation that the individual has a desire to approach is said to have positive valence whereas a situation that the individual wants to avoid is termed negative valence.

When confronted with conflict, the valence may be to fight or to avoid the confrontation by fleeing. To deal with the conflict, Lewin's theory suggests that skills are needed to resolve conflicts constructively. Participation in a peer mediation program that teaches conflict resolution skills and offers children experiences in mediating conflicts will give students confidence. For mediators involved in helping other students to resolve conflicts this confidence will become a positive valence thus motivating the child to aid in conflict resolution. When faced with their own conflicts mediators will choose to resolve the conflict by using skills instead of fighting or withdrawing from a conflict.

#### Lawrence Kohlberg's Theory of Moral Development

Kohlberg's theory of moral development suggests the need to create a school atmosphere that would encourage peer groups operating within their own stage of moral

development to choose to live by the ideals of justice. This would be accomplished by creating expectations for behavior that children could understand and support.

Resolving conflict in a democratic manner is especially important when dealing with students who are from different ethnic groups, cultures, and linguistic backgrounds. Even though diversity represents a source of creativity and energy, lack of understanding different perspectives and behavior can contribute to school related conflicts. Working cooperatively toward a common goal resolves many conflicts. Shared expectations, or norms about what behavior is appropriate within a given situation, must be agreed upon. Increasing the levels of moral development, as well as teaching conflict resolution strategies, begins with a shared set of norms which should be clearly and publicly stated.

Kohlberg discusses three levels of moral development: pre-conventional, conventional, and post-conventional. Each level embodies stages. At the pre-conventional level children interpret right or wrong based on the consequences of their actions. In most public schools, consequences of actions involve punishment for wrong behavior or rewards for good behavior. Consequences may come from peers, teachers, and administrators. According to Kohlberg, the child's perception of the appropriateness of behavior is labeled good or bad based on the consequences of their actions. Children at this point have an external locus of control. Avoidance of punishment and deference to power are valued because of consequences, not in terms of the morality of the action. All too often, public school policies inhibit students moving beyond the pre-conventional level. Children may give in to power of others whether represented by a bully or school official. Teachers and administrators punish children for misbehaving often without teaching children why various actions were deemed inappropriate.

During the instrumental relativist orientation stage of the pre-conventional level, action is judged by whether it satisfies the needs of the child and occasionally the needs

of others. The concepts of fairness, reciprocity, and equal sharing are present, but are always interpreted in a physical or pragmatic way. Reciprocity is not a matter of loyalty, gratitude, or justice but instead is the perception that if "your scratch my back then I'll scratch yours."

At the conventional level, maintaining the expectations of the child's family, peer group, or school is perceived as valuable in its own right regardless of consequences. Loyalty to the expectations of the group means that peer pressure greatly influences behavior, often to the displacement of family values. Destructive behavior exhibited by gangs influence other gang members to participate to be accepted by the group. However, conformity to "good" behavior exists as well. Good behavior gains approval because it is that which pleases or helps others. Actions should reflect values which are embedded in society and proclaimed in programs for youth; YMCA, boys and girls clubs, and church groups.

Under the heading of the conventional level is the law and order orientation stage. At this stage the individual gravitates toward the maintenance of the social order, authority, and fixed rules. Appropriate behavior consists of showing respect for authority and doing one's duty.

During the last level of moral development, the post-conventional level, a concentrated effort is made to define values and principles that are valid apart from the authority of groups holding these values and separate from the individual's own identification with these groups. During the social-contract legalistic orientation stage of the post-conventional level, right actions tend to be defined in terms of general individual rights and upon standards that are agreed upon by society as a whole. Free agreement and contract is the binding element of obligation. Children skilled in problem-solving

negotiation work toward finding an integrative solution. This integrative solution becomes an agreement between the disputing parties.

In the final stage of moral development under the post-conventional level, the universal ethical principle orientation, values and principles are abstract and ethical. Such universal principles of justice, equality of human rights, and respect for the dignity of people as individuals are internalized.

Kolberg proposes that moral development is an aim of education. He believes in the importance of instilling in students values and skills that contribute to achieving a psychologically healthy and self-fulfilling life-style. These values should lead to behaviors and attitudes that reflect the traditional values of society so students may become effective and successful members of society.

When promoting the development of students' capacities in the areas of cognitive, social, moral, and emotional functioning, the traditional values of society must be carefully scrutinized. If the society of which the student is a member does not value the universal principles of justice, equality of human rights, and respect for the dignity of people, then teaching children the traditional values of that society are not a desirable goal. Careful attention must be paid to the accepted principles of the society compared to the "universal" principles of equality and respect in Kohlberg's theory.

#### Abraham Maslow's Hierarchy of Needs

Action on the part of a child satisfies the needs of the child and occasionally the needs of others. Motivation to deal with conflict is also rooted in the perceived needs of the individuals involved in the conflict. Abraham Maslow's Hierarchy of Needs helps to explain why individuals handle conflict in a variety of ways. Maslow's clinical experiences led him to believe that understanding human life requires understanding humankind's highest aspirations. Growth, self-actualization, striving toward health,

search for identity and autonomy, and yearning for excellence must by now be accepted beyond reproach as a widespread and perhaps universal human tendency (Maslow, 1954).

Abraham Maslow proposes that motivation can be divided into five fundamental categories of needs. Physiological needs, consisting of basic survival needs such as food, air, water, shelter, and sleep, must be met in order to sustain life. When deprived of these needs an individual must use some form of conflict resolution or risk sickness or death. Physiological needs insure life and must be satisfied before a higher category of need becomes a motivator.

Safety needs include the protection from danger, the threat of danger, illness, and any unexpected intrusion to the feeling of security. Children may choose to flee from the source of conflict if a perceived feeling of danger is present. The classroom bully is an ever threatening source of conflict to a child's need for safety. The increasing number of violent crimes on and off the school campus increases the need for safety among school children. To help satisfy this need, the schools must not only make the school safe according to district guidelines, but also satisfy the perceived need of safety for the children.

Social needs are encompassed in a child's desire for friendship, belonging, and approval from their peers. When social needs are not met, maladjustment is the consequence. Peer pressure exerts a strong force on children attempting to deal with conflict. Rather than fleeing from the source of a conflict, the desire to belong may motivate children to deal with conflict by fighting. If negotiation or mediation is seen as a "popular" way to resolve a problem then a child may choose to resolve conflicts nonviolently. Peer mediation, using pairs of students as mediators, increases the likelihood of meeting social needs.

Esteem needs are divided into two categories. The first is the need for self-esteem, in the form of self-confidence, achievement, knowledge, and independence. Learning how to resolve conflicts in which both parties feel a sense of achievement, termed a win-win solution, will help to satisfy the self-esteem need in the disputants. The mediators themselves will also experience satisfaction in esteem needs during and after the successful resolution of a conflict.

The second esteem need focuses on one's reputation such as the need for approval, prestige, and recognition of one's work. Peer mediators are motivated to continue their role as conflict resolvers when they have successfully assisted their peers in working out problems. The feeling of prestige and approval comes from the satisfaction they receive from helping others. Recognition also enhances the reputation of the mediators when the mediators are actively sought out by their peers to handle disputes.

Self-actualization, the need for self-fulfillment, is at the uppermost level in the Maslow's motivation hierarchy. This is the need, Maslow believes, behind the drive to become everything that an individual is capable of becoming. This need is a primary motivator when the other needs have been satisfied. The need for self-actualization increases as more is obtained. Peer mediators who reach this level of motivation continue to be more involved and excited about their role as a mediator. They press for continued self development and participation in the mediation program and often branch out to solve conflicts that arise in their presence. This is the desired state to sustain the influence of the mediation program.

#### William Glasser's Control Theory

William Glasser's control theory, renamed choice theory, suggests that the only behavior over which individuals have control is their own. The message of control theory is that once its basic ideas are understood, specifically the needs, individuals can



choose from an inventory of behaviors to exhibit. Control theory asserts that our behavior is always our best attempt to control the world and ourselves as part of that world so that we may best satisfy our needs. (Glasser, 1984) Unfortunately, children often do not believe that they have choices when faced with conflict. Instead of realizing that they operate under the control theory, many children react naturally, without much thought, to the many stimuli surrounding them. This type of reaction is termed stimulus-response. Attainment of power is a goal of children. Children want and need power to control situations. Conflict resolution and peer mediation training gives children power to better control the world and themselves as part of the world.

Through the teaching of conflict resolution and peer mediation skills, students realize they have power to control behavior. Many students participating initially in the peer mediation program choose self-destructive behaviors in an attempt to gain control over their situation. During the peer mediation program, students are taught that they have needs that must be satisfied and that they have choices of how to resolve their conflicts that are better than what they are currently choosing. Once students are taught peer mediation and conflict resolution strategies an array of behaviors are internalized that are used to constructively manage daily conflicts.

Total behavior is described by William Glasser as the sum of four main parts: acting, thinking, feeling, and the concurrent physiology. Pat is mad because Robert took her pencil. She hits his Robert. Anger is the feeling and hitting is the action. The thinking process is that if she hits Robert she will get her pencil back. The physiology may be that she experiences tension in her back and her head hurts. The sum of all four parts is Pat's total behavior. Total behavior must be considered before an effective resolution can be reached. During peer mediation, mediators question disputants about their conflict and

paraphrase disputants' answers. During questioning and paraphrasing mediators focus on total behavior; acting, thinking, feeling, and physiology.

### Summary of Theoretical Bases

Four theorists offer a combination of theories that support implementation of a peer mediation program in an elementary school. Lewin's Field Theory (Lewin, 1948) states that internalization of conflict resolution skills encourages children to approach and manage conflict. Experience and confidence in mediating conflicts act as positive valences that push children to use their skills and knowledge to constructively resolve conflicts.

Kohlberg's Theory of Moral Development (Kohlberg, 1981) promotes teaching values and skills for a psychologically healthy and self-fulfilling life. By allowing children to mediate and negotiate and then marvel at the effective results of their labor helps children reach a higher level of moral development. The more students learn about how to take a cooperative approach to managing conflicts, the healthier they tend to be psychologically (Johnson & Johnson, 1995).

Maslow's Hierarchy of Needs contributes to the explanation of why children are motivated to deal with conflicts in certain ways and their need for safety and security (Maslow, 1954). When armed with conflict resolution expertise children become motivated to try to manage conflict assertively. Conflicts are energizing and trigger physical energy and an intense psychological focus. This energy motivates students to resolve the conflict and put their plans into action (Johnson & Johnson, 1995).

Glasser's Control Theory (Glasser, 1984) explains behavior as an interaction of four parts--all of which contribute to feelings and actions on the part of children. Children crave control over their lives and are willing to use knowledge and skills to gain desired

power. Following peer mediation training children learn they have the power to make decisions that best resolve conflicts that are mutually satisfying to all involved parties.

### Conflict and Conflict Resolution

Dealing successfully with conflict is important to the social and emotional development of our youth (Johnson & Johnson, 1995). Conflict pertains to the struggle over values or claims to status, power, and limited resources, in which the goals of the people involved are to attain desired values or claims, often at the expense of their rivals. A conflict exists when activities or interests are incompatible. People attempting to maximize their needs, wants, goals and interests, often prevent or interfere with another people maximizing their own needs, wants, goals and interests.

### Conflict Sources

A need is something that is necessary for survival. Physiological needs include the basic necessities of life such as food, air, water, shelter and sleep. At school these needs are not usually a concern to students. Safety needs, on the other hand, are a concern of students. Conflicts often arises when students feel a threat to their security. Other aforementioned needs include, social needs such as the need for friendship and belonging, and esteem needs, the feeling of self confidence, and approval and recognition by others.

A want is defined as the desire for something. A conflict may arise if students do not agree on who will use the computer first or who will get to sit be a certain person at lunch. Although wants do not interfere with sustaining the life of individuals they do threaten the perceived quality of life. Most conflicts in the schools revolve around satisfying wants.

A goal is an ideal that is to be achieved. Goals are made up of wants. To reach a valued goal students work to attain their many wants. Conflicts arise when one or more

of the steps needed to secure a goal are thwarted. A student who seeks to achieve the goal of maintaining straight A's is faced with many situations that impede the acquisition of the goal. Each of these situations are possible causes of conflict.

An interest broadly encompasses the potential benefit to be gained by achieving wants, needs, and goals. A conflict of interests is the result when the actions of individuals interfere with or block those of others attempting to reach their goals (Deutsch, 1973).

Protection of values, as well as needs, wants, goals and interests, is also important to people involved in a conflict. They prefer to stick to their values, beliefs about environment and self, rather than to change them. When dealing with conflict it is important to focus not only on human interests but human needs as well. When investigating the processes parties must go through in order to move from an aggressive frame to a problem solving one, needs, wants, goals, and values must be dealt with.

#### Constructive and Destructive Conflict

Conflict is an inevitable and necessary part of life. How these conflicts are dealt with, not the reality of their existence, determines if conflicts become destructive or constructive. Conflicts may become destructive when they are ignored, suppressed, or avoided. Conflicts are also destructive when students chose to handle them in an aggressive manner. Students may become angry and choose to fight, harass, or verbally abuse each other. Such actions do not usually resolve problems and often result in alienating students from their peers and members of the school's faculty. Destructive conflicts can destroy effectiveness, rip apart relationships, sabotage work, delay and decrease teaching and learning efforts, and devastate individual commitment to an organization's goals (Janz, 1985). When conflicts are destructive one participant often wins at the expense of another. Disputants feel angry, hurt, resentful, and distrustful of

each other. Also, the possibility of constructively resolving conflicts that arise in the future, decreases.

Constructive conflicts are those in which participants utilize conflict resolution skills to ensure that each participant achieves their needs, wants, goals, and interests. Constructive conflicts end in a win-win resolution for both parties. Participants are more likely to respect, like, and trust each other. The possibility of constructively resolving conflicts that arise in the future, increases.

Rather than ignoring the existence of conflict or hoping that it will disappear if it is ignored, Johnson & Johnson (1995) recommend that schools deal with conflict by following the following steps. First, the existence of conflict is acknowledged. Next, school personnel admit that some conflicts are destructive in nature and ought to be dealt with. A program that focuses on violence prevention and conflict resolution should be implemented. Peer mediation is a recommended strategy used to teach conflict resolution. As part of the program, school personnel teach students to resolve conflict in appropriate, nonviolent ways. The school becomes a conflict positive school in which resolving conflicts peacefully is critical to the members of the school organization. Conflict, used constructively, acts as a stimulus for positive change in both individuals and the student body as a whole.

### Conflict Resolution Choices

#### Win-Lose or Lose-Lose Conflict Resolutions

When faced with conflict an individual decides how to respond to the situation. The importance of goals of the participating individuals, the importance of the relationship between the participants, and knowledge of different ways to handle conflicts determine the choices implemented to resolve a conflict. Possible choices used to manage conflict include avoidance or withdrawing, smoothing, compromising, conquest seen as win-lose

situation, negotiation, arbitration, or mediation (Johnson & Johnson, 1995). The importance of familiarization with the range of strategies students use to resolve conflicts leads school personnel to realize that "to resolve conflicts constructively, students must learn how to negotiate" (Johnson & Johnson, 1995).

Avoidance or withdrawing from a conflict, may decrease the probability of conflict escalation at the moment but the problem itself may not go away. The educational system uses programs such as Drug Abuse Resistance Education (DARE), which taught children to just say "no" and walk away. This type of solution to the problem of dealing with individuals that push their values on others may be an initial choice but may not keep the situation from reoccurring. The feelings of the child avoiding the conflict are not taken into consideration. Feelings of frustration and self doubt need to be investigated to help end the inner conflict that arises by avoidance. The DARE program has been modified to include more about the feelings of children.

Withdrawing from a conflict may be an effective way to manage conflict. When the goal of an individual is not important or the relationship with the other person is not at issue, an individual may choose to give up both and avoid the conflict and the person. Another time when avoidance is a viable option is when it is used as a delaying tactic until the participants have calmed down enough to control their feeling so they may successfully resume negotiations.

Another conflict resolution solution is conquest or fight. This strategy usually results in a win-lose situation. Children often choose this strategy when the goal is very important but the relationship is not. Forcing or persuading the other to give in to pressure may give way to a fight. Fighting may be verbal or physical.

Children have learned, at home and at school, that standing up for themselves is important. Often this means using fists or weapons to put an end to conflict.

Adolescents between the ages of 10 and 19 are killed with a gun at a rate of one every three hours. In fact, an American child today is 15 times more likely to be killed by gunfire than was a child in war-ravaged Northern Ireland prior to recent peace talks (Sautter, 1995). The schools need to offer students a safe haven free of violence and an opportunity to learn and use nonviolent means to end a conflict.

Spontaneous remission occurs when conflict just stops. This may happen because the disputants tire of the conflict or both parties simply agree to spontaneously terminate the quarrel for no apparent reason. If both disputants feel that the conflict is over and will not resume at another time, this is a viable way to end a conflict. If, however, one or both of the parties believe they have "lost" the battle then the conflict has not been resolved. Disputants may still harbor ill feelings and sooner or later may continue the dispute.

Smoothing is best used when sustaining a positive relationship with an individual is important and goal achievement is secondary. Giving up the goal to maintain a quality relationship is more important to the smoother than achieving said goal. Smoothing is a technique that requires skills and although the relationship is spared, the smoother may still harbor some resentment. This method should be used with caution.

When both preserving the relationship and goal attainment are relatively important, compromising may be an effective tool to resolve conflict. Compromising is used when both people involved in a dispute can not get what they want. Parts of goals may be unrealized and slight sacrifices in the relationship will occur when compromising takes place. Meeting in the middle or using the luck of the draw to determine the winner is used when coming to terms during a dispute. Neither player truly feels that they have received what they want. Goals are not fully met and the relationship may suffer slightly as well.

Arbitration is another means used to end a conflict. Arbitration may be voluntarily when disputants request it or become compulsory if it is implemented by a third party. A judge, often a teacher or a school administrator in the schools, takes sides. This submission of a dispute to a disinterested third party allows the judge to decide how the conflict will be resolved. The arbitrator listens to both side and decides who is right and who is wrong. The decision and the consequences for any wrong doings are imposed. The disputants are expected to accept the decision of the arbitrator and then suffer the consequences.

Arbitration takes the solving of the conflict out of the hands of the disputants and is recommended to be used as a last resort (Johnson & Johnson, 1995). The reason for this is because the problem-solving skills that are needed to successfully handle conflict are not used by the disputing parties to resolve their own conflicts. Students learn that they need a teacher, administrator, or another person to resolve their conflicts. Arbitration does not empower students. They do not learn the procedures, skills, and attitudes required to resolve conflicts constructively in their personal lives at home, in school, at work, and in the community (Johnson & Johnson, 1995).

Teachers and administrators often engage in arbitration (Johnson & Johnson, 1995). During arbitration, at least one of the disputants leaves the arbitration session feeling less than satisfied with the outcome. These feelings of resentment resurface at another time in the form of another conflict. Punishing students for misbehaviors does not seem to deter future problems for most students.

Although arbitration may not be the most ideal way to resolve a conflict, it is preferable to nonreconciliation. Nonreconciliation is potentially explosive because conflict may reassert itself at any point in time. Students that are angry or feel that they are not being treated fairly will continue to harbor resentment toward the person with whom the



resentment is aimed. These negative emotions may reassert themselves in a number of potentially violent situations. These conflict resolutions are temporary or leave the issue unresolved to occur again later.

### Win-Win Conflict Resolutions

The previously mentioned responses to conflict often result in a lose-lose situation or a win-lose situation. Neither of these situations meet the wants and needs of both disputants. Two types of transactional resolution, a win-win situation for both parties, appears to resolve conflicts in a nonviolent way that allows both disputants to feel they have settled the conflict fairly (Johnson & Johnson, 1995). Contact and interaction is initiated so disputants are forced to engage in a procedural encounter that reduces or terminates conflict.

The first type of transactional resolution is direct negotiation. During direct negotiation, also termed problem-solving negotiation, parties solve their dispute together without outside help. When both goals and the relationship are highly important direct negotiation is a necessary method of conflict resolution. Individuals must be skilled in how to negotiate before this strategy becomes a desirable way to resolve conflicts.

To negotiate effectively each individual states personal wants, needs and feelings. They discuss the reasons for their positions. Both parties work to understand the other's perspective. Options that maximize mutual benefit are deliberated. Finally, the two, working as partners rather than adversaries, reach a plausible agreement.

This agreement, called an integrative solution, has many advantages. It is attractive to both parties because it joins their interests thereby reducing resistance to reaching an agreement. The agreement tends to be extraordinarily stable because it maximizes the interests and benefits of both people. Compromises, coin tosses, and other mechanical agreements are often unsatisfying to one or both parties and therefore create a situation in

which the conflict is likely to reappear (Thomas, 1976). The agreement should strengthen the bond between the opposing parties. This increased bond will help to maintain the solution and facilitate the progress of integrative solutions in succeeding conflicts.

The integrative solution also contributes to the welfare of the community of which the disputants are members. Schools that allow students, faculty, and staff members to work together to reconcile their differences constructively tend to be seen as conflict positive schools. Conflict positive schools manage conflicts constructively to enhance the quality of teaching, learning, and school life and recognize that conflicts are inevitable, healthy, and valuable. Conflicts are not problems. They are part of solutions (Johnson, 1995).

The second type of transactional resolution is mediation. A mediator is sought out to act as a catalyst so that interaction and communication may be initiated.

Modern conflict resolution programs stress peer mediation, a technique found in many cultures. In ancient China, people practiced the Confucian way of resolving disputes by using moral persuasion and agreement. In Japan, the village leader was expected to use mediation and conciliation to help community members settle their disputes. In parts of Africa, a neighborhood meeting, or "moot" assembled, and a respected member helped disputants resolve their conflict without involving a judge or arbitrator and without using sanctions. In some cultures, members of extended families served as mediators. For centuries, local religious leaders, such as priests, ministers, and rabbis, were community mediators. (Johnson, 1995, p. 19-20)

Conflicts that arise in a school may occur between students, between adults, or between a student and an adult. If negotiation between the parties involved in the conflict is not attempted or is attempted without resolving the conflict then mediation is a viable alternative.

Most research on mediation concern conflict management efforts by third parties whose formal role is to act as a neutral intermediary. However, most mediation efforts are made in less formal, everyday settings by people who are called into the dispute or intrude of their own accord. Parents mediate disputes between siblings. Managers mediate disagreements at the workplace. Friends mediate arguments between other friends (Sheppard, 1989, p. 15).

Any person may be a mediator, but to mediate effectively certain mediation skills must be used and practiced. Children or adults may be used as mediators. The use of two peer mediators, especially with children, to resolve conflicts offers support to both the mediators and disputing parties. This process is labeled peer mediation.

#### Peer Mediation

Conflict resolution teaches children to manage conflicts and rule violations through negotiation and peer mediation. At the secondary level, peer helper programs are another format for practicing crucial life skills. Students are trained in conflict management strategies. Then the mediator is assigned a conflict by an administrator. The peer mediator meets with the disputants and helps the disputants resolve the conflict. Not only does this process help to solve conflicts, students also learn skills to aid them when future disputes arise. This approach is relatively easy and inexpensive to implement, but having a few peer mediators is not likely to decrease the severity and frequency of all conflicts.

Johnson and Johnson (1995) suggest that instead of concentrating on training only some of the student body to resolve conflicts the entire student body should be trained to deal with conflicts. The acting peer mediation team rotates throughout the school so that all students gain experience as mediators. A disadvantage of this approach is the time and commitment required by the faculty. The more students who are trained to negotiate

and mediate, however, the greater the number of conflicts that will be managed constructively. Johnson and Johnson call their total student body approach Teaching Students to Be Peacemakers Program. They recommend that the training be conceived as a 12-year spiral curriculum in which each year students learn increasingly sophisticated negotiation and mediation procedures throughout their school life.

Whether using a spiral curriculum for all grade levels or simply implementing a program with a small group of students, teaching students negotiation procedures require knowledge of crucial steps. Students in conflict first define what they want. They should do so in a non aggressive yet assertive way. Specific wants, needs, and goals should be stated using ownership words such as "I", "me", "mine", or "my". Explaining how the other individual's actions inhibit what is wanted allows the other party to view the problem more clearly. Behaviors that are observed should be stated without making judgments or inferences about motives, personality, or attitude. When describing wants and needs, disputants should focus on maintaining a cooperative relationship. A good relationship statement indicates clear ownership (uses I, me, my, or mine) and describes how the individual views the relationship. An example is, "I think we need to discuss our disagreement yesterday."

Part of this step includes listening carefully to each other. Giving full attention to the speaker by making eye contact, paraphrasing what the speaker is saying, asking questions, and not interrupting lets the speaker know the listener is paying attention. Both parties need to define the conflict together.

Next, the disputants take turns describing their feelings. Each individual names the feeling, describe the behavior that they perceive caused the feeling, and explains how the behavior has affected them. This is a difficult communication skill to develop. Many

students tend to accuse, label, and resort to name-calling instead of openly describing their feelings.

After describing their feelings they explain the reasons underlying those wants and feelings. Until both parties are informed as to the reasons underlying wants and feelings, neither party has a clear picture of the other's perspective. A conflict may occur because both people want to sit by Steve at lunch. When the reasons are explored it may come to light the one person wants to ask Steve for a ride home after school and the other wants to discuss weekend plans. Once this is realized, both parties may be able to meet their needs by taking turns sitting next to Steve.

Then the students transpose perspectives in order to see the conflict from both sides. This is accomplished through communication skills such as the aforementioned paraphrasing and questioning. Each disputant describes the other person's feelings, asks if the perception is correct, and refrains from judging the feelings.

The disputants then generate at least three optional agreements which secure maximum benefits for both parties. Having more than one option to choose from allows each person the opportunity to have their say and to generate workable solutions. Solutions must be thought out carefully in terms of the benefit to both. Then both parties agree on the wisest course of action.

If negotiations fail, the next best course of action is to use mediation. Mediation is similar to negotiation in that mediators follow the same steps used in negotiation by questioning the disputants. The mediation procedure consists of four steps. First, the mediators stop the hostility between the two individuals. They may do this by suggesting that each person take some time to cool down. Next, the mediators ensure that the disputants are committed to the mediation process by asking them to agree to certain conditions. Mediators ask the disputants to agree to try to solve the problem, tell the

truth, not interrupt, not be involved in name-calling or put downs, and speak directly to the mediators. The mediators facilitate negotiations between the disputants by asking the disputants to tell what happened and how they feel about the situation. They ask each person what they would like to see happen to resolve the conflict and what they think they could do to help expedite the process. Lastly, they help the disputants reach a solution and then formalize the agreement by writing it down. The mediators then ask both parties to sign the agreement.

#### Research on Peer Mediation

Although peer mediation programs, under a variety of names and labels, have been started in schools, relatively little empirical research is available concerning effects of these programs or impact peer mediation training and mediation experience has on mediators.

Metis Associates, Inc. (1990) summarized the significant findings of the Resolving Conflict Creatively Program (RCCP). A peer mediation program, part of the RCCP, was implemented at five schools in New York. Surveys were completed by 143 students and their teachers concerning the extent to which the program had affected their class and school climate. A large percentage of teachers who responded to the survey instrument found promising results from the implementation of the program. Approximately 85 % of the teachers agreed that students were helped through contact with mediators, and participation in the mediation program contributed to increasing the mediators' self-esteem. About 98 % of teachers believed that mediation gave children vital skills needed to deal with every day school conflicts. More than 88 % of teachers agreed that mediation allowed students to take more responsibility for resolving conflict.

Approximately 84 % of the surveyed mediators agreed that the program gave them skills that they could use their whole life. Of the surveyed students, 83 % agreed that

being a mediator helped them to understand people with opposing views, and 85 % indicated that mediation was helpful.

Burrell and Vogl (1990) reported an 80% success rate for conflicts mediated by peers in Milwaukee. They stated that students' self-esteem and leadership skills have improved. Milwaukee teachers reported less fighting and disruptive behavior as a result of the peer mediation program.

Following the implementation of a conflict resolution/peer mediation program that encompassed teaching the steps of negotiation and mediation, Johnson and Johnson saw a dramatic drop in the frequency of student to student conflicts that had to be dealt with by the teachers and administrators. Conflict itself was not diminished, but with the new conflict management strategies, students themselves were able to handle their own problems. Johnson and Johnson (1991) posit that the more years students spend learning and practicing the skills of peer mediation and conflict resolution, the more likely they will be to actually use those skills both in the classroom and beyond the school door.

Tolson, McDonald, and Moriarty (1992) studied whether mediation was a viable alternative to traditional forms of school discipline. Fourteen students, selected according to their grade point average and leadership skills were trained as mediators. Students involved in a conflict were randomly assigned to a pair of mediators (N=28) or to traditional discipline (N=24). An analysis of variance reported that mediation did significantly reduce referrals for interpersonal problems, but did not significantly reduce the amount of overall disciplinary referrals. Tolson, McDonald, and Moriarty concluded that mediation provides an effective alternative to traditional discipline.

Research reported by the National Association for Mediation Education and Jerry and Joan Benson documents that peer mediation programs are worthy of investigation.

They determined that peer mediation programs reduced administrators' and teachers' time managing conflicts; decreased the level of violence and crime in the school; and enhanced the self-esteem, grades, and attendance of the students trained as mediators. Couple these positive outcomes with the fact that students learned life skills of solving problems through communication and critical thinking, and it becomes apparent that such programs are effective and worthy of investigation (Benson and Benson, 1993).

#### Impact of Peer Mediation on Students

Roush and Hall (1993) studied the effects of teaching conflict resolution skills to fourth, fifth, and sixth grade students. The dependent measures included self-concept and a tally of playground misconduct infractions. Although the self-concept inventory did not show a significant change, the number of misconduct slips written at the playground decreased significantly following treatment.

Dudley (1994) investigated the training effects of peer mediation and negotiation in middle school. His pre-post, treatment-control study of 198 students from grades 6, 7, 8, and 9 found that students trained in peer mediation and negotiation used significantly fewer negative reference words and significantly more positive reference words when describing their thoughts, feelings, and beliefs about conflict. Dudley investigated the mean change in the ratio of positive and negative reference words using a three-way analysis of variance. Students involved in the program were better skilled in negotiation of complex problems than those in the control group. The program was in effect for approximately three months. The program implementation period was relatively short. A longer implementation phase may have produced more significant results (Dudley, 1994).

Miller (1994) examined 140 fourth grade students involved in a peer mediation program during a twelve week period. No significant effect was found to exist on the dependent measures of total scores obtained on the Piers-Harris Children's Self-Concept



Scale (PHCSCS), or the Behavior Dimensions Rating Scale (BDRS). Miller concluded that the implementation of a peer mediation program does not influence overall self-concept or behavior over a relatively short period of time.

Johnson and Johnson (1994) conducted studies of peer mediation which examined student management of conflicts before and after peer mediation training. After training, conflicts between students were often managed by students rather than adults. The frequency of conflicts teachers had to resolve decreased 80 % and the number of conflicts referred to the principal was reduced to zero. Such a dramatic reduction of referral of conflicts to school personnel transformed the school discipline program from arbitrating conflicts to maintaining and supporting the peer mediation process.

A review of direct research on peer mediation programs (Johnson, 1994) finds that approximately 87 % of conflicts mediated resulted in lasting and stable agreements. Peer mediators engaged in fewer antisocial and more prosocial behavior in schools. Violence and other serious discipline infractions declined. Referrals to administrators were reduced by approximately 60 %. Johnson believed that most of these studies, however, were of very poor quality methodologically. Their results, therefore, should be interpreted with caution.

As a prelude to this dissertation a pilot peer mediation program with a small number (N=22) of low achieving fifth grade students was implemented as a supplement to the language arts curriculum. The pilot program was implemented to "work out the bugs" for implementation of a full year program the following school year. Each student answered questions on the Children's Action Tendency Scale (CATS) prior to the implementation of the program. Over a six weeks period students learned conflict resolution strategies and the peer mediation process. Skills and knowledge included questioning disputants

about their perceptions and feelings, paraphrasing and restating disputants answers, and working with disputants towards resolving the conflict.

The students involved in the training program were excited about learning how to manage conflict and were motivated to learn the peer mediation process. Students behavior appeared to improve and the students liked participating in the program. Nine out of ten conflicts that were referred to the peer mediators were successful.

Further analysis of the CATS was not conducted because of the lack of truthful responses on the survey instrument, difficulty of scoring the instrument, and lack of referrals to peer mediation. Based on teacher observation and students' positive verbal comments about the peer mediation further investigation of peer mediation is warranted.

In conclusion, research conducted by Burrell and Vogl (1990), Johnson and Johnson (1991,1994), Tolson, McDonald, and Moriarty (1992), Benson and Benson (1993), and Roush and Hall (1993) supports the implementation of a peer mediation program to decrease the number of conflicts referred to teachers and administrators. Research is inconclusive as to the relationship between the implementation of a peer mediation program and students' self-esteem/self-concept. Research conducted by Metis Associates, Inc. (1990), Burrell and Vogl (1990), and Benson and Benson, (1993), found that participation in a peer mediation program improves mediators self-esteem/self-concept. On the other hand, Tolson, McDonald, and Moriarty (1992), Roush and Hall (1993), and Miller (1994) did not find any significant change in mediators' self-esteem/self-concept following participation in a peer mediation program.

### Cooperative Learning

To aid in the successful impact of a peer mediation program, one implementation approach is rooted in the concept of cooperative learning. Cooperative learning is a strategy that parallels the four theoretical frameworks previously discussed. David Hamburg, president of Carnegie Corporation, asserts that reversing the trend of violence among the young depends on teaching children how to work cooperatively with others. Johnson (1989) believes that the more children and adolescents work in cooperative learning groups, the greater will be their psychological health, self-esteem, social competencies, and resilience in the face of adversity and stress.

Cooperative learning may be contrasted with competitive and individualistic learning. When lessons or the attainment of grades are structured competitively, students work against each other for the reward of praise or good grade at the expense of the other students. Helpful and supportive behavior does not flourish in a competitive atmosphere.

Johnson and Johnson (1991) reviewed more than 520 experimental and over 100 correlational research studies that have been conducted in the last century that compare cooperative, individualistic, and competitive methods of student knowledge acquisition. Three broad categories that are affected by cooperative learning that have been investigated are; effort to achieve, quality of relationships among participants, and participants' psychological adjustment and social competence.

"We are created not for isolation, but for relationships. At heart, we are not a thousand individual points of light, but, rather, part of a larger brightness" (Johnson & Johnson, 1991, p. 284). For the students' well being it is a necessary that they feel valued, respected, and accepted. Too often, children do not internalize these feelings at home or at school. When working together cooperatively, students will have a more realistic and positive image of themselves and others. The more frequently cooperative

learning is used, the more positive relationships become. Cooperation, compared with competitive and individualistic efforts, promotes greater social support, caring, mutual commitment, and cohesion among group members.

Psychological adjustment and social competence are two essential components of psychological health (Johnson & Johnson 1989, 1991, 1994). Students that are psychologically adjusted see themselves as accepted and supported by the group. These feelings contribute to a greater degree of productivity, future feeling of autonomy and independence and thus should decrease inappropriate behavior.

Social competence, a working knowledge and practice of social skills, increases students' abilities to provide leadership, build and maintain trust, communicate effectively, and manage conflicts effectively. One of the intended outcomes of our educational system is to help children to develop these skills. Through cooperative learning, social skills are integrated into the learning process.

Classroom strategies, such as cooperative learning, enhance cooperation among students and lessens the competitiveness that is traditionally associated with education. Peer mediation and conflict resolution strategies taught cooperatively in the classroom and then expanded into a school-wide program help students learn how to cope with conflict.

What happens at school is pivotal, both to students and to society. Schools are not necessarily the cause of the problems of youth but they can provide attractive options to inappropriate behavior and give students a pattern for appropriate behavior. Schools that only choose to meet the academic needs of students miss the opportunity to help many students succeed in society. For many students, especially those in poverty, school may be their only way out.

Peer mediation training and experience in mediation is cooperative learning. During the training phase of the program students work together to learn conflict resolution and mediation skills by role playing and working together to discover constructive ways to resolve conflicts. During actual mediations pairs of students mediate conflicts thus allowing for cooperation among the mediators as well as the disputants. Johnson and Johnson (1995) recommend building a cooperative context at school where students manage conflicts constructively. Part of the school's "responsibility involves using cooperative learning a majority of the time and carefully structuring cooperation within and among learning groups, so that the entire class is learning community of collaborators" (Johnson & Johnson, 1995, p. 99). Peer mediators become a cooperative learning community which focuses on resolving conflict constructively.

#### Summary

Conflict is a normal part of student's lives, yet resolving conflicts constructively does not come naturally. Students involved in conflicts may resort to violence or other destructive methods in an attempt manage conflict. Students desire the power to control situations but do not have the knowledge and skills necessary to effectively gain control over the many situations they are confronted with daily. The result is disorderly schools filled teachers and administrators who spend more time managing disruptive students and less time teaching. The school's job is to educate the whole child so they may become productive citizens. Education should encompass the social-emotional, as well as academic, learning.

Several theories support peer mediation as a means to teach students how to resolve conflicts constructively. Lewin's Field Theory proposes that internalization of conflict resolution skills motivates children to approach and resolve conflict. Maslow's Hierarchy of Needs contributes to the explanation of what motivates children to handle conflicts in

particular ways. Kohlberg's Theory of Moral Development promotes the teaching of values and skills that contribute to a psychologically healthy and self-fulfilling life. Glasser's Control Theory explains behavior as a sum of four parts--all of which contribute to feelings and actions on the part of children. Children want control over their lives and are willing to use knowledge and skills to gain desired power. Johnson and Johnson's work with cooperative learning offers a sound basis for working together to solve problems. Taken together, these theories offer a sound theoretical foundation for implementing a peer mediation program.

Several authors have described the positive outcomes resulting from the implementation of peer mediation programs. Research conducted by Burrell and Vogl (1990), Johnson and Johnson (1991,1994), Tolson, McDonald, and Moriarty (1992), Benson and Benson (1993), and Roush and Hall (1993) suggests peer mediation programs decrease the number of conflicts referred to teachers and administrators. Research is inconclusive as to the relationship between the implementation of a peer mediation program and students' self-esteem/self-concept. Research conducted by Metis Associates, Inc. (1990), Burrell and Vogl (1990), and Benson and Benson (1993) found that participation in a peer mediation program improves mediators self-esteem/self-concept. On the other hand, Tolson, McDonald, and Moriarty (1992), Roush and Hall (1993), and Miller (1994) did not find any significant change in mediators' self-esteem/self-concept following participation in a peer mediation program. Investigation in the areas of the relationship mediation training and mediation experience has on mediator's self-control, locus of control, and the perception that resolutions are mutually satisfying to disputants remains limited. In studies in which effects of peer mediation were found, discussions of mediators' behavior prior to implementation of the program remains sketchy as well.

Therefore, the study that is needed is a comprehensive investigation into the effects that a peer mediation program has on peer mediators and students referred to mediation. This study will give fifth grade students, at a crucial stage in moral development, who crave control of their environment a chance to gain self-control through their experience in a peer mediation program. Self-esteem/self-concept is undoubtedly an important aspect in the emotional growth of children. This study examines the relationship between learning how to successfully manage conflicts and self-esteem/self-concept when a peer mediation program encompasses cooperative learning, control theory, and students' needs. Also investigated were the effects involvement in a peer mediation program had on students' self- control, self concept, and locus of control.

## CHAPTER 3

### METHODS AND PROCEDURES

Identifying effective conflict resolution strategies which aid students in constructively managing conflicts is crucial for preparing students to manage their conflicts. Learning conflict resolution strategies and skills provides a positive alternative to violence in conflict situations. The purpose of this study was to investigate the effects of an elementary school peer mediation program designed to teach fifth grade students conflict resolution skills. The effects of the program will be investigated by looking at changes in self-control, self-concept, and locus of control of mediators, number of conflicts referred to school administrators, and number of mutually satisfying conflict resolutions.

The following questions will be the focus of this study:

1. What effects will peer mediation training and mediation experience have on mediators' self-control? How are the effects similar or different for students who are not trained as mediators?
2. What effects will peer mediation training and mediation experience have on mediators' self-concept? How are the effects similar or different for students who are not trained as mediators?
3. What is the relationship between peer mediation training and mediation experience and mediators' locus of control? How are the effects similar or different for students who are not trained as mediators?



4. If effects of peer mediation training and mediation experience are found, how are the effects similar or different for mediators who are considered to be "disruptive" students?
5. What is the relationship between being a peer mediator and number of conflicts referred to school administrators?
6. How effective is peer mediation in achieving mutually satisfying resolutions as perceived by disputants?

### Sample

This study was conducted in two suburban elementary schools with similar populations. For the purpose of identification these schools will be called "school B" and "school C". Approximately 50% of the 620 students attending school B are members of one of four minority groups. Children that receive free or reduced priced lunches comprise 58% of the school population. In the targeted population of fifth grade students 44% of the 84 students are in one of three minority groups.

Fifth grade students at elementary school C attend school approximately two miles from school B. Approximately 50% of the 640 students attending school C are members of one of four minority groups. Children that receive free or reduced priced lunches comprise 51% of the school population. In the targeted population of fifth grade students 44% of the 46 students are in one of three minority groups.

### Selection of Subjects

Fifth grade students from school B and school C were chosen to be the grade level to participate in this study. Peer mediators that represent the diversity of the 84 students in the fifth grade population at school B in terms of ethnicity and gender were chosen by random selection. This proportional stratified sample of these students was determined by listing students on a piece of paper according to gender and ethnicity. Each name was then put into one of six groups; Hispanic males, Hispanic females, African American

males, African American females, males, and females. To obtain an accurate proportional stratified sample, one half of the students in each pile was drawn at random to be included in the treatment group labeled B1. The remaining half of each pile contained students designated to be assigned to the comparison group labeled B2. Groups that had an odd number of students, thus making it impossible to divide the group exactly in half, were divided in two and then rounded to the next whole number. For example, the African American female population of seven students was divided in half. The quotient in this case is three with a remainder of one. Three was rounded to four therefore, four of the seven girls were placed in the treatment group and three in the control group. This compensated for attrition in the treatment group.

Fifth grade students attending school C were divided into four homeroom groups which represent the diversity of students. From these four groups two were chosen randomly to be the control group labeled C.

A total of 130 participants divided into three groups of fifth grade students were used for this study. Some students did not secure permission to be in the peer mediation group so the three groups did not contain an equal number of students. Also, because of high mobility rate of students, not all students remained in the study for the complete year. The treatment group B1 consisted of 25 trained peer mediators from school B. The untreated comparison group B2 contained 59 fifth graders from school B. Students in school B may have been influenced as participants in the mediation program. Teaching methodology, and teachers' personalities, may have an effect on results as well. Because these students are in the peer mediation school, an additional control group was taken from a similar school where peer mediation is not offered as a conflict resolution strategy. The control group C from school C include 46 fifth grade students.

### Procedures

During the first week of staff development for teachers, the peer mediation program was introduced to the faculty at school B. The purpose of the study, testing measures, and method of implementation were discussed. Teachers were briefly trained in how to peer mediate and then practiced the peer mediation process. During the fourth week of school, pretests were given to each fifth grade student at school B. Pretests were also given to two classes of fifth graders at school C. Following the completion of the testing measures, the peer mediation program was introduced to the entire fifth grade group at school B. No discussion of peer mediation was held at school C. The following day, peer mediators attending school B were randomly selected as previously described. Students who were randomly selected took home a letter explaining the program and asking for permission to participate in the study (see appendix).

Students in group B1 peer mediators who had parental permission to participate, met 1 hour after school, three days a week for three weeks. During training sessions peer mediators were given an overview of the program, discussed conflict situations, learned active listening and effective questioning strategies, and participated in simulated mediation sessions (see appendix for an outline of the program).

Following the three week training session the peer mediators began mediating. During the implementation of the program, pairs of mediators mediated conflicts referred to them by classroom teachers, school administrators, or students (see appendix for mediation and referral form). Weekly meetings were held to discuss problems and strengthen skills. The total program length, including the training, was 30 weeks.

### Research Design

The primary research design used in this study was a pretest-posttest control-group design using two testing instruments. The different instruments were used to measure personal adjustment, self-control, self-concept, and locus of control. The two measurement instruments used were the Index of Personality Characteristics (IPC) and the Children's Personality Questionnaire (CPQ). The treatment group B1, untreated comparison group B2, and the control group C, received pretests before the peer mediation program was implemented. After the initial peer mediation training one measure, the IPC, was repeated to the treatment group. Following the two treatments; peer mediation training, and mediation experience, the mediation group was analyzed using the Acting In and Acting Out, Perception of Self and Perception of Others, and Internal Locus of Control and the External Locus of Control scales of the Index of Personality Characteristics.

Figure 1. Quantitative research design.

Treatment Group	R	O <sub>1</sub> and O <sub>2</sub>	X <sub>1</sub>	O <sub>1</sub>	X <sub>2</sub>	O <sub>1</sub> and O <sub>2</sub>
Control Group	R	O <sub>1</sub> and O <sub>2</sub>				O <sub>1</sub> and O <sub>2</sub>
Comparison Group	R	O <sub>1</sub> and O <sub>2</sub>				O <sub>1</sub> and O <sub>2</sub>

Key: R = random assignment.

X<sub>1</sub> = mediation training.

X<sub>2</sub> = mediation experience.

O<sub>1</sub> = IPC.

O<sub>2</sub> = CPQ.

## Instrumentation and Data Analysis

### Index of Personality Characteristics

The Index of Personality Characteristics (IPC), was developed to be used as a screening device of affective adjustment of school-aged children. The IPC is a self-report inventory of perceptions of behavior and feelings intended to be incorporated with additional data into a socioemotional appraisal (Conoley, 1989). The IPC measures perception of self and others, acting in and out, and internal and external locus of control. Data analysis was conducted using analysis of covariance (ANCOVA) to allow for differences on the pretest. Scores on pretests and post tests were compared for the mediator group B1, the comparison group B2, and the control group C. Additional analysis was done comparing students who had been classified disruptive to see whether their self-concept, self-control, and locus of control changed in a different fashion from other students in the study. Repeated measures ANOVA was computed following mediation training and mediation experience to determine what effects participation in mediation training and mediation experience had on the scales of the IPC.

### The Children's Personality Questionnaire

The Children's Personality Questionnaire (CPQ), 1985 Edition, measures changes in personality traits of participants. It is a standardized personality inventory intended for use with children ages 8 through 12. The test measures 14 dimensions of personality identified by R. B. Cattell (1965, 1967, 1973) as being objectively determined source traits. Primary factors measured in the CPQ include Self-Assured vs. Apprehensive, Affected by Feelings vs. Emotionally Stable, and Undisciplined Self-Conflict vs. Controlled.

An analysis of covariance (ANCOVA) was used to explore changes in self-control, self-concept, and locus of control. Scores on pretests and post tests were analyzed for the

mediator group B1, the comparison group B2, and the control group C. Additional analysis was done comparing students who had been classified disruptive.

#### Alignment of IPC and CPQ With Research Questions

Question 1, effects of peer mediation training and mediation experience on mediators' self-control, were explored by comparing pretest and posttest measures on the Acting In and Acting Out Scales of the IPC, and the Affected by Feelings vs. Emotionally Stable and Undisciplined Self-Conflict vs. Controlled scales of the CPQ. Question 2, effects of peer mediation training and mediation experience on mediators' self-concept were analyzed by comparing scores on pretest and posttest measures of the Perception of Self and the Perception of Others Scales of the IPC, and the Self-Assured vs. Apprehensive scales of the CPQ. Question 3, the relationship between peer mediation training and mediation experience and mediators' locus of control was investigated by comparing pretest and posttest measures on the Internal Locus of Control and External Locus of Control Scales of the IPC. For question 4, effects of peer mediation training and mediation experience for mediators who were considered to be disruptive, scores of disruptive students were compared to scores of peer mediators not labeled as disruptive on all scales of the IPC and CPQ.

#### Frequency Count of Office Referrals

To investigate question 5, the relationship between being a peer mediator and number of conflicts referred to school administrators, a tally of the number of fifth grade students referred to school administrators and the type of infraction were recorded. Office referrals were categorized in two groups. One group listed the peer mediators, and the other group contained students who were not trained as mediators. A chi-square test was used to interpret the frequency counts.

### Percentage of Mutually Satisfying Conflict Resolutions

To determine the answer to question 6, effectiveness of peer mediation in achieving mutually satisfying resolutions as perceived by disputants, the number of mutually satisfying resolutions compared to the number of total mediated conflicts was computed as a percentage. A chi square test was used to interpret the results for significance. A conflict resolution was deemed "mutually satisfying" if both disputants wrote "yes" or "Y" on the line following the question "Are you satisfied with the resolution?" on the referral and report form (see appendix).

### Qualitative Follow-up

Semistructured interviews were used with all participants in the mediation treatment group as an additional part of data collection. This interview added depth to the quantitative information investigated in questions 1, 2, 3, and 4. During the semistructured interview the interviewer asked a series of structured questions and then probed more deeply, using open-ended questions in order to acquire more complete data. The semistructured interview had the advantage of being fairly objective while still permitting a thorough understanding of the respondent's opinions and the reasons behind them (Borg & Gal, 1989). The structured part of the interview contained the following questions:

1. What did you like about the peer mediation program?
2. What did you dislike about the peer mediation program?
3. How did you resolve conflicts before peer mediation training?
4. How do you resolve conflicts now?
5. How do you feel you have changed as a result of the program?
  - a. Do you notice any difference in your self-control? Explain.
  - b. Do you notice any difference in your self-concept (how you feel about

yourself)? Explain.

c. Do you notice any difference in your locus of control (self motivated or motivated by others)? Explain.

6. What would you do differently now that you have been in the program when faced with a conflict?

7. Would you like to be a peer mediator next year? Why or why not?

The unstructured part of the interview was based on the answers received during the structured interview. When students focused on a certain aspects of their social-emotional development that appeared important to them the interviewer asked questions pertaining to the students' train of thought. The interview was semistructured to increase the chances of finding valuable pieces of information students had to share. Student responses to each question were grouped into categories to discover similarities, differences, and anomalies.



## CHAPTER 4

### RESULTS

Conflict is a natural part of living which may have many detrimental consequences on individuals and society. Changes in family, neighborhood, and societal life have resulted in youth who are not socialized into constructive patterns of conflict management and who have learned to deal with conflicts with violence and aggression (Johnson & Johnson, 1995). The focus of this study was to identify and develop techniques and strategies that enable children to deal constructively with conflict.

Identifying effective conflict resolution strategies which aid students in constructively managing conflicts is crucial to insure students are prepared to manage conflicts in school and out. Learning conflict resolution strategies and skills provides a positive alternative in conflict situations to violence. The purpose of this study was to investigate the effects of an elementary school peer mediation program used to teach a group of fifth grade students conflict resolution skills. Once taught how to manage conflict effectively, students applied their acquired knowledge and skills in real life situations. The effects of the program were investigated by looking at changes in self-control, self-concept, and locus of control of mediators, the difference in the number of conflict referrals to school administrators, and the percentage of successful mediations.

Six specific research questions were investigated:

1. What effects will peer mediation training and mediation experience have on mediators' self-control? How are the effects similar or different for students who are not trained as mediators?
2. What effects will peer mediation training and mediation experience have on mediators' self-concept? How are the effects similar or different for students who are not trained as mediators?
3. What is the relationship between peer mediation training and mediation experience and mediators' locus of control? How are the effects similar or different for students who are not trained as mediators?
4. If effects of peer mediation training and mediation experience are found, how are the effects similar or different for mediators who are considered to be "disruptive" students?
5. What is the relationship between being a peer mediator and number of conflicts referred to school administrators?
6. How effective is peer mediation in achieving mutually satisfying resolutions as perceived by disputants?

#### Sample

A total of 130 participants divided into three groups of fifth grade students were initially used for this study. The treatment group consisted of 19 trained peer mediators from school B. This peer mediation group is the treated group and is referred to as group B1. The untreated group contained 48 fifth graders from school B. This group is the non-treated comparison group labeled B2. Students in school B may have been influenced as participants in the mediation program or they may have been influenced by other factors not related to the program. Because these students are in the peer mediation school, a control group was taken from a similar school where peer mediation is not offered as a conflict resolution strategy. The control group from school C included 43

fifth grade students. Attrition and student absences during testing account for lower numbers of participants analyzed.

### Quantitative Analysis

#### Repeated Measures ANOVA for the Index of Personality Characteristics

The peer mediation program was implemented in two phases. Phase one of the program involved approximately three weeks of mediation strategies training. The second phase of the program included weekly meetings to fine tune knowledge and skills, and practice in real life mediation. To discover if gains in self control, self concept, and locus of control occurred following phase one, phase two, or both, repeated measures ANOVAs were done on each indicator of the Index of Personality Characteristics for students in group B1. Following each significant ANOVA a Scheffe Comparisons for Treatment was performed.

Treatment Group B1            R      O<sub>1</sub>    X<sub>1</sub>    O<sub>2</sub>    X<sub>2</sub>    O<sub>3</sub>

Key: R = random assignment.

X<sub>1</sub> = mediation training.

X<sub>2</sub> = mediation experience.

O<sub>1</sub>, O<sub>2</sub>, O<sub>3</sub> = Repeated Measures IPC.

On all six characteristics, the results were statistically significant when comparing pre-test O<sub>1</sub> and post-test O<sub>3</sub> scores. Significance was also found following peer mediation training at observation O<sub>2</sub>, on two characteristics; Acting In Scale and Perception of Self Scale. When comparing scores that were measured following mediation training O<sub>2</sub> to those measured following mediation practice O<sub>3</sub>, three characteristics showed statistical significance: Acting Out Scale, Perception of Self Scale, and Perception of Others Scale.

Therefore, the mediation training and practice had a positive effect on the peer mediation group B1 on all personality characteristics. See Table 1 for Repeated Measures Analysis of Variance (ANOVA) results.

Table 1

Repeated Measures ANOVA for the Index of Personality Characteristics Group B1

Characteristic Expression	Time	<u>n</u>	<u>M</u>	<u>SD</u>
Acting In Scale F = 6.61 p = 0.0001	O <sub>1</sub>	18	62.72*~	12.53
	O <sub>2</sub>	18	67.44*	12.72
	O <sub>3</sub>	18	68.78~	9.19

## Scheffe Comparisons for Treatment

O<sub>1</sub> with O<sub>2</sub>\* F = 4.92 p = 0.01O<sub>1</sub> with O<sub>3</sub>~ F = 8.09 p = 0.001

Acting Out Scale F = 11.58 p = 0.0001	O <sub>1</sub>	18	69.11*	13.98
	O <sub>2</sub>	18	69.94~	13.93
	O <sub>3</sub>	18	75.28*~	10.21

## Scheffe Comparisons for Treatment

O<sub>1</sub> with O<sub>3</sub>\* F = 12.16 p = 0.0001O<sub>2</sub> with O<sub>3</sub>~ F = 9.10 p = 0.0007

Perception of Self	O <sub>1</sub>	18	115.33*~	17.44
F = 10.29	O <sub>2</sub>	18	120.39*#	18.21
p = 0.0001	O <sub>3</sub>	18	125.61~#	15.83

Scheffe Comparisons for Treatment

O <sub>1</sub> with O <sub>2</sub> *	F = 4.39	p = 0.020
O <sub>1</sub> with O <sub>3</sub> ~	F = 18.13	p = 0.0001
O <sub>2</sub> with O <sub>3</sub> #	F = 4.68	p = 0.016

Perception of Others	O <sub>1</sub>	18	106.06*	17.86
F = 9.64	O <sub>2</sub>	18	108.78~	18.59
p = 0.0001	O <sub>3</sub>	18	113.89*~	12.95

Scheffe Comparisons for Treatment

O <sub>1</sub> with O <sub>3</sub> *	F = 9.02	p = 0.0007
O <sub>2</sub> with O <sub>3</sub> ~	F = 3.84	p = 0.031

Internal Locus of Control	O <sub>1</sub>	18	61.00*	7.44
F = 2.11	O <sub>2</sub>	18	62.50	7.91
p = 0.0297	O <sub>3</sub>	18	65.39*	6.69

Scheffe Comparisons for Treatment

O <sub>1</sub> with O <sub>3</sub> *	F = 4.56	p = 0.018
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External Locus of Control	O <sub>1</sub>	18	98.00*	21.37
F = 8.71	O <sub>2</sub>	18	102.94	22.72
p = 0.0001	O <sub>3</sub>	18	107.56*	15.15

#### Scheffe Comparisons for Treatment

O<sub>1</sub> with O<sub>3</sub>\* F = 8.38 p = 0.001

Research questions 1, 2, and 3 compare the three groups in this study. If peer mediation training and mediation experience had positive effects when comparing groups B1 treatment, B2 comparison, and C control, results should show the greatest impact on the mediation group B1, followed by less but possibly some impact on the comparison group B2. Some impact may be discovered in group B2 because students in B2 may have participated in mediation as disputants. Students in the control group C should show no effect of the program. Peer mediation was not discussed with or taught to students in group C.

#### Self Control

Research question 1. What effects will peer mediation training and mediation experience have on mediators' self-control and how are the effects similar or different for students who are not trained as mediators?

Self control was examined by using Analyses of Covariance to compare pretest and posttest measures. Scales included Affected by Feelings vs. Emotionally Stable, Undisciplined Self-Conflict vs. Controlled portions of the Children's Personality Questionnaire, and Acting In and Acting Out scales of Index of Personality Characteristics. A significant interaction between peer mediators B1 and the control group C was found ( $F=3.66, p<.03$ ) but not between the peer mediators B1 and the comparison group B2 ( $F=2.45, p<.12$ ) on the Affected by Feelings vs. Emotionally Stable portion of the Children's Personality Questionnaire. Although no statistical difference was found using ANCOVA, the adjusted mean for the peer mediators' group B1 was .91 points higher than the comparison group B2. A higher number on the ten point scale indicates that peer mediators scored higher on ego strength. Ego strength is customarily regarded as a factor expressing the level of natural dynamic integration, emotional control, and stability.



No significant interaction between peer mediators, comparison group, nor control group was found ( $F=2.85$ ,  $p<.06$ ) on the Undisciplined Self-Conflict vs. Controlled portion of the Children's Personality Questionnaire. The analysis approaches significance and reflects the trend toward more self-control, acceptance of approved ethical standards, ambition to do well, concern with social image, consideration of others, and tendency to reduce and control expressions of emotion on the part of the students in the mediation B1 group.

A significant interaction between peer mediators and the control group was found ( $F=3.96$ ,  $p<.02$ ) but not between the peer mediators B1 and the comparison group B2 on the Acting In scale of the Index of Personality Characteristics. A significant interaction between peer mediators and the control group was found ( $F=6.91$ ,  $p<.002$ ) but not between the peer mediators and the comparison group on the Acting Out scale of the Index of Personality Characteristics. The Acting In and Acting Out scales together form the behavioral Dimension of the Index of Personality Characteristics. Higher scores on the Acting In scale indicate more controlled behaviors. Higher scores on the Acting Out scale indicated more aggressive behaviors. See Table 2 for Analysis of Covariance (ANCOVA) measuring self control.

Table 2

## Summary Table for Analyses of Covariance Measuring Self Control

Characteristic Expression	<u>n</u>	Pretest		Posttest		<u>Adjusted M</u>
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Affected by Feelings vs. Emotionally Stable (CPQ)						
Peer Mediators -B1	15	7.27	2.58	8.80	2.04	8.52*
Comparison - B2	41	6.44	1.96	7.59	1.95	7.61
Control - C	24	6.13	2.71	6.79	1.89	6.93*
		*F = 3.66				p < .03
Undisciplined Self-Conflict vs. Controlled (CPQ)						
Peer Mediators -B1	15	8.07	2.63	7.60	1.76	7.27
Comparison - B2	41	6.93	2.39	6.98	2.41	7.01
Control - C	24	6.54	1.98	5.71	2.05	5.86
		F = 2.85				p < .06
Acting In Scale (IPC)						
Peer Mediators -B1	18	62.72	12.53	68.78	9.19	69.13*
Comparison - B2	30	64.20	9.82	69.33	9.24	68.95
Control - C	30	63.10	9.77	63.23	11.12	63.40*
		* F = 3.96				p < .02

## Acting Out Scale (IPC)

Peer Mediators -B1	18	69.11	13.98	75.28	10.21	76.11*
Comparison - B2	30	71.57	13.04	76.00	7.44	75.93
Control - C	30	72.57	13.92	69.67	10.16	69.23*

\* F = 6.91    p < .002

### Self Concept

Research question 2. What effects will peer mediation training and mediation experience have on mediators' self-concept and how are the effects similar or different for students who are not trained as mediators?

Self concept was examined by using Analyses of Covariance to compare pretest and posttest measures. Scales used include Self-Assured vs. Apprehensive portion of the Children's Personality Questionnaire and Perception of Self and Perception of Others scales of Index of Personality Characteristics. No significant interaction between peer mediators, comparison group, nor control group was found ( $F=1.61$ ,  $p<.20$ ) on the Self-Assured vs. Apprehensive portion of the Children's Personality Questionnaire. Lower scores on this characteristic indicate a higher degree of self-confidence and complacency.

On the Perception of Self scale of Index of Personality Characteristics a significant interaction was found between the peer mediator group and the control group ( $F=4.65$ ,  $p<.01$ ), but not between the peer mediator group and the comparison group. On the Perception of Others scale of Index of Personality Characteristics a significant interaction was found between the peer mediator group and the control group ( $F=9.94$ ,  $p<.0001$ ), but not between the peer mediator group and the comparison group. The Perception of Self and Perception of Others scales together form the Social Perception Dimension of the Index of Personality Characteristics. The scores imply how students perceive themselves and their interactions with others. The peer mediators had a more positive perception of themselves than the comparison or control group. See Table 3 for Analysis of Covariance (ANCOVA) measuring self concept.

Table 3

## Summary Table for Analyses of Covariance Measuring Self Concept

Characteristic Expression	<u>n</u>	Pretest		Posttest		<u>Adjusted M</u>
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
<b>Self-Assured vs. Apprehensive (CPQ)</b>						
Peer Mediators B1	15	2.73	1.44	3.07	1.79	3.22
Comparison - B2	41	3.20	1.93	2.63	1.46	2.65
Control - C	24	3.63	1.71	3.42	1.82	3.30
		F = 1.61	p < .20			
<b>Perception of Self (IPC)</b>						
Peer Mediators - B1	18	115.33	17.44	125.61	15.83	126.70*
Comparison - B2	30	120.10	14.96	126.73	12.27	125.26
Control - C	30	115.83	14.84	116.73	15.23	117.55*
		* F = 4.65	p < .01			
<b>Perception of Others</b>						
Peer Mediators - B1	18	106.06	17.86	113.89	12.95	114.65*
Comparison - B2	30	107.40	16.53	116.17	8.61	116.54
Control - C	30	111.53	17.51	105.60	12.95	104.77*
		* F = 9.94	p < .0001			

### Locus of Control

Research question 3. What is the relationship between peer mediation training and mediation experience and mediators' locus of control and how are the effects similar or different for students who are not trained as mediators?

Locus of control was examined by using Analyses of Covariance to compare pretest and posttest measures. Scales included Internal Locus of Control and External Locus of Control scales of Index of Personality Characteristics. A significant interaction between peer mediators and the control group was found ( $F=4.45$ ,  $p<.01$ ) but not between the peer mediators and the comparison group on the Internal Locus of Control scale of Index of Personality Characteristics. On the External Locus of Control scale of Index of Personality Characteristics a significant interaction between peer mediators and the control group was found ( $F=6.33$ ,  $p<.003$ ) but not between the peer mediators and the comparison group. The Internal Locus of Control and External Locus of Control scales together form the Locus of Control Dimension of the Index of Personality Characteristics. They show the degree to which children accept responsibility for their own behavior and its consequences or believe that they exercise some control over the events in their lives. Higher scores on both scales indicate children are predominantly self-controlling. These children have a stronger belief in their own ability to influence the events of their lives and they have a tendency to accept responsibility for their own behavior. See Table 4 for Analysis of Covariance (ANCOVA) measuring locus of control.

Table 4

## Summary Table for Analyses of Covariance Measuring Locus of Control

Characteristic Expression	<u>n</u>	Pretest		Posttest		<u>Adjusted M</u>
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Internal Locus of Control (IPC)						
Peer Mediators - B1	18	61.00	7.44	65.39	6.69	65.49*
Comparison - B2	30	61.63	7.76	65.60	6.37	65.58
Control - C	30	61.70	10.31	61.47	5.51	61.43*
		* F = 4.45 <u>p</u> < .01				
External Locus of Control (IPC)						
Peer Mediators - B1	18	98.00	21.37	107.56	15.15	108.72*
Comparison - B2	30	102.27	16.57	109.47	11.37	108.63
Control - C	30	100.20	16.23	98.73	16.42	98.87*
		* F = 6.33 <u>p</u> < .003				

### Disruptive Students

Research question 4. If effects of peer mediation training and mediation experience are found, how are the effects similar or different for mediators who are considered to be "disruptive" students?

To analyze effects of the peer mediation program on students labeled as disruptive an Analyses of Covariance was used to compare pretest and posttest measures of the Index of Personality Characteristics and the Children's Personality Questionnaire. Students were labeled as "disruptive" by a team of four, fifth grade teachers and the school administrator. Qualifications to be considered disruptive include; off task behavior, nonconformity to classroom and school rules, problems getting along with other children, and more than an average number of office referrals for inappropriate behavior. The committee labeled six of the fifteen students as disruptive.

Scales used for analysis included Affected by Feelings vs. Emotionally Stable, Undisciplined Self-Conflict vs. Controlled, Self-Assured vs. Apprehensive portions of the Children's Personality Questionnaire, and Acting In, Acting Out, Perception of Self, Perception of Others, Internal Locus of Control External Locus of Control scales of the Index of Personality Characteristics. A significant difference was not found on any scale, but an interesting trend was discovered. On eight of nine scales, children labeled as disruptive made gains, almost equal to standard score standard deviations in the area of self-concept, self-control, and locus of control. On the External Locus scale, disruptive students increase their scores by more than one standard deviation from the standard score mean. Although no significant differences were found, discussion concerning the implications is warranted.



### Self Control of Disruptive Students

The adjusted mean on the Affected by Feelings vs. Emotionally Stable scale (IPC) was slightly higher for the disruptive group. Although no significant interaction was found, the disruptive group's scores increased twice that of the non-disruptive group. This increase indicates that students labeled as disruptive made greater gains towards emotional stability and maturity.

On the Undisciplined Self-Conflict vs. Controlled (IPC), both groups had small decreases in scores which approached the standard score mean. The disruptive adjusted mean was in line with the standard mean where as the non-disruptive group was not.

On the Acting In and Acting Out scales disruptive students' scores increased more than three times those of the non-disruptive students. On both scales the disruptive students originally had scores at least one standard deviation below the standard score mean and increased their scores to nearly the mean. Although no statistically significant interactions were found, disruptive students tended to increase their levels of self control at a greater rate than those of the other students. See Table 5 for Analysis of Covariance (ANCOVA) measuring self control of disruptive students.

Table 5  
Summary Table for Analyses of Covariance -- Self Control of "Disruptive" Students

Characteristic Expression	<u>n</u>	Pretest		Posttest		<u>Adjusted M</u>
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
<b>Affected by Feelings vs. Emotionally Stable (CPQ)</b>						
Standard Scores		5.77	2.41			
Disruptive	6	6.33	3.39	8.50	2.35	9.10
Not Disruptive	9	7.89	1.83	9.00	1.94	8.60
<b>Undisciplined Self-Conflict vs. Controlled (CPQ)</b>						
Standard Scores		6.86	2.09			
Disruptive	6	7.00	3.35	6.67	1.97	6.88
Not Disruptive	9	8.78	1.92	8.22	1.39	8.08
<b>Acting In Scale (IPC)</b>						
Standard Scores		73.13	11.82			
Disruptive	6	55.33	15.67	66.83	9.87	70.19
Not Disruptive	12	66.42	9.30	69.75	9.12	68.07
<b>Acting Out Scale (IPC)</b>						
Standard Scores		72.96	13.23			
Disruptive	6	55.50	14.98	68.17	12.84	78.38
Not Disruptive	12	75.92	6.97	78.83	6.69	73.73

### Self Concept of Disruptive Students

Self concept was examined by using Analyses of Covariance to compare pretest and posttest measures. The adjusted mean on the Self-Assured vs. Apprehensive scale (IPC) was lower for the disruptive group. Although no significant interaction was found, the disruptive group's scores decreased whereas the scores of the non-disruptive group increased. This decrease in scores indicate that students labeled as disruptive made movement towards being self assured, confident, and secure. The non-disruptive group's scores indicate a move towards being more apprehensive.

On the Perception of Self and Others scales (IPC), the disruptive group's scores increased more than twice those of the non-disruptive group. This large, though not statistically significant, gain showed greater growth in the area of self concept for students in the disruptive group. See Table 6 for Analysis of Covariance (ANCOVA) measuring self concept of disruptive students.

Table 6

Summary Table for Analyses of Covariance Measuring Self Concept of "Disruptive"Students

Characteristic Expression	n	Pretest		Posttest		<u>Adjusted M</u>
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
<u>Self-Assured vs. Apprehensive (CPQ)</u>						
Standard Scores		3.18	1.82			
Disruptive	6	3.33	1.37	3.00	2.19	2.50
Not Disruptive	9	2.22	1.30	2.89	1.27	3.22
<u>Perception of Self (IPC)</u>						
Standard Scores		125.45	21.48			
Disruptive	6	101.67	19.33	118.00	20.53	129.57
Not Disruptive	12	122.17	12.14	129.42	12.18	123.63
<u>Perception of Others (IPC)</u>						
Standard Scores		106.29	17.40			
Disruptive	6	90.33	18.78	105.67	16.48	115.94
Not Disruptive	12	113.92	11.41	118.00	8.96	112.87

### Locus of Control of Disruptive Students

Locus of Control was examined by using Analyses of Covariance to compare pretest and posttest measures. Internal Locus of Control and External Locus (IPC) were used to measure changes in locus of control. These two indicators show the degree to which children accept responsibility for their own behavior and its consequences or believe that they exercise some control over the events in their lives. Higher scores on both scales imply that children are predominantly self-controlling. These children have a stronger belief in their own ability to influence events of their lives and they have a tendency to accept responsibility for their own behavior. On both scales, the disruptive group made greater gains in the area of locus of control than did the group labeled non-disruptive, with the external scale showing an average gain of 26 points for the disruptive group. See Table 7 for Analysis of Covariance (ANCOVA) measuring locus of control of disruptive students.

Table 7

Summary Table for Analyses of Covariance Measuring Locus of Control of "Disruptive" Students

Characteristic Expression	<u>n</u>	Pretest		Posttest		<u>Adjusted M</u>
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Internal Locus of Control (IPC)						
Standard Scores		61.37	10.19			
Disruptive	6	57.33	6.41	63.67	8.96	63.84
Not Disruptive	12	62.83	7.47	66.25	5.50	66.12
External Locus of Control (IPC)						
Standard Scores		105.91	14.71			
Disruptive	6	81.00	25.06	99.00	16.02	107.99
Not Disruptive	12	106.50	13.55	111.83	13.35	107.34

### Number of Conflicts Referred to School Administrators

Research question 4, What is the relationship between being a peer mediator and number of conflicts referred to school administrators? was investigated by using a Chi-square goodness of fit test on the frequency distribution of children referred to the office. Peer mediators were referred to the office 17 times out of a total of 93 referrals. Peer mediators represented 19 out of a total of 84 fifth graders, or twenty-three percent. Observed frequencies were 17 office referrals involving peer mediators and 76 referrals of students in the control group. Although a smaller percentage of mediators were referred to the office, 18 percent of the office referrals were peer mediators compared to the 23% of peer mediators in the population, no significant difference was found on the Chi square test for goodness of fit.

### Mutually Satisfying Resolutions

Research question 5, How effective is peer mediation in achieving mutually satisfying resolutions as perceived by disputants? was investigated by using a Chi-square test on the frequency distribution of children referred to the office. A significant difference was found ( $p < .0001$ ). Approximately 95.8 percent of the peer mediated conflicts resulted in mutually satisfying resolution as perceived by disputants.

### Qualitative Follow-up

Semistructured interviews were conducted with all participants in the peer mediation group as an additional part of data collection. This interview added depth to the quantitative information investigated in questions 1, 2, 3, and 4. During the semistructured interview, the interviewer asked a series of structured questions and then probed more deeply, using open-ended questions in order to acquire more complete data. Student responses to each question were grouped into categories to discover similarities,

differences, and anomalies. The structured part of the interview contained six questions and responses:

What did you like about the peer mediation program?

Approximately seventy-two percent of the peer mediators responded that they liked the program because they helped kids solve problems. This allowed children to stop fighting and stay or become friends. About fourteen percent of those interview said they liked the program because they learned better ways to solve their own problems. These respondents believed they had more self-control after they participated in the program. Another fourteen percent thought it was fun to be in the program because of the parties and their friends.

What did you dislike about the peer mediation program?

The response most often stated was "nothing." The mediators said they like all aspects of the mediation program. One student said they wished the school year would not end. About thirty-six percent of the respondents talked about difficulties discovered during the mediation process. Comments expressed included concern about disputants not listening to mediators, arguments between disputants were hard to handle, difficulty in helping opponents understand what the problem was, and the feeling of failure when a conflict was not resolved.

How did you resolve conflicts before peer mediation training?

Half of the respondents interviewed said they normally dealt with conflicts by yelling, talking back, arguing, and fighting. Ignoring a conflict was the strategy used by twenty-five percent of the peer mediators to handle conflicts prior to mediation training. An additional twenty-five percent stated that an adult such as a teacher or administrator resolved the conflict.

How do you resolve conflicts now?



All of the peer mediators responded that they would talk out the problem and find an agreed upon solution themselves or would seek out a peer mediator to help them with the process. They expressed the importance of calming the other person, investigating what the real problem was, being a good listener, and reaching a resolution that satisfied both participants. One mediator said "hurt the problem not the person".

How do you feel you have changed as a result of the program?

Seventy-three percent of the mediators reported a positive change in their behavior and attitude concerning conflict resolution. They felt they were nicer to others, not as picky with siblings, talked instead of knocking people in the mouth, listened better, and expressed their feelings more. One mediators said "I feel more special". A few mediators, two, said they did not know how they had changed and one student did not feel that he had changed at all.

Do you notice any difference in your self-control?

Every one of the peer mediators felt they had better self-control after participating in the mediation program. They said they had more control over their temper, were not as picky as before, did not yell as much or get as mad, and they talked more instead of fighting. One girl said, "I got dad's temper but don't lose it anymore". In a psychological evaluation completed by a psychologist on one of the peer mediators the following comment was made. "According to XXXX, he used to fight a lot. Since becoming a 'peer mediator' at school the fighting has stopped.

Do you notice any difference in your self-concept (how you feel about yourself)?

All of the interviewed mediators, except for one, expressed the opinion that they felt better about themselves after participating in the peer mediation program. They said they were nicer, cared more about others, and did not get in as much trouble. A girl said, "Before I didn't like myself. I was a geek and slime ball. Now I am very smart and finish

goals". A boy declared, "oh yeah, when I would get mad I'd let it build up and horrible things would happen. Now I know I can talk about it and the cause of it. The one boy who did not feel as though his self-concept changed said, "I always felt good about myself and I still do". In a psychological evaluation completed by a psychologist on one of the peer mediators the following recommendation was made. "Continue XXXX's role as a 'peer mediator', as this seems to have instilled confidence."

Do you notice any difference in your locus of control (self motivated or motivated by others)?

All peer mediators commented that they believed they were more self motivated because they participated in the program. A girl stated, "I only did good things before only if I got money or stuff. Now I like to help cause in the end you are rewarded by how you feel, not what you get" Two girls stated that before they really did not care how others felt but now they do because they want to, not because others tell them to care.

What would you do differently now that you have been in the program when faced with a conflict?

All peer mediators responded that they would control themselves more and try to discover how to solve the problem. They felt communication was important and they also believed they should stand up for themselves and others when involved in a conflict. One boy said he would "try to solve problems using heads not fists".

Would you like to be a peer mediator next year?

Every peer mediator said "yes", they really wanted to be involved in the peer mediation program next year. They responded that they thought it was fun and important to help people solve problems. Peer mediators also said it helped them control

themselves. "I'd fight like I used to if I couldn't be a mediator." "I still want to be better than I am now."

## CHAPTER 5

### DISCUSSION

Although peer mediation programs, under a variety of names and labels, have been started in schools, relatively little empirical research is available concerning effects of these programs on students or the impact peer mediation training and mediation experience have on mediators.

This study gave fifth grade students, at a crucial stage in moral development, who crave control of their environment, a chance to increase their self-control and self concept through their experience in a peer mediation program. Effects of peer mediation training and mediation experience on mediators' self-control, self-concept, and locus of control were investigated using a peer mediation program that encompassed cooperative learning, control theory, and students' needs. In addition, the number of conflicts referred to school administrators was examined and the percent of mutually satisfying resolutions was computed. This study used peer mediation as the primary strategy used to teach conflict resolution skills.

#### Quantitative and Qualitative Analysis

##### Self Control

Investigation in the areas of the relationship mediation training and mediation experience had on mediators' self-control was limited in previous studies. In studies in which effects of peer mediation were found, discussions of mediators' behavior prior to or following implementation of the program was not discussed. Miller (1994) examined

140 fourth grade students involved in a peer mediation program during a twelve week period. No significant effect was found to exist on the dependent measures of total scores obtained on the Behavior Dimensions Rating Scale (BDRS). Miller concluded that the implementation of a peer mediation program does not influence behavior over a relatively short period of time. Burrell and Vogl (1990) reported on a peer mediation program implemented in Milwaukee. They stated that Milwaukee teachers reported less fighting and disruptive behavior as a result of the peer mediation program. Previous studies concerning effects peer mediation training and mediation experience had on students self control were inconclusive.

Effects peer mediation training and mediation experience had on students self control was investigated in this study. A significant interaction between trained peer mediators and the group from another school was found but not between the peer mediators and the untrained student group in their same school on three of the four measures used to evaluate self-control. The significant difference in the scores between the two schools may be attributed to the implementation of the mediation program or to the general school climate at the experimental setting. The fifth grade team of teachers at the peer mediation school employs numerous motivational and behavioral management techniques that are not utilized at the control school. These may or may not account for the significant differences between the two schools.

Taken into consideration that results were not significant between the peer mediators and the other students in their school, the peer mediators' mean score did increase slightly more than the control groups' mean scores on each of the three measures used to evaluate self-control. The higher increase in the means indicates that peer mediators showed an increase in ego strength, emotional control, stability, and they had more controlled behaviors. Peer mediators labeled as disruptive had a mean score difference at least

twice as much as the non-disruptive group. The small size of the groups did not give power needed to yield statistical significance. It is possible that if a larger number of students had been used, the results may have been significant.

No significant interaction between peer mediators B1, comparison group B2, nor control group C was found on the Undisciplined Self-Conflict vs. Controlled portion of the Children's Personality Questionnaire. Children with a higher score are more self-controlled, strive to accept approved ethical standards, ambitious to do well, concerned with social image, considerate of others, and are disposed to reduce and control expressions of emotion. The adjusted mean for the peer mediation group was a little higher than the comparison group but the students labeled as disruptive were more than a full point higher, out of ten, than those of the comparison group.

During the semi-structured interview, peer mediators were asked if they noticed any difference in their self-control. Every one of the peer mediators felt they had better self-control after participating in the mediation program. They said they had more control over their temper, were not as picky as before, did not yell as much or get as mad, and they talked more instead of fighting. One girl said, "I got dad's temper but don't lose it anymore". In a psychological evaluation completed by a psychologist on one of the peer mediators the following comment was made. "According to XXXX, he used to fight a lot. Since becoming a 'peer mediator' at school the fighting has stopped. Statistical analysis and interview questions, although not statistically significant, were encouraging. The results add pertinent information where there previously was none, concerning self-control. Peer mediator's scores, especially, those of students labeled as disruptive, showed a greater increase in self-control compared to students at the comparison school, and a significant difference over those at the control school.

Increased self control or students' perception of an increase in self control is an important factor in social-emotional growth of children. Peer mediators, especially students categorized as disruptive, believed they gained more self control following their involvement in the mediation program. This perception was validated by the growth shown during statistical analysis. Learning skills needed to resolve conflicts, coupled with mediation practice gave mediators a feeling of power to control events in their lives. Mediators were excited about resolving conflicts to the point of actively seeking out students with conflicts. They verbalized their feelings so freely that their classmates requested involvement in the program. How exciting to have students look for a conflict to solve rather than look to create a conflict.

William Glasser's control theory suggests that the only behavior over which individuals have control is their own. The message of control theory is that once its basic ideas are understood, specifically the needs, individuals can choose from an inventory of behaviors to exhibit. Control theory asserts that our behavior is always our best attempt to control the world and ourselves as part of that world so that we may best satisfy our needs. (Glasser, 1984). Attainment of power is a goal of children. Children want and need power to control situations. Conflict resolution and peer mediation training gave children power to better control the world and themselves as part of the world.

### Self Concept

Previous research was inconclusive as to the relationship between the implementation of a peer mediation program and students' self-esteem/self-concept. Research conducted by Metis Associates, Inc. (1990), Burrell and Vogl (1990), and Benson and Benson (1993) found that participation in a peer mediation program improves mediators self-esteem/self-concept. On the other hand, Tolson, McDonald, and Moriarty (1992), Roush and Hall (1993), and Miller (1994) did not find any significant change in mediators' self-

esteem/self-concept following participation in a peer mediation program. The results in this study were statistically inconclusive although they tended to show a slight increase in self concept.

On two of the three tests used to analyze self concept the peer mediators mean score differed significantly from those at the control school but not the scores of the comparison group. The significant difference in the scores between the two schools may be connected to the implementation of the mediation program itself. The environment at the peer mediation school contained variables that could not be controlled in relationship to the comparison school such as teachers who use many techniques to motivate children. Although no significant gains in self concept were reported between the mediators and the in school comparison group, the mediation group as a whole increased their "perception of self" mean score by ten points. The mediators labeled as "disruptive" increased their point total by seventeen points. This large gain in the disruptive scores was exciting. If this group contained more than a few students, powerful self concept results may have been realized.

The semi-structured interview conducted with the peer mediators yielded additional information concerning self-concept. All of the interviewed mediators, except for one, expressed the opinion that they felt better about themselves after participating in the peer mediation program. Comments such as, "Before I didn't like myself. I was a geek and slime ball. Now I am very smart and finish goals". "I am a better person." "I feel that I am nicer." "I feel better about myself because now I care." A boy declared, "When I would get mad I'd let it build up and horrible things would happen. Now I know I can talk about it and the cause of it." In a psychological evaluation completed by a psychologist on one of the peer mediators the following recommendation was made. "Continue XXXX's role as a 'peer mediator', as this seems to have instilled confidence."



Taken together the statistical analysis combined with the interview lead the researcher to conclude that the peer mediation program had a positive influence on mediators' self concept, especially mediators referred to as disruptive.

Children's feeling of self worth is important. Peer mediators stated they felt better about themselves following the program. They held their heads higher and discussed how great they felt whether solving a problem or looking for one to solve. How wonderful to see children excited about dealing with conflict. They were proud of themselves and each other because they had a repertoire of knowledge and skills to make their world a more peaceful place. This increase in self concept is rooted in Maslow's Hierarchy of Needs. Safety, social, esteem, and self actualization needs are more readily met through peer mediation training and experience.

#### Locus of Control

Investigation in the areas of the relationship mediation training and mediation experience has on mediator's locus of control was not discussed in any of the research on peer mediation. The Internal and External Locus of control scales measured the degree to which children accept responsibility for their own behavior and its consequences or believe they exercise some control over the events of their lives. A higher score on the Internal Locus of Control scale is considered a more mature, positive pattern of responding to events. A lower score on this measure indicates that children are more likely to ascribe responsibility for their behavior to such things as luck, fate, circumstance, or the actions of others (Brown, 1988). A higher score on the External Locus of Control scale indicates that student are apt to accredit themselves with more ability and responsibility for control of their behavior than they ascribe to circumstance or other people.

A significant interaction between peer mediators and the control group was found but not between the peer mediators and the comparison group on the Internal and External Locus of Control scale of Index of Personality Characteristics. Higher scores on both scales indicate children are predominantly self-controlling. Similar to the measures of self-concept and self-control measures, the peer mediators mean scores were slightly higher than those of the children in the comparison group. Children labeled as disruptive made double the gains on locus of control as compared to the comparison group. On the External Locus of Control indicator the disruptive student moved from the fifth percentile rank, to two points, out of 132, of the 50 percentile rank. This large jump in external locus of control denotes that these students, prior to their participation in the program, adhered to the belief that they had very little ability or responsibility for managing their behavior. They felt that other people or circumstances, controlled their behavior. This impressive gain in locus of control merits further investigation.

During the interview with the peer mediators, all peer mediators commented that they believed they were more self motivated because they participated in the program. A girl stated, "I only did good things before only if I got money or stuff. Now I like to help cause in the end you are rewarded by how you feel, not what you get" Two girls stated that before they really did not care how others felt, but now they do because they want to, not because others tell them to care.

Locus of control is a powerful indicator related to how children explain events in their lives. Peer mediators, especially those categorized as disruptive, believed they had more control over daily happenings. They felt they had more power to influence outcomes of daily occurrences following participation in the peer mediation program. Peer mediators also believed they were motivated internally to handle these events. This control enticed

them to move towards conflict in hopes of peaceful resolution, rather than fighting or withdrawing.

According to the statistical analysis, and the findings from the interview, a slight increase in internal locus of control has been discovered for all students involved in the mediation program. The students labeled as disruptive made even greater gains. This adds vital information to the findings in the body of research concerning the merits of peer mediation programs. No previous research was found that discussed locus of control of mediators.

#### Number of Conflicts Referred to School Administrators

The relationship between being a peer mediator and number of conflicts referred to school administrators was investigated by using a Chi-square goodness of fit test on the frequency distribution of children referred to the office. Although a smaller percentage of mediators were referred to the office, no significant difference was found on the Chi square test for goodness of fit. The peer mediation program was developed and implemented by a school administrator. If the classroom teacher implemented the program, office referral may have been reduced. Although no significant interaction was discovered, this data may be helpful considering no research was found which discussed the relationship of being a peer mediator and the number of conflicts referred to school administrators.

#### Mutually Satisfying Resolutions

Effectiveness of peer mediation in achieving mutually satisfying resolutions as perceived by disputants was investigated by using a Chi-square test on the frequency distribution of children referred to the office. A significant difference was found ( $p < .0001$ ). Approximately 95.8 % of the peer mediated conflicts resulted in mutually satisfying resolution as perceived by disputants. This helps to support findings from

Burrell and Vogl (1990). They reported an 80% success rate for conflicts mediated by peer in Milwaukee. Johnson (1994) also found a large percentage, 87% of conflict mediated resulted in lasting and stable agreements. Peer mediated conflicts appear to result in mutually satisfying resolutions most of the time.

#### Recommendations for Further Research

This study had a few limitations which could be corrected for further investigations concerning peer mediation. Although the pattern of results from personality measures and interviews support positive results of peer mediation for elementary students, additional research is warranted. The small number of students was one variable which limited the strength of the conclusions. The two schools used for this study are located in a low socioeconomic area in a suburban school district, and therefore the extent to which results can be generalized to all elementary schools is restricted. Increasing the number of participating schools may produce different results. Although students were randomly selected to be trained as peer mediators not all selected students secured permission from their parents or chose to participate in the program. The attrition rate was high in all three groups therefore a larger sample, especially in the peer mediator group, would be worthy of study.

Encouraging results were discovered concerning students who participated in the program. If the number of students participating in this particular group was increased, significant results may have been found. Investigation concerning students labeled as disruptive should be more thoroughly investigated. According to this study, these students' self concept, self control, and locus of control improved more than that of the other students in all other groups. A greater number of students in this category might yield fascinating results. The peer mediation program was in effect for slightly less than one full school year. An extended peer mediation program may have offered fascinating

results. A longitudinal study focused on investigating self control, self concept, and locus of control of mediators over a few years would be worthy of study. Using mediators to train future mediators, may contribute to existing research.

Both the IPC and CPQ yielded consistent results. Both measures adequately measured self control, self concept, and locus of control as was needed for this study. Both quantitative and qualitative data obtained was based largely on students responding to questions. Children, even with the best intentions, do not necessarily report their true feeling. Data may be slightly skewed depending on truthfulness of student responses. Therefore, data collected on validity and reliability of responses may improve results.

Effects of a teacher led peer mediation program could be investigated. Training a group of teachers to effectively implement a program in their classroom would produce additional questions deserving of exploration. How would teachers change as a result of peer mediation program involvement? What effects would a program have on classroom or school climate? What additional implications would be discovered?

#### Theoretical Implications

This study contributes to the body of knowledge relating to effect of peer mediation. Several theories support the implementation of a peer mediation program to teach students how to resolve conflicts constructively. Lewin's Field Theory (Lewin, 1948) posits that internalization of conflict resolution skills motivates children to approach and manage conflict. Kohlberg's Theory of Moral Development (Kohlberg, 1981) promotes the teaching of values and skills that contribute to a psychologically healthy and self-fulfilling life. Maslow's Hierarchy of Needs contributes to the explanation of why children are motivated to handle conflicts in certain ways (Maslow, 1954). Glasser's Control Theory (Glasser, 1984) explains behavior as cumulative results of feelings and actions on the part of children. Children want control over their lives and are willing to

use knowledge and skills to gain desired power. Johnson and Johnson's (Johnson & Johnson, 1989, 1991, 1994, 1995) work with cooperative learning offers a sound basis for working together to solve problems. Taken together, these theorists offer a theoretical basis for implementing a peer mediation program.

#### Implications for Practice

The results of this study offer encouraging implications for practice. Children who are taught how to resolve conflict constructively and then practice their knowledge and skills tend to have more self control, a better self concept, and an increase in the power they feel they have over daily occurrences. School administrators or teachers may be convinced to coordinate a peer mediation program as part of a larger school wide conflict resolution plan. Mediation is one small part of a larger school goal; to teach children to be self managing individuals.

In the past year, reports of violence involving children and at schools has shaken citizens. Children's involvement in acts of violence is escalating. In April of 1998 two children stormed their school grounds and murdered students and a teacher. A few days following this incident another student reportedly sliced students, teachers and himself with a razor blade. A student fired six bullets at a group of students waiting to enter their school for the day. This act of violence occurred at a school less than two miles from the school where the peer mediation program was implemented. What different story might have been reported if peer mediation had been available for all students in the school district? Although peer mediation cannot promise an end to all of children's problems or violence, it may be one powerful preventative technique.

## APPENDIX

## APPENDIX

### Peer Mediation Problem Solving Process

#### Peer Mediation Problem Solving Process

##### Introduction

**Hi, we are peer mediators.**

**Would you like some help solving your problem? (if yes then continue)**

**I am \_\_\_\_\_ and this is \_\_\_\_\_. (shake hands) What are your names? (wait for response)**

**Do you know about peer mediation?**

**-We are students helping students.**

**-We will not take sides.**

**-Both of you will get a turn to talk.**

**-We will not judge you or tell you what to do.**

**-Everything you tell us will be confidential. That means that we will not tell anyone what you say unless you tell us something that is against the law or that could hurt you or someone else.**

**Before we can begin the mediation process we have some rules you must agree to.**

**-Do you agree to try to solve the problem?**

**-Do you agree to tell the truth?**

**-Do you agree to not interrupt?**

**-Do you agree to no name-calling or put downs?**

**-Do you agree to speak directly to us?**

##### Investigating the problem

**Ask person #1 Tell us what happened and how you feel? Restate including feelings.**

**Ask person #2 Tell us what happened and how you feel? Restate including feelings.**

**Ask person #1 Is there anything that you would like to add? Restate including feelings.**

**Ask person #2 Is there anything that you would like to add? Restate including feelings.**

##### Working towards a solution

**Ask person #2 What would you like to see happen to help solve this problem? Restate**

**Ask person #1 What would you like to see happen to help solve this problem? Restate**

**Ask person #1 What can you do to solve this problem? Restate.**

**Ask person #2 What can you do to solve this problem? Restate.**

Help students reach a solution that they both think is good. Write the agreement. Have each of them sign the agreement.

##### Ending the peer mediation process

**Say, Congratulations. You worked hard to solve your problem!**

**(If there is no agreement say, You are not ready to solve your problem. Please come back when you are ready to work things out.)**



## Mediation and Referral Form

### Mediation Referral and Report Form

**Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_ to \_\_\_\_\_

**Name of person making referral:** \_\_\_\_\_

**Location of Conflict:**

Classroom     Hall     Playground     Cafeteria  
 Bathroom     Outside     Other ( \_\_\_\_\_ )

**Type of Conflict:**

Touching     Teasing     Threatening  
 Name Calling/Put-downs     Rumor/Gossip     Property  
 Friendship     Other ( \_\_\_\_\_ )

**Disputants:**

\_\_\_\_\_ Grade \_\_\_\_\_ Gender \_\_\_\_\_  
 \_\_\_\_\_ Grade \_\_\_\_\_ Gender \_\_\_\_\_

**Was the conflict resolved?**  Yes     No

**Resolution Agreement:**

The disputants agreed to: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Signed:**

Disputants: \_\_\_\_\_ Mediators: \_\_\_\_\_  
 \_\_\_\_\_ Are you satisfied with the resolution? \_\_\_\_\_  
 \_\_\_\_\_ Are you satisfied with the resolution? \_\_\_\_\_

**Follow-up:**

Date: \_\_\_\_\_ Person doing the follow-up: \_\_\_\_\_  
 Results: \_\_\_\_\_  
 Comments: \_\_\_\_\_

Semistructured Interview

\_\_\_\_\_  
Name

1. What did you like about the peer mediation program?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. What did you dislike about the peer mediation program?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. How did you resolve conflicts before peer mediation training?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. How do you resolve conflicts now?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. How do you feel you have changed as a result of the program?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

a. Do you notice any difference in your self-control? Explain.

\_\_\_\_\_

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b. Do you notice any difference in your self-concept (how you feel about yourself)?

Explain.

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c. Do you notice any difference in your locus of control (self motivated or motivated by others)? Explain.

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6. What would you do differently now that you have been in the program when faced with a conflict?

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7. Would you like to be a peer mediator next year? Why or why not?

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8. Additional information.

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## Peer Mediation Training Program

### Day 1

- Activity 1:** Overview of the program
- Duration:** 60 minutes.
- Materials:** Peer Mediation Folders, pencils, paper, video, VCR
- Objectives:** To provide an overview of the peer mediation program.
- Vocabulary:** Mediation, Peer, Peer Mediation
- Instruction:** With help from the students, define and discuss the vocabulary words.
- Overview of training content
- learn about conflict
  - learn speaking, listening, mediation, and negotiation skills
  - practice skills
  - mediate conflicts
- Activities:** Watch video
- Closure:** Redefine vocabulary words

### Day 2

- Activity 2:** What is conflict? How do you deal with conflict. (Modified Activity 4-Schmidt and Activity 3 in Training Manual)
- Duration:** 60 minutes
- Materials:** Peer Mediation Folders, chalk board
- Objectives:** To realize that conflict is inevitable and natural.
- To realize that the way in which conflict is handled is what makes it constructive or destructive
- Vocabulary:** Conflict, constructive and destructive

- Instruction:** Tell students that conflict is inevitable and natural and the way in which conflict is handled makes it constructive or destructive.
- Activities:** Brainstorm and list on the board what conflict is - discuss.  
Brainstorm and list on the board what causes conflict - discuss.  
In groups of four, students will discuss ways to deal with conflict.  
They will decide as a group which ways are constructive and which are destructive.  
They will present their discussion to the whole group.
- Closure:** Review conflict, causes, and ways to handle conflict.
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#### Day 3

- Activity 3:** Activity 5 Fighting Fair Mediation (Schmidt, 1994).  
**Duration:** 30 minutes
- Activity 4:** Activity 7 Conflict clues/The hassle line (Schmidt, 1994).  
**Duration:** 30 minutes
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#### Day 4

- Activity 5:** Activity 8 Feelings count (Schmidt, 1994)  
**Duration:** 30 minutes
- Activity 6:** Activity 9 Listening behaviors (Schmidt, 1994)  
**Handout:** Steps to I Care Listening pg. 12c (Schmidt, 1991)  
**Duration:** 30 minutes

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Day 5

Activity 7: Activity 10 If I had a million dollars (Schmidt, 1994)

Duration: 30 minutes

Activity 8: Activity 11 Effective listening (Schmidt, 1994)

Duration: 30 minutes

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Day 6

Activity 9: Activity 14 Effective questioning (Schmidt, 1994)

Duration: 30 minutes

Activity 10: Activity 5 Role of mediator and Principles of mediation (Modified-  
Training Manual)

Duration: 30 minutes

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Day 7

Activity 11: Activity 15 (modified) Simulated Mediation Session (Schmidt, 1994)

Duration: 60 minutes

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Day 8

Activity 12: Activity 16 (modified) (Schmidt, 1994)

Duration: 60 minutes

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Day 9

Activity 13: Organization of the program, sign Mediator's Commitment. Give out  
Certificate of Completion. Celebrate completion of initial training

Duration: 60 minutes

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