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ABSTRACT

The effectiveness of peer mediation in secondary schools is evaluated to determine if the process is beneficial to the disputants. A review of information on the use of mediation in schools is included, and programs in this school system are described. This study investigates perceptions from high school disputants (N=111) in an ethnically diverse suburban public high school system of the short-term impact of the peer mediation process. The following factors were examined: (1) The number of agreements still in effect 5-7 days after mediation; (2) Whether the disputants could describe what the dispute and/or agreement was about; (3) Could the disputants describe what happened to them during the process that brought them to a successful signing of an agreement? and (4) Disputants' perceptions of the mediators during the process. Success rates were compared to demographic characteristics of the disputants. Findings indicate that peer mediation is successful for students of all ethnic backgrounds. Significant findings are presented in the areas of: (1) The fairness of the agreement compared to ethnicity and age; (2) The length of time the disputants had known one another compared to the strength of the agreement; and (3) the ethnicity of the disputant compared to whether or not they would use mediation in the future. Appendix A is the Disputant Assessment form. Appendix B is the Structured Interview Questions. Appendix C is the Disputant Survey. Appendix D surveys the relationship of questions to the research questions. Appendix E is the interrater reliability for Research Question 6A. (Contains 85 references and 32 tables.) (EMK)

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An Analysis of the Short-Term Impact
of Peer Mediation on High School Disputants
In An Ethnically Diverse Suburban School System

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A Dissertation submitted to

The Faculty of

The Graduate School of Education and Human Development
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Abstract of Dissertation

An Analysis of the Short-Term Impact of Peer Mediation on High School Disputants in an Ethnically Diverse Suburban School System

The purpose of this study was to investigate perceptions from high school disputants in an ethnically diverse suburban public school system on the short-term impact of the peer mediation process. A total of 111 disputants provided data for this study.

The disputants' perceptions were surveyed and analyzed. The following factors were examined to determine the short-term impact of peer mediation; the number of agreements still in effect 5 to 7 days after mediation, and whether or not the disputants could describe what the dispute and/or agreement was about. The more important question addressed was could the disputants describe what happened to them during the process that brought them to a successful signing of an agreement? Success rates were compared to several demographic characteristics of the disputants. The final research questions addressed the disputants' perceptions of the mediators during the process.

Findings indicated that peer mediation was successful for students of all ethnic backgrounds. Significant findings were found in the areas of the fairness of the agreement compared to ethnicity and age, the length of time the disputants had known one another compared to the strength of the agreement, and the ethnicity of the disputant compared to whether or not they would use mediation in the future.

Dedication

To the two most important people in my life!

My sons,

Christopher Joseph Kolan

and

Carl Joseph Kolan

And to:

My family who have always been there for me
when I needed them most:

My Mother, Mrs. Ruth Kaiser,
My Brother, Mr. Keith Jambretz, and
My Sister, Ms. Karen Laufenberg

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Table of Contents

Abstract-----	i
Dedication-----	ii
Acknowledgments-----	iii
List of Tables-----	vi

Chapter One: INTRODUCTION

Introduction-----	1
Statement of the Problem-----	3
Statement of the Purpose-----	4
Theoretical Framework-----	5
Research Questions-----	8
Hypotheses-----	10
Assumptions-----	12
Limitations-----	12
Delimitations-----	12
Definition of Terms-----	13

Chapter Two: LITERATURE REVIEW

Introduction-----	16
Theoretical Framework-----	17
Current Status of Violence in High Schools-----	26
Current Strategies Used to Prevent Violence-----	27
Historical Perspective on Mediation-----	28
Historical Perspective on School-Based Peer Mediation Programs-----	30
Current Status of School-Based Peer Mediation Programs-----	33
Benefits of Peer Mediation Programs-----	35
Components of Effective Peer Mediation Programs-----	37
Resources Needed for Effective Peer Mediation Programs-----	42
Current Status of Research on Peer Mediation Programs-----	45
Summary-----	51

Chapter Three: METHODOLOGY

Methods and Procedures-----	54
Location of the Study-----	56
Sample and Population-----	56
Research Design-----	60
Instrumentation-----	61
Data Analysis-----	64
Categorization of the Data-----	64
Summary-----	66

Chapter Four: RESULTS

Introduction-----	68
Research Question #1-----	71
Research Question #2-----	72
Research Question #3-----	73
Research Question #4-----	86
Research Question #5-----	89
Research Question #6-----	91
Research Question #7-----	93
Research Question #8-----	95
Research Question #9-----	96
Structured Interview Results-----	99
Summary-----	101

Chapter Five: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction-----	103
Implications of Results-----	105
Research Question #1-----	107
Research Question #2-----	108
Research Question #3-----	109
Research Question #4-----	114
Research Question #5-----	116
Research Question #6-----	116
Research Question #7-----	118
Research Question #8-----	120
Research Question #9-----	121
Conclusions-----	122
Recommendations for Future Research-----	124
Summary-----	127

References-----	131
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Appendixes

Appendix A: Disputant Assent Form-----	141
Appendix B: Structured Interview Questions-----	142
Appendix C: Disputant Survey-----	143
Appendix D: The Relationship of the Survey Questions to the Research Questions-----	145
Appendix E: Inter-rater reliability for Research Question #6A-----	150

List of Tables

	<u>Title</u>	<u>Page</u>
1	Demographics of Schools Collecting Data-----	59
2	Summary of results-----	70
3	Frequencies & Percentages of Successful Mediations-----	71
4	Frequencies & Percentages of Administration & Security Referrals-----	71
5	Frequencies & Percentages of Agreements in Effect 5-7 Days After Mediation-----	72
6	Frequencies & Percentages of Agreements by Dispute Type in Effect 5-7 Days After Mediation-----	72
7	Frequencies & Percentages of Strong and Weak Agreements---	74
8	Frequencies & Percentages of the Strength of the Resolution by Grade Level-----	74
9	Frequencies & Percentages of the Strength of the Resolution by Age-----	75
10	Frequencies & Percentages of the Strength of the Resolution by Grade Point Average-----	76
11	Frequencies & Percentages of the Strength of the Resolution by Disputants Receiving Special Education Services-----	77
12	Frequencies & Percentages of the Strength of the Resolution by Disputants Receiving ESOL Services-----	78
13	Frequencies & Percentages of the Strength of the Resolution by Gender-----	79
14	Frequencies & Percentages of the Strength of the Resolution by Culture-----	80
15	Frequencies & Percentages of the Strength of the Resolution by Whether or Not the Disputant had used Mediation Previously-----	81
16	Frequencies & Percentages of the Strength of the Resolution by Attendance-----	82
17	Frequencies & Percentages of the Strength of the Resolution by Length of Time the Disputants Had Known One Another----	83
18	Frequencies & Percentages of the Strength of the Resolution by the Type of Relationship the Disputants had Before Mediation-----	84

List of Tables Continued

<u>Title</u>	<u>Page</u>
19 Frequencies & Percentages of Whether or Not the Disputants Thought the Mediation Process was Helpful to Them-----	86
20 Reasons Disputants Thought Mediation was Helpful-----	87
21 Reasons Disputants Thought Mediation was Not Helpful-----	87
22 Frequencies & Percentages of Whether or Not the Disputants Thought Mediation was Helpful to the Other Disputant-----	88
23 Reasons Disputants Thought Mediation was Helpful to the Other Disputant-----	88
24 Reasons Disputants Thought Mediation was Not Helpful to the Other Disputant-----	89
25 Frequencies & Percentages of Whether or Not Disputants Felt the Agreement was Fair at the Time of Mediation -----	89
26 Frequencies & Percentages of Whether or Not Disputants Felt the Agreement was Fair at the Time of Mediation by Age----	90
26.1 Standardized Residuals of Whether or Not the Disputants Felt the Agreement was Fair at the Time of Mediation by Age----	91
27 Frequencies & Percentages of Types of Disputes-----	92
28 Frequencies & Percentages of Disputants Able to Report the Mediation Agreement 5-7 Days After Mediation-----	92
29 Disputants' Descriptions of What Happened in the Mediation Process That Brought About An Agreement For Them-----	94
30 Frequencies & Percentages of How the Disputants Perceived the Mediators In All Categories-----	96
31 Frequencies & Percentages of Whether or Not the Disputant Would Use Mediation in the Future-----	96
32 Frequencies & Percentages of Whether or Not the Disputants Would Use Mediation in the Future by Culture-----	97
32.1 Standardized Residuals of Whether or Not the Disputant Would Use Mediation in the Future by Culture-----	98

Chapter One

Introduction

The primary business of schools is to educate students. Unfortunately, many students are more concerned with their own safety than on the content being taught in classes (Buckner & Flanary, 1996; Hill, 1996; Kirleis, 1995; Rogers, 1994). Learning cannot take place in an atmosphere of fear or intimidation (Heller, 1996). A safe environment allows a student to focus on academics. One of the goals of peer mediation programs is to help promote a safe environment. In order to make schools peaceful places in which high quality education can take place, conflicts must be managed constructively and without physical violence (Johnson & Johnson, 1996).

Violence is one of the most significant problems confronting public schools today (Elam, Rose, & Harris, 1994; Gill & Frierson, 1995; Girard & Koch, 1996; Johnson & Johnson, 1996; Kirleis, 1995; Rowicki & Martin, 1994; Wilson-Brewer, Cohen, O'Donnell, & Goodman, 1991). Efforts to manage and curb violence and conflict in high schools are of national concern (Malm, 1992; Office of Educational Research and Improvement, 1993; Rogers, 1994; VanAcker, 1993). Even more of a concern to educators is that violent behaviors and aggression are on the rise (Kolan, 1995; Malm, 1992; Morse & Andrea, 1994). Most school systems, without regard to their size, population, economic status, or

geographical location have seen this rise in incidents of violence (Hale, Farley-Lucas, & Tardy, 1994; Kolan, 1995; Prothrow-Stith, 1991; Wilson-Brewer et al., 1994). There is evidence that the increase in violence will continue unless something dramatic and decisive is done.

Schools have most prevalently used in-school suspensions, out-of-school suspensions, or expulsions for repeated acts of violence (Rogers, 1994). These strategies do serve as an immediate consequence for inappropriate behavior, but they do not serve as an intervention to help students feel in control of the situation nor do they teach coping strategies.

Peer mediation has been introduced as one strategy to teach students how to cope and handle conflicts before an act of violence occurs (Cutrona & Guerin, 1994; Gill & Frierson, 1995; Hale et al., 1994; Johnson & Johnson, 1996; Khattri, 1991; Lish, 1993; Malm, 1992; Morse & Andrea, 1994; Office of Educational Research and Improvement, 1993; Prothrow-Stith, 1991; Robertson, 1991; Rogers, 1994; Rowicki & Martin, 1994; Smith, 1993). The National Association for Mediation in Education (NAME) estimated that there were approximately 2,000 peer mediation programs in 1992, but between 5,000 to 8,000 such programs by 1994 (Gill & Frierson, 1995; Johnson & Johnson, 1996).

Due to the dramatic rise in the number of programs, training competent peer mediators is crucial. Peer mediation programs

teach students to practice and model tolerance that may eventually prevent and settle conflicts peacefully. (Cutrona & Guerin, 1994). Peer mediation programs potentially offer an empowering, humanistic, and educational alternative to violence (Johnson & Johnson, 1996b).

Statement of the Problem

Violence is one of the most significant problems facing schools today (Elam et al., 1994; Gill & Frierson, 1995; Johnson & Johnson, 1996; Kirleis, 1995; Rowicki & Martin, 1994; Wilson-Brewer et al., 1991). Peer mediation programs are one school systems attempt to control and prevent acts of violence. These programs have been introduced as one strategy to teach students how to cope and handle conflicts before an act of violence occurs (Cutrona & Guerin, 1994; Gill & Frierson, 1995; Hale et al., 1994; Johnson & Johnson, 1996; Khattri, 1991; Lish, 1993; Malm, 1992; Morse & Andrea, 1994; Office of Educational Research and Improvement, 1993; Prothrow-Stith, 1991; Robertson, 1991; Rogers, 1994; Rowicki & Martin, 1994; Smith, 1993).

Peer mediation programs have advanced significantly over the past decade (Johnson & Johnson, 1996). While the number of schools in which programs may be found has at least doubled between 1992 and 1994, research and evaluation of these programs has lagged behind (Cutrona & Guerin, 1994; Johnson & Johnson,

1996; Khattri, 1991; Morse & Andrea, 1994; Wilson-Brewer et al., 1991). Peer mediation programs are not evaluated on what they are doing, how they are doing it, or how broadly their efforts can be generalized (Johnson & Johnson, 1996b). In addition, very few of these programs are directly based on a theoretical model (Johnson & Johnson, 1996). For the most part, well-meaning peer mediation coordinators are operating programs with very little research on whether or not these programs are effective for the students they are meant to have an effect on, namely, the disputants. Research on the effectiveness of peer mediation programs on disputants is in its infancy. This research will be an early attempt to determine if the peer mediation process has any short-term impact on the disputants.

Statement of the Purpose

Peer mediation programs need to be evaluated to determine if they are effective for the intended recipients, namely, the disputants. The research data to answer this question has not been collected. Furthermore, there has been little research on the factors that determine the effectiveness of high school peer mediation programs. The purpose of this study is to analyze whether or not the peer mediation process has any short-term impact on high school disputants in an ethnically diverse suburban school system. This study will examine what happens in the peer mediation process to the disputants, and try to

determine what impact the process has on them.

Theoretical Framework

The various theories of conflict suggest that conflict is a necessary and positive condition for development and growth. Therefore, schools should encourage and promote strategies to teach students how to cope and handle conflicts (Cutrona & Guerin, 1994; Gill & Frierson, 1995; Hale et al., 1994; Johnson & Johnson, 1996a, 1996b; Khattri, 1991; Lish, 1993; Malm, 1992; Morse & Andrea, 1994; Office of Educational Research and Improvement, 1993; Prothrow-Stith, 1991; Robertson, 1991; Rogers, 1994; Rowicki & Martin, 1994; Smith, 1993). Peer mediation programs teach students how to handle conflicts. Yet most schools fear that all conflicts will end in violence.

Peer mediation programs don't have the research to know how students are managing conflicts. In addition, very few of these programs being implemented in schools are directly based on a theoretical model (Johnson & Johnson, 1996b). For the most part, well-meaning peer mediation coordinators are beginning programs with very little information on the impact these programs have on the disputants. There is also very little information on how to run an effective program or the necessary components of an effective program. Peer mediation programs are being initiated in many schools in response to the increasing frequency and severity of conflicts among students without the evaluation

research of desired outcomes for the disputants (Cutrona & Guerin, 1994; Hale et al., 1994; Hill, 1996; Johnson & Johnson, 1996b; Khattri, 1991; Kolan, 1995; Lish, 1993; Malm, 1992; Office of Educational Research and Improvement, 1993; Robertson, 1991; Rogers, 1994; Rowicki & Martin, 1994; Smith, 1993; VanAcker, 1993). The cognitive developmental theory, the social-psychological theory of social interdependence, the structure-process-attitude/behavior theory, and the conflict strategies theory all postulate that conflict is a necessary and positive aspect of human development and relationships.

In order to ensure that students manage conflicts in constructive ways, schools should provide cooperative environments. Schools are particularly important institutions for providing training in peer mediation skills because of the strategic value of educating children (Zhang, 1992). Within cooperative environments, communication tends to be open and honest, perceptions tend to be accurate and constructive, trust is built and maintained, and disputants are interested in maximizing joint outcomes. Students' success in resolving their conflicts constructively tend to result in reducing the number of conflicts referred to administrators, which, in turn, tend to reduce suspensions.

There are few things more important for students to learn than a basic understanding of how cooperative interdependent

systems function and the competencies required to work cooperatively with others (Johnson & Johnson, 1989). It is the hope of educators that students have the psychological health and stability required to build and maintain career, family and community relationships to establish a basic and meaningful interdependence with other people to participate effectively in our society (Johnson & Johnson, 1989). Students are technologically, economically, ecologically, and politically interdependent. Cooperation must be established between disparate students.

When students work together to solve problems, conflicts occur. Students disagree about the nature and cause of the problems, have differing values and goals related to outcomes and means, and disagree in how much each should contribute to the problem-solving efforts. It is essential that students be taught how to understand the nature of interdependent systems, how to operate effectively within them, and how to manage conflicts (Johnson & Johnson, 1989). Peer mediation programs teach students these skills.

Violence in response to conflict is learned. Peer mediation is thought to help students unlearn this response (Office of Educational Research and Improvement, 1991). Peer mediation teaches disputants to manage conflict peacefully. This study will examine what happens in the process to the disputants, and

try to determine what impact the process has on them.

Research Questions

1. What percentage of the peer mediations ended with a written agreement?

1a. Are administration-referred mediations more likely to end with a written agreement than security-referred mediations?

2. What percentage of the written agreements are still in effect five to seven days after the mediation?

In order to analyze each subsidiary part of research question number three, the responses from survey question number seven asking the disputants what their agreement was about were categorized into "strong" and "weak".

3. What is the percentage of agreements that were strong? What is the percentage of agreements that were weak?

Does the strength of the resolution differ with regard to:

3a. Grade levels?

3b. Age?

3c. Grade point averages?

3d. Special education services received as compared with regular education?

3e. English for students speaking other languages (ESOL) services as compared with regular education?

3f. Gender?

3g. Culture?

- 3h. Previous use of mediation?
 - 3i. Attendance?
 - 3j. Length of time the disputants have known one another?
 - 3k. The disputant's relationship?
4. Do the disputants think the mediation process was helpful?
- 4a. Did the disputants think the mediation process was helpful to them?
 - 4b. Why or why not?
 - 4c. Did the disputant feel that the mediation process was helpful for the other disputant?
 - 4d. Why or why not?
5. Did the disputants feel the agreement was fair at the time of mediation?
- 5a. Is there a difference in whether or not the disputants think the agreement was fair with regard to age?
6. How much knowledge about the dispute and resolution can the disputants recall five to seven days after the mediation?
- 6a. Can the disputants report what the dispute was about five to seven days after mediation?
 - 6b. Can the disputants report the resolution five to seven days after mediation?
7. How do the disputants describe what happened in the mediation process that brought about them signing an agreement with the other disputant?

8. How did the disputants perceive the mediators during the mediation?

8a. Did the disputants trust the mediators?

8b. Did the disputants think the mediators seemed confident with the process?

8c. Did the disputants think the mediators treated them with respect?

8d. Did the disputants think the mediators genuinely listened to them?

8e. Did the disputants think the mediators understood their point of view?

9. Would the disputants use the mediation process to solve conflicts in the future?

9a. Is there a difference in whether or not the disputants would use mediation in the future by culture?

Hypotheses

1. There is no relationship between the type of dispute and whether or not it is still in effect 5-7 days after mediation.
2. There is no relationship between the strength of the resolution and grade level.
3. There is no relationship between the strength of the resolution and age.
4. There is no relationship between the strength of the

resolution and grade point average.

5. There is no relationship between the strength of the resolution and whether or not the disputants receive special education services.

6. There is no relationship between the strength of the resolution and whether or not the disputants receive English for students of other languages (ESOL) services.

7. There is no relationship between the strength of the resolution and gender.

8. There is no relationship between the strength of the resolution and culture.

9. There is no relationship between the strength of the resolution and whether or not the disputant has used the process previously.

10. There is no relationship between the strength of the resolution and attendance.

11. There is no relationship between the strength of the resolution and the length of time the disputants have known one another.

12. There is no relationship between the strength of the resolution and the type of relationship the disputants had prior to mediation.

13. There is no relationship between the age of the disputant and whether or not they felt the agreement was fair at the time of

mediation.

14. There is no relationship between the culture of the disputant and whether or not they would use mediation in the future.

Assumptions

For the purposes of this study , the following assumptions have been made:

1. Because all sites use the same training materials, there will be a limited variability factor in the mediation process.
2. Disputants will respond honestly to the survey.
3. Disputants that were identified during the nine week period of this study are assumed to be representative of the population using the peer mediation program during the school year.

Limitations

When reviewing this study, the following limitations need to be considered:

1. This study is limited by the disadvantage of collecting data via a survey.
2. This study is relying on self-reported data. This study is relying on the disputants to answer the questionnaire honestly.

Delimitations

For the purposes of focusing the scope of this study, the following delimitations will be established:

1. The sample is a large diverse suburban public school system.
2. For all but research question #1, this study is limited to

ninety-three percent of the sample.

Definition of Terms

Conflict: Conflict is an expressed struggle between at least two interdependent parties who perceive incompatible goals (Hale et al., 1994). Conflict is a normal part of life (Glass, 1994; Johnson, Johnson, Dudley, & Burnett, 1992; Krantzler & Miner, 1994; Morse & Andrea, 1994; Scherer, 1992; Schrupf, Crawford, & Usadel, 1991). Johnson and Johnson (1996) caution that if students are to manage their own conflicts constructively, they must learn to value conflicts and see them as potentially positive. Conflict is part of the process of testing and assessing oneself (Duffy, Grosch, & Olczak, 1991). It is at the root of personal and social change (Deutsch, 1973). Without conflict there would be no growth, learning, or change (Krantzler & Miner, 1994; Office of Educational Research & Improvement, 1993; Schrupf et al., 1991). What makes conflict positive or negative is how students react to it (Krantzler & Miner, 1994; Office of Educational Research & Improvement, 1993; Schrupf et al., 1991).

Disputants: The two or more students with a conflict (National Institute for Dispute Resolution, 1996).

Effective Peer Mediation Program: The peer mediation program is able to cause some desired result.

Fair: The written agreement does not favor either disputant.

High School: Students in grades nine through twelve.

Impact: For this study, the researcher is trying to determine if the disputants thought the peer mediation process was beneficial to them, if they would use it in the future, and if they could describe what part of the process brought about success for them. These three factors define "impact" for this study.

Peer Mediation: A conflict resolution option in which a mediator guides disputants through a process the intent of which is to help define the issues in the conflict, and then, help the disputants reach a mutually satisfactory agreement (Duffy et al., 1991; National Institute for Dispute Resolution, 1996).

Peer Mediation Program: A program which offers mediation as an option for resolving conflicts within the school. The following standards were used to qualify each program for this study. 1. An initial needs assessment was conducted, 2. There is on-going administrative support, 3. There is a program coordinator at each site, 4. There is training for peer mediators, 5. There is evaluation of that training by the mediators, 6. There are written referral forms, and 7. There are written agreements (National Institute for Dispute Resolution standards, 1996).

Peer Mediator: A student who has been trained to help fellow students resolve disputes by acting as a neutral and presiding over the mediation process (National Institute for Dispute Resolution, 1996). The mediator's role is to listen to each

disputant's understanding of the conflict, clarify what is said by both disputants, and facilitate the communication process (Cutrona & Guerin, 1994).

Peer Coordinator: A person who coordinates the daily operations of a peer mediation program (National Institute for Dispute Resolution, 1996).

Strong Response: An agreement where the disputants talk out their differences, address each other's feelings, and have an interest in maintaining the relationship.

Successful Mediation: A mediation that has been resolved and has a written agreement signed by both disputants.

Weak Response: An agreement where the disputants do not interact with one another after the mediation.

Chapter Two

Literature Review

Introduction

There has been much literature written on peer mediation. This review begins with a section on the theoretical framework to define and describe what peer mediation is, and describe where the theories are rooted. The theories are based on the construct of violence and, therefore, the next two sections describe the current status of violence in high schools and the current strategies used by high schools to prevent violence.

From there, the literature review addresses the concept of peer mediation. The first three sections include historical perspectives on peer mediation programs in all fields, then narrows the focus to include a historical perspective of school-based peer mediation programs, and lastly provides a historical perspective on the peer mediation programs in the school system where the data was collected.

After the historical perspective is analyzed, the researcher reviews the literature of the current status of school-based peer mediation programs. The sections included are the benefits of having a peer mediation program, the components that contribute to an effective peer mediation program, and the resources needed for an effective peer mediation program. The last section reviews the current status of research on peer mediation

programs. Implications for further research in the field are also included. Lastly, there is a summary to recap the salient points of each section.

Theoretical Framework

Why it is important to the field

Social competence is an essential aspect of psychological health. People are not born instinctively knowing how to interact with other people effectively. Many people lack basic interpersonal skills, such as resolving a conflict, and often their social ineptitude seems to persist as they get older (Johnson, D.W., Johnson, R.T., Dudley, B., & Burnett, R., 1992). The relationships which are so essential for living productive and happy lives are lost when the basic interpersonal skills are not learned (Johnson, D.W. et al., 1992).

The development of a coherent set of ideas and a systematic method for training peer mediators has a profound significance for promoting individual and social well-being (Johnson & Johnson, 1989). Conflict is a pervasive aspect of life, but most people have developed only meager skills for handling the difficult conflicts they confront in the course of their lives (Glass, 1994; Johnson, D.W. et al., 1992; Krantzler & Miner, 1994; Morse & Andrea, 1994; Scherer, 1992; Schrupf et al., 1991). The emerging theory in the area of peer mediation provides the possibility of teaching students how to manage

conflicts more productively. This, along with fostering a more cooperative school environment, may be the most fruitful contribution that schools can make to the promotion of positive mental health and to the prevention of a number of psychological disorders (Johnson & Johnson, 1989).

The use of peer mediation programs in the schools is a classic example of practice being developed largely separate and apart from theory and research. While most educators are concerned about the potentially destructive outcomes from conflicts in schools, most theorists posit that conflict is a necessary and positive aspect of human development and relationships (Johnson & Johnson, 1989, 1996b). The theoretical base for peer mediation comes from a fragmented conglomerate of theories from a wide spectrum of the academic disciplines (Kmitta, 1997).

Cognitive- developmental theory

Piaget's (1965) cognitive-developmental theory postulates that conflicts resulting from intellectual maturation spur revisions in understanding of the self and relationships. A second postulate of the theory is that conflict is the mechanism by which children and adolescents acquire new cognitive structures, develop new perspectives, and shift in their patterns of reasoning. These changes result in behavior changes toward parents and peers. These new behavior changes create new

conflicts as roles and normative expectations are redefined.

There are a number of studies conducted on conflict with students based on Piaget's cognitive developmental theory. Most of the studies were conducted by Selman and his colleagues (Selman & Demorest, 1984; Selman, Beardslee, Schultz, Krupa, & Podorefsky, 1986; Selman & Schultz, 1990). The results of their research indicates (1) the type of conflict behavior employed is correlated with age; that is, older students use higher level strategies more frequently than do younger students; (2) higher-level strategies are used more frequently with familiar people and with other students as opposed to adults; (3) the use of higher-level strategies is associated with indices of adaptive functioning and social competence, and (4) the use of higher strategies is associated with social status with peers (Johnson & Johnson, 1996b).

Social Psychological Theories

Social Interdependence

Morton Deutsch's social psychological theory, social interdependence, explains conflicts as part of all social relationships and the way in which they are managed depends on the nature of the social interdependence of the people (Deutsch, 1973; Johnson & Johnson, 1989). Morton Deutsch (1973) was socially concerned about the possibilities of nuclear war. He turned this social concern into a theoretically oriented

investigation of cooperation and competition. Morton Deutsch developed a conflict resolution theory in which he theorized that structuring a situation cooperatively results in promotive interaction which creates constructive and healthy resolutions of conflicts. Conversely, structuring a situation competitively results in oppositional interaction which creates destructive and unhealthy resolutions of conflicts (Deutsch, 1973). Conflicts are resolved constructively when they result in an outcome that all disputants are satisfied with, improve the relationship among the disputants, and improve the ability of disputants to resolve future conflicts in a constructive manner (Deutsch, 1973; Johnson & Johnson, 1995).

Cooperation is the key to constructive peer mediation on two levels (Deutsch, 1973; Johnson & Johnson, 1989; Zhang, 1992). First, cooperation is the state that peer mediation procedures seek to restore. Second, cooperation provides a context that influences the course of peer mediation efforts by focusing the students on long-term integrative strategies and resolutions. When conflicts occur in an on-going cooperative environment, they tend to be constructive because the students realize that their long-term interests in their future ability to work together is more important than their immediate interests in the issue in dispute. The research concludes that the more cooperative the relationship, the more frequently conflict occurs, the more

conflicts are managed positively, the greater the explanations and criticisms present in the exchange and the more frequent the use of problem-solving strategies, and the greater the change in positions and reasoning towards a more mature level and the more social interaction is continued and relationships are strengthened and improved (Deutsch, 1973; Johnson & Johnson, 1995, 1996b; Laursen & Collins, 1994).

Unfortunately, most schools are dominated by competition instead of cooperation (Johnson & Johnson, 1989). Competition is based on scarcity. Within competitive situations, students focus their energies on winning, paying little or no attention to maintaining a good relationship. Conflicts are then associated with lingering anger and discontinued social interaction (Deutsch, 1973; Johnson & Johnson, 1989). When peer mediation programs are implemented in competitive environments of schools, their effectiveness can be severely compromised (Johnson & Johnson, 1996b).

Structure-Process-Attitude/Behavior Theory

Closely related to Deutsch's social interdependence theory is Kurt Lewin's (1951) structure-process-attitude/behavior theory. Lewin's theory postulates that the structure of a situation determines the processes of interaction, which determines the attitudes and behaviors of the people involved (Watson & Johnson, 1972). According to Watson & Johnson (1972)

any group is a "dynamic whole". The structure of the situation contains the role definitions and the expectations of appropriate and inappropriate ways for people to interact with one another in a situation. Situational factors, such as the number of people involved, spatial arrangements, hierarchy of prestige, social sanctions, power, and the nature of the activities influence each situation. Changes in any or all of these situational factors lead to changes in the processes of the interactions of the members, which ultimately change the attitudes and behavior of the people involved. Patterns of behavior that can lead to constructive or destructive resolutions of conflict, therefore, result from the way the situation is structured (Johnson & Johnson, 1995).

Conflict Strategies Theory

Conflict strategies theory (Johnson, 1991; Johnson & Johnson, 1996b) posit that there are two major concerns in conflict resolution: (1) concern about reaching one's own goals and (2) concern about maintaining an appropriate relationship with the other person. The degree of importance of the relationship determines which of the five strategies a person uses to resolve a conflict: (1) integrative problem-solving negotiations, used when both the goal and the relationship are highly important. An agreement is sought that ensures both parties fully achieve their goals and any tensions are resolved;

(2) compromising, used when both the goal and the relationship is moderately important and it appears that the disputant and the other person cannot get what they want. They each give up part of their goals and sacrifice part of the relationship in order to reach an agreement; (3) smoothing, used when the goal is of no importance but the relationship is of high importance. The disputant gives up his/her goals in order to maintain the relationship at the highest quality possible; (4) withdrawing, used when the goal and the relationship are not important. The disputant gives up both and avoids the issue and the other person; and (5) forcing or distributive win-lose negotiations, used when the goal is very important but the relationship is not. The disputant seeks to achieve his/her goal by forcing the other person to yield to him/her. There are situations in which each of these strategies may be used appropriately.

Summary

Most theories of conflict suggest that conflict is a necessary and positive condition for development and growth. Therefore, schools should encourage and promote strategies to teach students how to cope and handle conflicts (Cutrona & Guerin, 1994; Gill & Frierson, 1995; Hale et al., 1994; Johnson & Johnson, 1996a, 1996b; Khattri, 1991; Lish, 1993; Malm, 1992; Morse & Andrea, 1994; Office of Educational Research and Improvement, 1993; Prothrow-Stith, 1991; Robertson, 1991; Rogers,

1994; Rowicki & Martin, 1994; Smith, 1993). Peer mediation programs teach students how to handle conflicts. Yet most schools fear that most conflicts will end in violence. Research states very few of these programs being implemented in schools are directly based on a theoretical model (Johnson & Johnson, 1996b). For the most part, well-meaning peer mediation coordinators are beginning programs with very little information on the impact these programs have on the disputants. There is also very little information on how to run an effective program or the necessary components of a good program. Peer mediation programs are being initiated in many schools in response to the increasing frequency and severity of conflicts among students without the evaluation research of desired outcomes for the disputants (Cutrona & Guerin, 1994; Hale et al., 1994; Hill, 1996; Johnson & Johnson, 1996b; Khattri, 1991; Kolan, 1995; Lish, 1993; Malm, 1992; Office of Educational Research and Improvement, 1993; Robertson, 1991; Rogers, 1994; Rowicki & Martin, 1994; Smith, 1993; VanAcker, 1993). The cognitive developmental theory, the social-psychological theory of social interdependence, the structure-process-attitude/behavior theory, and the conflict strategies theory all postulate that conflict is a necessary and positive aspect of human development and relationships.

In order to ensure that students manage conflicts in

constructive ways, schools should provide cooperative environments. Within cooperative environments, communication tends to be open and honest, perceptions tend to be accurate and constructive, trust is built and maintained, and disputants are interested in maximizing joint outcomes. Students' success in resolving their conflicts constructively tend to result in reducing the number of conflicts referred to administrators, which, in turn, tend to reduce suspensions.

There are few things more important for students to learn than a basic understanding of how cooperative interdependent systems function and the competencies required to work cooperatively with others (Johnson & Johnson, 1989). It is the hope of educators that students have the psychological health and stability required to build and maintain career, family and community relationships to establish a basic and meaningful interdependence with other people to participate effectively in our society (Johnson & Johnson, 1989). When students work together to solve problems, conflicts occur. It is essential that students be taught how to understand the nature of interdependent systems, how to operate effectively within them, and how to manage conflicts (Johnson & Johnson, 1989). Peer mediation programs teach students these skills.

Violence in response to conflict is learned. Peer mediation can help students unlearn this response (Office of Educational

Research and Improvement, 1991). Peer mediation teaches disputants to manage conflict peacefully. This study examined what happens in the mediation process to the disputants to determine what impact the process had on them.

Current Status of Violence in High Schools

Violent behaviors and aggression are becoming an ever-more alarming and frequent occurrence. (Kolan, 1995; Malm, 1992; Morse & Andrea, 1994). Every six seconds of every school day a violent crime is committed in a school building or on school grounds. The National School Safety Center reports that approximately 28,200 students and 5,200 teachers are physically attacked in our nation's high schools each month (VanAcker, 1993). Over nineteen percent of these people require hospitalization (Kirleis, 1995; Rowicki & Martin, 1994). From 1986-1990, seventy-one people were killed by guns in high schools nationwide (Hearing before the Committee on Education and Labor, 1992).

The rise of violence is not confined to inner-city schools. Most school systems, no matter their size, population, economic status, or geographical location have seen the rise of incidents of violence (Hale, Farley-Lucas, & Tardy, 1994; Kolan, 1995; Prothrow-Stith, 1992; Wilson-Brewer et al., 1994). The problem of violence will get worse unless something dramatic and decisive is done.

Current Strategies Used to Prevent Violence

High schools have most prevalently used in-school suspension, out-of-school suspension, or expulsion, for repeated acts of fighting (Rogers, 1994). These strategies do provide immediate consequences for inappropriate behavior, however, they don't serve as an intervention to help the students feel in control of the situation, nor do they teach any coping strategies (Rogers, 1994).

Peer mediation was introduced as one strategy to teach students how to cope and handle conflicts before an act of violence would occur (Cutrona & Guerin, 1994; Gill & Frierson, 1995; Hale et al. 1994; Hill, 1996; Johnson & Johnson, 1996; Malm, 1992; Morse & Andrea, 1994; Office of Educational Research and Improvement, 1993; Rogers, 1994; Rowicki & Martin, 1994). Peer mediation programs teach students to practice and model tolerance that can eventually prevent and settle conflicts peacefully. For this reason, peer mediation programs are proactive because they equip students to deal confidently with conflict. Prothrow-Stith (1991) states that peer mediation on the high school level is known to reduce fighting, thus reducing suspensions and expulsions. Peer mediation will not by itself be sufficient in preventing all school violence (Kmitta, 1997). However, peer mediation programs are an intervention offering an empowering, humanistic, and educational alternative to violence.

Historical Perspective on Mediation

In the 1950's, businesses borrowed the skills used in mediation from the field of law (Campbell, 1995; Vasquez, Johnson, Jaffe, & Stamato, 1995). Businesses found that mediation is most beneficial in circumstances where the parties must maintain an on-going relationship (Campbell, 1995; Johnson & Johnson, 1996b; Singer, 1990). Research also reports that people making their own decisions on the resolution of a problem are more apt to abide by them (Johnson & Johnson, 1996b; Singer, 1990). People feel empowered to be part of the solution of a conflict. Mediation skills proved to be very effective for the business world. Many legal suits between companies were avoided through the use of mediation.

In addition to the business community, within the last twenty years, a number of other social arenas have found the mediation process to be critical to solve conflicts. Vasquez et al. (1995) reported that mediation has been used to solve neighborhood disputes, divorce disputes, environmental issues, and court-ordered disputes for civil cases. One of the reasons mediation is used in so many ways is that it is quick, less expensive than legal suits, more private, understandable, and fair (Lovenheim, 1996).

The research conducted on community mediations have not investigated relational parameters as serious influences on the

mediation process or their outcomes (Folger & Jones, 1994). Even where mediation has been used in sensitive community relations or in divorce proceedings, the analyses of relational influences has not been studied (Folger & Jones, 1994). This is an area for potential research.

One of the earliest peer mediation programs was the San Francisco Community Boards program (Duffy et al., 1991). This program was community-based and not generally involved with the criminal justice system. Its primary focus was on issues of community development.

In contrast, two of the earlier community mediation programs from the 1960's in Philadelphia, Pennsylvania, and in Columbus, Ohio, were developed by local prosecutors and courts in response to the need to speed and improve the processing of minor criminal concerns (McGillis, 1986). There was a surge of these community programs by the 1980's.

The school-based peer mediation programs began in the late 1960's with the "Teaching Students to be Peacemakers Program" (Johnson & Johnson, 1996a). This program was derived from the social interdependence theory of Morton Deutsch. During this same time, community mediation began to flourish (Vasquez et al., 1995). Following the riots of 1968, there were numerous neighborhood and multiparty disputes involving different ethnic or racial groups in the community. Most of the community issues

raised for mediation had to do with school desegregation and public housing conflicts.

In the early 1970's, mediation was used in the sitings of hazardous facilities and the undertaking of major development projects (Vasquez et al., 1995). Only more recently, have court ordered cases been sent to mediation. These usually involve medical malpractice suits, personal injury claims, and workman's compensation claims (Vasquez et al., 1995). Florida and Texas have authorized courts to order mediation in all civil cases (Campbell, 1995; Lovenheim, 1996).

In the late 1970's, family courts began referring contested divorce cases with children to staff mediators (Vasquez et al., 1995). Originally these mediators were social workers whose aim was to try to keep the divorce amicable. It was so successful that now entire cases are sent to mediation.

In 1980, under President Carter, community mediations became nationally recognized. The United States Justice Department sponsored three model Neighborhood Justice Centers (Johnson & Johnson, 1996b; Vasquez et al., 1995). The opening of those centers officially put the stamp of approval for the nation on community mediation. As a result of this national attention, these programs flourished throughout the 1980's.

Historical Perspective on School-Based Peer Mediation Programs

The history of school-based peer mediation programs is

brief, spanning only about three decades (Folger & Jones, 1994). The application of peer mediation programs to educational settings has a number of historical roots (Duffy et al., 1991). It appeared that most of the earliest movements stemmed from the following two areas. One is the "peace and justice movement" which takes a broad view of conflict and is concerned with such issues as global peace and community violence (Davis, 1986). The other area emerged from the field of academic educational psychology as the concept of cooperative learning in the classroom (Deutsch, 1973; Johnson & Johnson, 1989). Cooperative learning suggests that cooperative experiences will promote higher academic and social achievement.

In the 1960's and 1970's, some religious and social peace activists saw the relevance of teaching peer mediation (Davis, 1986; Girard & Koch, 1996). One of the oldest programs, "Come Together", in Downey, California was founded in 1965 (Wilson-Brewer et al., 1991). In total, there were about ten known programs operating throughout the U.S. between 1965 and 1980 (Wilson-Brewer et al., 1991). For the most part, however, all efforts were isolated, without training, and had little or no administrative support.

In the 1980's, however, a more conscious and coordinated effort began to take shape. In 1983, New York's largest mediation center opened, School Mediators' Alternative Resolution

Team (S.M.A.R.T.). This program was initially integrated into schools in New York City (Davis, 1986; Duffy et al., 1991; Lam, 1989; Robertson, 1991). In 1984, The National Association for Mediation in Education (NAME), in Amherst, Massachusetts, was founded (Girard & Koch, 1996; Warner, 1992; Wilson-Brewer et al., 1991). In 1984, pioneering peer mediation efforts were also underway in California, North Carolina, Arizona, Hawaii, New Mexico, and Ohio (Kirleis, 1995; Robertson, 1991; Warner, 1992). Between 1984 and 1995, NAME and the National Institute for Dispute Resolution (NIDR) estimate that there are well over five thousand programs put into existence (Girard & Koch, 1996).

Most peer mediation programs were introduced into the schools from community centers. Once there was this interest from people in the community to bring the program into the schools, programs flourished. Their interest started as an effort to stop violence. Programs already established in community centers could be replicated in schools rather easily and quickly.

In summary, there are many reasons why peer mediation programs spread so quickly in schools. The following lists some of these reasons:

(1) There was a felt need for them and interest was generated by hearing about others' successes with these kinds of programs (Khattari, 1991).

(2) Some activists were worried about nuclear war and they saw being able to solve differences of opinion as a way of avoiding the devastation of nuclear war (Davis, 1986).

(3) Youth violence was on the rise and educators were looking for alternative methods for managing this increased violence.

(Khattari, 1991; Robertson, 1991; Wilson-Brewer et al., 1991).

(4) There was a need for a more responsive and accessible justice system. It was believed that mediation skills were transferable and could be used to solve small interpersonal conflicts within communities (Davis, 1986; Johnson & Johnson, 1996b). Each community chose their own reason to establish a peer mediation program in their school. However, whatever the communities' reason, most schools wanted to have a peer mediation program.

Current Status of School-Based Peer Mediation Programs

Research indicates that there were between 2,000- 5,000 peer mediation programs in operation across the country in 1992 (Warner, 1992). More recent research indicates that by 1994 there were between 5,000- 8,000 (Gill & Frierson, 1995; Duffy et al., 1991; Johnson & Johnson, 1996a). Similar programs have been developed on an international basis, primarily in English-speaking countries such as Canada, Australia, New Zealand, and England (Duffy et al., 1991). The bulk of these programs have been started within the last ten years (Warner, 1992).

Peer mediation as an alternative to violence has generated

considerable controversy among educators (Cutrona and Guerin, 1994). Some teachers and administrators believe that it is not the responsibility of the schools to provide such training. Others believe the increase in conflict resulting in violence makes it not only appropriate but imperative to teach. Some proponents, such as the director for New York City's Victim Services, believe that the peer mediation program is the fourth R to be taught in schools (Glass, 1994). Such programs provide students with the tools to manage their own conflicts (Warner, 1992). Acts of violence disrupt the normal functioning of the school, and the fear of violence can prevent students and teachers from concentrating on the business of school which is to learn (Office of Educational Research and Improvement, 1993). Too often the problem of violence in high schools becomes entangled in a vicious cycle of finger pointing and avoidance of responsibility by staff who should be working together to help solve the problem.

Violence occurs in schools because it is the place where diverse groups congregate (Cutrona & Guerin, 1994; Glass, 1994; Prothrow-Stith, 1991). The school should then also be the place where the students learn how to cope with and sort out these differences that eventually lead to violence. The peer mediation process promotes the development and exhibition of cooperative and supportive attitudes (Office of Educational Research and

Improvement, 1993). The data suggests that peer mediation programs by themselves are not sufficient to reduce violence. School systems, families, and communities all need to be involved in both the causes of violence and the promotion of peace as an alternative to violence (Gill & Frierson, 1995; Smith, 1993; Webster, 1993; Willis, 1993).

Johnson and Johnson (1996b) cautions that the use of peer mediation programs is a classic example of practice being largely separate and apart from relevant theory and research. Peer mediation programs were originated by nonviolence advocates, anti-nuclear-war activists, and lawyers. These groups developed these programs on models other than theories of conflict. Furthermore, Johnson and Johnson (1996b) suggest that because peer mediation practices and programs are separate from theory, their effectiveness is difficult to assess.

Benefits of Peer Mediation Programs

Research establishes several benefits for having a peer mediation program. The benefit that was discussed most often was that it teaches students a life skill that empowers them to solve their own problems (Hill, 1996; Kirleis, 1995; Scherer, 1992; Schrupf et al., 1991; Smith, 1993). Peer mediation redefines conflicts in such a way that no one has to lose. It provides a commitment to cooperate and create new possibilities beneficial to all involved.

The use of peer mediation programs has reduced the number of fights in schools, thereby reducing the number of suspensions (Johnson & Johnson, 1996a; Lane & McWhirter, 1992; Office of Educational Research and Improvement, 1993; Schrupf et al., 1991; Smith, 1993; Westheimer, 1992). This is the number one reason why schools institute peer mediation programs.

Another benefit cited in the research is that peer mediation programs teach students that conflict is a normal part of life and that it is an opportunity to learn and grow (Glass 1994; Schrupf et al., 1991). This concept is very different from what student's perceptions and beliefs before training are concerning conflict.

Since today's schools are one of the few places that children of all cultures converge, peer mediation programs help promote mutual understandings of these various cultures (Glass 1994; Prothrow-Stith, 1991; Schrupf et al., 1991). Peer mediation teaches democratic principles and offers a voice for those who feel alienated or under-represented.

A student's social skills are strengthened by the empowerment of participation in a peer mediation program (Kirleis, 1995; Rowicki & Martin, 1994). Many programs report the skills of listening and conversing are particularly strengthened. This benefit has extended beyond school and the social relationships into the student's homes. It is important

that these skills are transferrable to the environment of the student. Useful life skills, including social skills, are valuable benefits for teaching the peer mediation process.

Components of Effective Peer Mediation Programs

Administrative support

Research identifies several components associated with effective peer mediation programs. The most essential component of an effective peer mediation program is to have administrative support (Cutrona & Guerin, 1994; Eisler, 1994; Glass, 1994; Lockwood, 1993; Morse & Andrea, 1994). According to these experts, the peer mediation program in any school is only as strong as the people operating it. The commitment of the people in the building to "buy into" the program, promote it, and publicize it is paramount (Eisler, 1994). Administrators need to demonstrate in some way their commitment to the program, not just verbally give support. This commitment should be in the form of designating staff members to manage the program, providing space to run the program, or providing funds for the training to take place.

Advisory committees

Many peer mediation programs are effective because they use advisory committees (Lockwood, 1993; Robertson, 1991; Schrupf et al., 1991). These advisory committees begin with a small group of people committed to the program. They usually include an

administrator, a staff person, a parent, a student, and a business person from the community. These committees provide a foundation of support for the program.

Qualified peer mediators

A peer mediation program is not effective without well-trained and qualified peer mediators. Research indicates that the most important attribute of an effective peer mediator was a student who can communicate well (Cohen ,1994; Malm, 1992; Morse & Andrea, 1994; Rogers, 1994; Schrumpf et al., 1991; Smith, 1993; Westheimer, 1992; Willis, 1993). Such peer mediators must be able to listen carefully, restate and clarify what they are told, and ask neutral questions. In the peer mediation communication process, listening takes a priority over speaking (Araki, 1989). The student must be able to empathetically listen, state and restate all ideas so that everyone in the process understands the same message. Cobb (1993) articulates a new concept that the success of the process doesn't depend as much upon the good communication skills of the mediator as it depends upon the good communication skills of the disputants.

Bush and Folger (1996) report that the communication that takes place during the process is much more powerful than the terms of the agreement. They report that disputants had examined their own feelings, and relied on their own insights about human strengths and frailties in deciding what to say to each other and

in making commitments to each other.

Recently researchers are recognizing the immense influence communication plays in the mediation process. Research is just beginning in the areas of both communication between the disputants and between the disputants and mediator. Researchers are acknowledging that as mediators attempt to manage disputants' conflicts, they also enter them (Folger & Jones, 1994). Mediators become parties involved with the conflict through their own outlook, through their own interpretation of the situation, and as they convene through the mediation process. Because the process possesses a human interaction, the mediator influences this process.

Cohen (1994) states that both the positive and the negative leaders in a school should be chosen to be peer mediators. He believes that students who get into conflicts relate to different types of students. Willis (1993) suggests that negative leaders-bullies and troublemakers- often make good peer mediators. Cohen (1994), Morse & Andrea (1994), Robertson (1991), and Schrupf et al., (1991) add that there needs to be a diversity of sex, race, ethnicity, culture, and academic achievement when choosing students to be trained as mediators.

Improved self-esteem

Zhang (1992) tested Deutsch's theory of cooperation and conflict resolution using an intervention project at an inner

city alternative high school in New York City. The results of his theory testing show that conflict resolution had a positive impact on the student's self-esteem. Peer mediation provides an opportunity for high school students to develop a strong self-image (Deutsch, 1992; Johnson & Johnson, 1996a, 1996b; Khattri, 1991; Robertson, 1991; Westheimer, 1992).

Improved decision-making skills

Research confirms that in addition to giving students more confidence in their ability to solve problems, peer mediation programs also allow students to improve their decision-making skills (Hill, 1996; Office of Educational Research and Improvement, 1993). Students learn that they can become part of the solution instead of the problem by practicing such skills as listening and articulating the feelings of others as they restate what the disputant has stated. Students learn to see a situation from different perspectives and understand feelings they may not share.

Training and retraining

Training and retraining are other components of an effective high school peer mediation program (Schrumpf et al., 1991; Wampler & Hess, 1990). The lack of funding for training, follow-up training, or training materials was discussed most frequently in the literature (Cohen, 1994; Robertson, 1991; Schrumpf et al., 1991). Although the exact content of the training will vary with

the time allowed and the particular needs of the school, research suggests that from eight to sixteen hours of training are required to cover the information in sufficient detail (Robertson, 1991; Schrupf et al., 1991).

There appears to be conflicting opinions in the research about who should conduct the training; an in-school person or an expert, consultant. The differing opinions are a result of how the students view each of these people. Morse & Andrea (1994) and Warner (1992) state that it is advisable to have an in-house person provide the training to allow the students the opportunity to constantly ask this person questions. The students will continue to view this person as an advocate for the program also. On the other hand, Robertson (1991) states that an outside expert should be brought in to conduct the training. The students will be impressed by learning the skills from an expert. The research is conclusive, however, that the most important factor when deciding who should conduct the training is that the person be competent (Morse & Andrea, 1994; Robertson, 1991; Warner, 1992).

There is conflicting opinion in the research concerning when training should take place. Araki et al. (1989) recommends that the training not take place during school hours. He believes that asking the students to miss classes and make up the work is not fair to them. Robertson (1991), however, decided she wouldn't conduct the training unless it was on school time. She

believes it shows the level of commitment from the administration to provide a place for training, get substitutes for the staff being trained, and sent a message of importance to the students who were chosen to be trained.

Robertson (1991) emphasizes the need for quality "follow-up" training. This is very important if some mediators have learned a step of the process incorrectly. Through role-plays, these steps can be reviewed and practiced. It is also very important for the mediators to have time to build on their evolving experiences as mediators. Follow-up training can also build group cohesion.

Integration into academic units

Stevahn, Johnson, Johnson, & Real (1996) report that the integration of peer mediation training into academic units enhances the probability that it will eventually be more widely adopted and its use maintained over a period of years. Most peer mediation programs have been stand alone programs within schools. History confirms that these programs discontinue if the person with the most commitment to the program leaves the building. Warner (1992) suggests that infusing peer mediation training into the curriculum will help permanently integrate it into school life.

Resources Needed for Effective Peer Mediation Programs

The literature reveals several types of resources needed for

effective peer mediation programs. The most important resource identified is the commitment of the people involved (Cutrona & Guerin, 1994; Folger & Jones, 1994; Robertson, 1991; Wampler & Hess, 1990). This includes the person who is coordinating the program, the student mediators, and all staff committed to seeing the program succeed. Webster (1993) cautions about the considerable human resources consumed with peer mediation programs. He states that thousands of teachers, counselors, health educators, and volunteers are spending countless hours in financially strapped schools delivering programs to captive audiences of students. He suggests that these efforts may be better used in ways that are more likely to prevent violence or that have other socially desirable payoffs. He suggests individualized attention to enhance students' academic performance, mentoring, and supervised recreation.

The resource discussed most often is the lack of funding for peer mediation programs (Eisler, 1994; Wampler & Hess, 1990; Webster, 1993). Most programs are not funded at all. Webster (1993) pointed out that peer mediation programs, on a whole, are inexpensive to implement compared with other interventions of violence. He cautions that this might be a big part of their appeal. Eisler (1994) and Robertson (1991) discuss that administrators usually must become extremely creative in the use of existing funds for the programs to continue at all. Several

sources suggested peer mediation programs not be shy about asking their local businesses or PTA's for funds (Cutrona & Guerin, 1994; Robertson, 1991; Schrupf et al., 1991; Wilson-Brewer et al., 1991). There was agreement in the literature that funding as a line item in the school budget is needed.

After human resources, space in which to hold the mediations was the resource discussed next most often in the literature (Cohen, 1994; Eisler, 1994; Robertson, 1991). Since most schools are overcrowded, providing a private space in which the students felt comfortable was a big concern. Eisler (1994) reported that the students were primarily concerned with size and privacy of the space and less concerned with how well equipped it was or its location.

Time was another resource commented on in the literature. The research is divided on whether or not the mediations should take place during the school day, or only at lunch and after school (Cutrona & Guerin, 1994; Eisler, 1994). Difference of opinion came as to whether or not peer mediation is a worthwhile enough activity for students to miss class. Mediations could be scheduled when the students were not in class (Cutrona & Guerin, 1994; Eisler, 1994). Human resources, funding, space, and time are resources the literature recommends for effective peer mediation programs.

Current Status of Research on Peer Mediation Programs

A review of the literature indicates that many peer mediation programs are based on experience and intuitive insights rather than on research evidence and have undergone no systemic evaluation (Cutrona & Guerin, 1994; Johnson & Johnson, 1996b; Khattri, 1991; Morse & Andrea, 1994; Wilson-Brewer et al., 1991). The most common type of peer mediation evaluation research tends to rely more on description of the intervention than on the measurement of the impact of the process (Jones, 1995). Most programs, however, maintain statistics on all the student mediators and the cases mediated (Cutrona & Guerin, 1994; Morse & Andrea, 1994; Warner, 1992; Scherer, 1992; Wilson-Brewer et al., 1991).

One joint effort still in progress called the Philadelphia Peer Mediation Project, between the Good Shepherd Mediation Program, the Office of desegregation of the Philadelphia School District, and Temple University involves the evaluation of peer mediation programs in the Philadelphia Public Schools (Jones, 1995). Over thirty-nine programs were implemented and evaluated. Data has been collected to determine the factors that enhance or inhibit the formation and continuation of programs, the participants' evaluation of training, the impact of training on the participants' attitudes about conflict, the extent to which mediation is used as a dispute resolution mechanism, mediators'

and disputants' satisfaction with the process and outcome, and the rate of agreements in mediated disputes. Although the study is still in progress, initial findings are positive. One reason stated that there has been little evaluation conducted on peer mediation programs is because more energy has been spent on designing, establishing, and implementing programs (Jones, 1995). There is a clear need to design clear-cut, observable, and measurable goals as a basis for implementing and evaluating peer mediation programs (Duffy et al., 1991).

The limited body of research in existence is generally flawed in methodology which in turn hampers generalization. Kmitta (1998) suggests the need for standardization of reliable and valid instruments to measure the constructs that peer mediation programs purport to effect. He also states that there has to be greater attention paid to the research design. Randomly selected treatment/control conditions are precluded from use in peer mediation research because of the volunteerism inherent in the theoretical underpinnings of the programs (Kmitta, 1998). Kmitta (1998) suggests quasi-experimental models using stringent matched comparisons are the next best approach and should be used in future research. Kmitta (1998) lastly suggests that researchers and evaluators talk regarding the issues surrounding peer mediation theory and practice.

In general, student mediators, disputants, staff, and

administration report that peer mediation programs are effective (Morse & Andrea, 1994; Warner, 1992). This is usually measured in the evaluations by reduced incidents of fighting, lower suspension rates, and improved school climate (Duffy et al., 1991; Johnson & Johnson, 1996a, 1996b). Heller (1996) reported that student fights decreased by thirty-two percent, and out-of-school suspensions decreased by twenty-nine percent due to the peer mediation programs. Austin (1996) reported a fifteen percent or greater decrease in suspensions as a result in peer mediation programs in Baltimore City Public Schools. Westheimer (1992) reported that the number of fights as measured by the number of suspensions decreased during the time that the peer mediation program was at Walker Hill High School. Eisler (1994) cited a reduction in the number of suspensions and physical fights in her study of five high schools in New York City. The Office of Educational Research and Improvement (1993) reported an Ohio school having suspensions fall from one hundred sixty-six in 1993 to sixty-three in 1994. Scherer (1992) reported suspensions lowering from fifty-one to twenty in a one year period. However, Araki (1990) found no changes in rates of suspension at three Honolulu schools. Schrupf et al. (1991) cautions that the lower number of suspensions and lower number of fights cannot be attributed solely to peer mediation programs. However, they can reflect a trend toward a more positive school climate, for which

peer mediation may be in part responsible (Austin, 1996).

Webster (1993) cites a study that was conducted at six inner-city high schools with tenth-graders around the country to determine the effectiveness of teaching peer mediation skills. The teachers attended a one-day training session. Usable data were available on only four of the sites. After comparing pretest and post-test scores on knowledge about violence, attitudes about ways to handle conflicts, acceptance of violence, violence locus of control, self-esteem, and fighting, there were no significant differences found. This same study suggested several methodological limitations of the evaluation. For example, the evaluators didn't monitor the implementation of the program nor the data collection procedures. Also, high risk students in the intervention group were more likely to drop out of the study than were students in the comparison group, potentially biasing the results. There also was no follow-up study to determine the program's long-term effect on behavior. Tolan and Guerra (1996) caution that one major potential limitation is the inability to follow the evaluation and the participants for long enough to determine the actual impact on violence prevalence.

Johnson and Johnson (1996a) cautions the self-report nature of the data on the effectiveness of peer mediation programs make it somewhat suspect. Johnson and Johnson (1996b) also caution

that before the effectiveness of peer mediation programs can be reliably assessed, programs need to be clearly defined.

The latest research on the effectiveness of peer mediation programs is The Comprehensive Peer Mediation Evaluation Project (CPMEP) (Jones, 1998). It involved twenty-seven schools in Philadelphia, Laredo, and Denver. The project investigated the impact of cadre and whole school mediation programs on students' conflict attitudes and behaviors, school climate, and the use of mediation as a dispute resolution process. The results consistently demonstrate that both cadre and whole school programs can have significant impacts on students' conflict attitudes and behavior and on school climate. The data confirms that mediation is an effective, although underutilized, means of handling peer disputes (Jones, 1998).

There is an obvious lack of any longitudinal data on peer mediation programs (Johnson & Johnson, 1996b; Tolan & Guerra, 1996; Warner, 1992; Webster, 1993; Wilson-Brewer et al., 1991). There is a need for longitudinal studies on (1) the impact of the training of mediators, (2) the impact of the process on the disputants, and (3) the constancy of the program over time (Johnson & Johnson, 1996). One study indicated that peer mediation agreements were honored (Carruthers, W.L., Sweeney, B., Kmita, D., Harris, G., 1996). A program coordinator at one elementary school found that sixty of sixty-two disputants

surveyed two to four weeks after their mediation session reported that their agreement had been honored. At one middle school where informal follow-ups were conducted with eighty-four disputants, the program coordinator noted that all but a few disputants reported that their agreement had been honored (Carruthers et al., 1996).

The issue of learning how to manage conflicts or mediate schoolmates' conflicts influences conflict management and relationships years later has not yet been explored. There are few studies of how well programs have been implemented and continued over several years. The evaluation criteria for peer mediation programs needs to be reviewed and restructured in order to provide consistent measures of progress. Wilson-Brewer et al. (1991) suggest that a baseline needs to be created to look at the differential effects of peer mediation programs given age, gender, and ethnic differences in students. Jones (1995) states that most research involves problems with small samples, limited sites, and focus on narrowly defined outcome measures.

Johnson and Johnson (1996b) report that the studies conducted in schools do not test theory. They report that schools have not used the theory and research from the fields of international relations, labor-management disputes, divorce, child custody, and criminal and reconciliation. The training programs used in schools also tend to stand separate and apart

from the more theoretical work in other areas.

Carruthers et al. (1996), Johnson and Johnson (1996b), Tolan and Guerra (1996), and Tolson, E.R., McDonald, S., & Moriarty, A. (1992) suggest that the next step of research be to determine what happens to the disputants in the peer mediation process. They suggest careful, moment-to-moment analysis of the patterns of interaction that lead to constructive and destructive outcomes among the disputants need to be conducted. What is the impact of this process on them? Carruthers et al. (1996) cautions of the difficulty this produces when conducting research with human participants. They caution that humans are intentional, social, and possess the ability to monitor their own performance, and researchers can not expect programs to be exactly the same from one school to the next. Programs might differ from school to school due to factors such as different coordinators and mediators. They suggest even the same program can produce different results because of the complexity and interaction of all the structures that affect the result of the process. Webster (1993) cautions that before peer mediation programs can be confirmed effective, researchers need to better understand the phenomenon of the process and its effect on the disputants.

Summary

Given the increase in violence in high schools today, peer mediation programs offer one promising solution for teaching

students a life-long skill to deal with violence. The urgency to preserve peace in high schools is great, however, the answer can not be provided short-term (Office of Educational Research and Improvement, 1991). Violence will not be solved through short term solutions. Violence in response to conflict is learned. Staff can help students unlearn this response (Office of Educational Research and Improvement, 1991). Peer mediation programs that provide practice and model tolerance on a daily basis can provide the means to prevent and settle conflicts peacefully. Learning to manage conflict peacefully as an integral part of life and as an opportunity for growth and change is a life skill that students need to learn (Cutrona & Guerin, 1994; Office of Educational Research and Improvement, 1991).

One of the most menacing problems for a large segment of students is their inability to solve interpersonal problems in a safe, constructive way (Hill, 1996; Rogers, 1994). Mirroring what students see in their families, neighborhoods, and through the media, they believe that aggression and physical confrontation are the only means of solving conflicts (Hill, 1996). Learning and practicing peer mediation skills help students know that they don't have to resort to violence or destructive behavior in order to be heard.

Within today's pluralistic and multi-cultural school settings, the sheer multitude of human interaction produces

varying degrees of conflict that must be managed in a manner that allows teaching and learning to survive (Girard & Koch, 1996; Office of Educational Research and Improvement, 1991). Through the collaboration of peer mediation programs, staff can help students prevent and settle conflict peacefully (Cutrona & Guerin, 1994; Hale et al., 1994; Hill, 1996; Johnson & Johnson, 1996; Khattri, 1991; Kolan, 1995; Lish, 1993; Malm, 1992; Office of Educational Research and Improvement, 1993; Robertson, 1991; Rogers, 1994; Rowicki & Martin, 1994; Smith, 1993; VanAcker, 1993). Peer mediation does not provide answers to the dilemmas posed by our multi-cultural society, but it does offer skills and frameworks for handling differences, which can lead to improved communication, greater understanding, and less fear (Girard & Koch, 1996).

Peer mediation programs have gained credibility and support in the last ten years (Warner, 1992). As educators seek ways to manage violence in schools, it appears that peer mediation programs will remain a part of the solution. While practice has moved quickly, research and evaluation of peer mediation programs has lagged behind (Johnson and Johnson, 1996a, 1996b). A gap continues between practice and research. The effectiveness of peer mediation programs for disputants needs to be further researched.

Chapter Three

Methodology

Methods and Procedures

This study is descriptive in nature. The purpose is to determine if the peer mediation process is beneficial to the disputants. The following methods were used to conduct this research.

After a review of literature, no standardized instrument was found to use to answer the research questions. Therefore, the researcher constructed a survey through a review of the literature and from the advice of experts in the field. This research is only replicable to similar ethnically diverse large metropolitan suburban school systems.

Report forms and referrals of peer mediation programs were reviewed for the three month period of September 1999 through December 1999. This was to determine trends, reoccurring issues, and areas of importance to include on the survey. Five peer mediation coordinators were consulted in a variety of high school settings in the county in which the data was collected to determine important constructs to be included in the survey. An expert in a neighboring county was also consulted.

Experts in the field were interviewed about the constructs to be included in the survey. Two of the experts work at the National Institute for Dispute Resolution in Washington, D.C.,

and three are on university campuses operating peer mediation centers. All are accomplished authors in the field, and one expert has just written a dissertation on peer mediation.

A conference call was arranged between the five experts described above. The five people were sent a rough draft of the survey before the call. The objective of the call was to edit the survey, and then, brain-storm other constructs that were omitted in the survey. Following the conference call, a final draft of the survey was sent to all of the experts for review.

The survey was pilot tested with ten disputants at one setting. First, the disputants were asked to take the survey. Then, the disputants were asked questions in order to verify that they understood each question.

All high schools in the county were contacted to determine which ones currently had operational peer mediation programs. If the high school had a peer mediation program, surveys and assent forms were hand delivered to each coordinator at the school. The same directions and information was given to each coordinator. Self-addressed envelopes were given to the coordinators to send back their assent forms and surveys every two weeks.

Twenty-four randomly selected disputants were individually interviewed at four sites at the end of May. The purpose of the interviews was to get richer information on the disputants' view

of what really happened to them during the peer mediation process. The four sites having the greatest number of mediations were sites selected for the interviews. The six students from each site were randomly selected based on their availability that day.

Location of the Study

The site for this study is an ethnically diverse metropolitan suburban school system with approximately 100,000 students. Approximately 49% are female, and 51% are males. This large diverse multi-cultural population has approximately 20% African Americans, 10% Asians, 10% Hispanics, and 55% Caucasians. Approximately 10% receive special education services, and approximately 5% are students who speak another language, other than English, as their primary language (ESOL). The mobility rate in this school system is about 15%.

Sample and Population

Permission to conduct the study was obtained from the school system. The names of students who use the peer mediation program remain confidential, therefore, an assent form was signed by the disputant. The purpose of the assent form was to confirm for the disputant that the information they provided would be used for no other purposes than this dissertation. A sample assent form is Appendix A.

All twenty-one public high schools in the school district

were contacted to determine if they currently had an operational peer mediation program. Thirteen of the twenty-one public high schools had an operational peer mediation program. All thirteen program coordinators said they were willing to assist in the data collection. One site said they would be training in January and intended to have an operational program by February 1998. This site did not do the training in January and, consequently, was not used.

There are many challenges involved in conducting research in complex environments such as public high schools. Controlling for variables is a problem. Working across settings in this case is problematic. There is no set standardization to the peer mediation programs. Peer mediation programs in and of themselves are problematic because participation on the part of the disputants is always voluntary.

Although the peer mediation programs among the sites may vary since there is no standardization in the county, there were important similarities in the programs. The peer mediation programs of the thirteen sites were similar in the following ways: (1) they all had administrative support; (2) they all had a volunteer program coordinator; (3) they all had a place designated in the school where mediations took place; (4) all programs only did student-student mediations; (5) all programs had two mediators conducting a mediation; (6) no adults were in

the room during the mediation; (7) all programs used the same materials to train; and (8) all programs had written referrals and written agreements.

All of the coordinators in all of the high schools with peer mediation programs were asked to administer a survey to all disputants five to seven days after a "successful" mediation. "Successful" as defined by this study is when the disputants have ended the mediation process with a signed written agreement. Thus, there are likely to be disputants at each site that could have gone through the mediation process but would not have completed the survey because they did not end the process with a signed agreement and are excluded from this study. The total population of disputants who had a successful mediation was used for this study. All disputants who had "successful" mediations during the time period at all of the sites were asked to complete the survey.

Descriptive information for each site is included in Table 1 on the next page.

TABLE 1. Demographics of Schools Collecting Data

School Name	Enrollment '97-'98	% Racial / Ethnic Composition					% Sp.Ed.	% ESOL	Avg. Class Size	College Bound
		African/Amer.	Amer./Indian	Asian	Hispanic	White				
1	2590	31.6	0.6	17.1	19.4	31.3	7.4	12	24.2	82.9
2	1480	5.8	0.4	2.4	1.9	89.6	10.5	0	27.3	82.8
3	1330	28.2	0.2	13	26.2	32.4	11.3	9.9	24.2	75.4
4	1890	20.5	0.5	14.3	15.6	49.1	8.7	6.9	27.4	81.6
5	1550	7.1	0.5	11.1	10.9	70.5	13.8	7.2	26.6	86.6
6	1650	13.7	0.4	14.3	12.1	59.5	9.1	5.9	27	92.5
7	1760	32.7	0.2	17.4	6.2	43.4	11.7	0.2	27.9	88.6
8	2025	14.7	0.3	15.7	10.4	58.8	7.2	6.7	27.1	90.2
9	1160	14.7	0.6	14.7	16.9	53.1	11.7	6.4	24.8	86.4
10	1950	23.2	0.3	10.3	10.9	55.3	8.7	7.9	28.6	80.9
11	1880	13.1	0.3	11.6	5.2	69.8	10.6	9.4	26.8	89.9
12	1300	24.8	0.2	15.4	30.7	28.9	9.1	10.6	25.7	78.3
13	1720	5.2	0.2	26.1	3.6	64.9	8.4	0.2	29.9	96.4

Research Design

This descriptive study was designed to analyze what, if any, short-term impact the peer mediation process has on the disputants. All twenty-one public high schools in the system were contacted to determine if they had a peer mediation program. Thirteen of the twenty-one schools had an operational peer mediation program.

The coordinator of each site that has a program was asked if they would be willing to administer a survey to all disputants involved in the mediation process five to seven days following the mediation. An appointment was made with each coordinator to teach them how to administer the survey. Each survey at each site was coded with a number and a letter "A" or "B". The number was coded to the site. The letter with the number represented each mediation and each disputant. Upon collection of the surveys there was an "A" and a "B" completed survey for each mediation at each site representing each disputant from that mediation. The referral forms and written agreements from each mediation at all sites were reviewed for verification of accurate information on the surveys from the disputants.

Information was collected at all sites on the number of mediations conducted compared to the "successful" mediations as defined by this study. This data was collected by asking the program coordinators how many mediations they had that did not

result in the writing of an agreement. The program coordinators were also asked how many mediations they had where the disputant(s) refused to complete a survey.

A survey was distributed to all high school disputants five to seven days after they had been involved in a successful mediation. The time period began on February 2, 1998, and ended on April 9, 1998. This time period included nine and one-half weeks that school was in session. The last date for a disputant to complete a survey was May 1, 1998. A disputant assent form was signed by each disputant before he/she completed the survey. This time frame was selected by the researcher because it is approximately one marking period. Thursday, April 9, 1998, was selected as the end of the time period because the county where the data was collected began its spring break on April 10, 1998.

During the week of April 27, 1998, six randomly selected disputants at four sites were asked to take part in a structured interview. See Appendix B for a copy of the questions used in the structured interview. These disputants had been involved in a mediation between February 2, 1998, and March 27, 1998. The disputants were interviewed at least one month following their experience with mediation. The purpose of this interview was to expand and elaborate on information obtained from the surveys.

Instrumentation

The disputants responded to a survey consisting of a series

of questions to either fill in the correct answer, write an answer to an open-ended question, or circle a number on a likert scale. This researcher reviewed the referral forms and written agreements of twenty mediations in one facility between September 1, 1997, and December 1, 1997 to begin to "brain-storm" ideas of types of information that would be important to get from disputants to research the construct of "impact" from the peer mediation process.

After determining several constructs, these ideas were discussed with experts. A conference call with experts in the field was set up to have them "brain-storm" ideas and to validate the constructs the researcher began with. The experts in the field consisted of two practitioners from the National Institute of Dispute Resolution, one of these also being a practitioner from a peer mediation center at the George Mason University, a practitioner from a peer mediation center at the University of Baltimore, and a practitioner/researcher from Miami University in Ohio. The experts received a draft of the survey before the conference call. A copy of the draft was also sent out to a practitioner with the Fairfax County Public Schools in Fairfax, Virginia who was not available the day of the conference call. The purpose of the conference call was to edit and revise the draft and to discuss if anything important had been left out. The survey was revised after the conference call. All experts

received a copy of the survey to edit again. See Appendix C for the survey.

The survey was pilot tested on ten disputants in one setting. The disputants took the survey and then the constructs were verified by questioning the disputants about their thinking as they answered each question. It was determined that all ten disputants correctly understood each question.

Once the survey was edited and pilot tested, an appointment was made with each program coordinator at every site to make sure they all had the same instructions. All program coordinators were called at the end of February to answer any questions they had and to check that no other obstacles had arisen.

The surveys were collected from the program coordinators every two weeks. Each program coordinator was given self-addressed envelopes in which to place their surveys and assent forms. Each site coordinator was provided ten self-addressed envelopes to put the assent forms and surveys in the mail at the end of each two-week period. This allowed the researcher the advantage of beginning to code the data as it was being collected, and helped insure compliance from the site coordinators. The program coordinators were contacted if they had not been heard from after one month. The answers from the surveys were scored, interpreted, coded, and categorized.

Data Analysis

All data collected from the surveys and structured interviews were coded numerically from each site. SYSTAT was used to obtain descriptive statistics and Chi-square tests. A Chi-square test was used to compare statistical significance of association between the categorical variables forming the table. Each open-ended question from the survey and structured interview was analyzed to determine themes or patterns in answers, and then sorted into categories. A full explanation of how the responses to several of the open-ended research questions were categorized and discussed in the next section. A descriptive profile was written to describe the findings. Appendix D contains a grid showing the relationship of the survey questions to the research questions.

Categorization of the Data

Research questions 3, 6A, and 7 were categorized according to common themes. Research question 3 asked if there was a differential strength of the resolution with regard to grade levels, ages, grade point averages, students who receive special education services, students who receive ESOL services, gender, cultures, whether or not the disputant had used mediation previously, attendance, length of time the disputants have known one another, and the disputant's relationship. In order to analyze each part of research question three, the responses from

survey question number seven asking the disputants what their agreement was about were categorized into "strong" and "weak". The categories were defined by the researcher according to the strength of the resolution. A "strong" response was defined by the disputants talking out their differences, addressing each other's feelings, and having an interest in maintaining the relationship. Examples of "strong" responses were "talking out differences", "not believing rumors", and "trying to get along with one another". A "weak" response was defined by a resolution that did not include the disputants interacting with each other after the mediation. Examples of "weak" responses were "to stop fighting", "to stay away from one another", and "not to talk to one another". The researcher had a peer mediation coordinator categorize the direct responses of the disputants into the two categories based on the definitions. The results of the researcher and this second coordinator were then compared to insure that similar categories were extracted from the responses.

To determine inter-rater reliability for research question 6a, the researcher had five additional peer mediation coordinators all from different locations, categorize the actual statements taken from the disputant's surveys. Each coordinator was given individual cards with the responses written on them, and four envelopes. Each envelope had one of the following categories on the front: fights, verbal disagreements, rumors,

and property. Each coordinator categorized the response on the card and sorted it into the proper envelop. Appendix E contains an inter-rater reliability chart of the reported disputes.

The responses were categorized into fights, verbal disagreements, rumors, and property. These categories were used because a direct comparison of agreement rates could be analyzed using research conducted by Jones (1995 & 1998).

For research question 7, the comments written by the disputants as to what happened in the mediation process that made it successful for them, were divided into the following five categories: (1) those where the disputants felt it had something to do with talking, (2) those which had to do with talking and being able to express feelings, (3) those which had to do with mediation as a process, (4) those which had to do with the mediators, and (5) those that either left the question blank or said they couldn't describe what happened to bring them to signing an agreement.

Summary

The present study collected data from disputants who had participated in peer mediation. The purpose was to see if there was any short-term effect on the disputant from the mediation process. All disputants from all high schools in the county having operational peer mediation programs were candidates to be surveyed. The survey was constructed, edited by experts, and

field tested on disputants. Revisions were made based on recommendations. The surveys were hand-delivered to each site with specific instructions for administration. The surveys were returned to the researcher at two week intervals. Twenty-four interviews were conducted at four sites at the end of May. The purpose of the interviews was to obtain a clearer understanding from the disputants as to what happened to them during peer mediation that caused them to sign an agreement.

Chapter Four

Results

Introduction

The purpose of this study was to determine if high school disputants in an ethnically diverse suburban school system felt peer mediation was effective for them. After reviewing the literature, a survey was developed to obtain this information from the disputants. The purpose of the survey was to analyze whether or not the peer mediation process had any short-term impact on these high school disputants, and to examine what happened during the peer mediation process to produce any impact.

The purpose of this chapter is to present the results of the data analysis. The results are presented in response to the research questions developed for this study. A descriptive analysis follows the research question if an open-ended response was requested on the survey.

All high school disputants in an ethnically diverse suburban school system from a nine week period were asked to participate in this study. Their participation was voluntary and anonymity was ensured for all who responded. There were 120 disputants during the nine week period and 111 reached an agreement. Only those 111 to sign an agreement were surveyed. Failure on the part of some participants to complete all items on the survey sometimes resulted in less than 111 responses for certain items.

On the following page is Table 2 which summarizes all of the results of the study. It references the research question to the page on which the results can be found. It categorizes the results by type. "Process" was used if the relationship between the variables had something to do with the mediation process itself. "Disputant" was used if it looked at a characteristic of the disputant. "Mediators" was used when the disputants were rating the mediators. "Outcome" was used when the research question was asking the disputants something about how they felt or what they thought after going through the mediation process.

Table 2 SUMMARY OF RESULTS

<u>Research Question</u>	<u>Independent Variables</u>	<u>Type</u>	<u>Dependent Variable</u>	<u>Result</u>		<u>Follow-Up Analysis</u>
				<u>Freq.</u>	<u>ChiSq.</u>	
1, page 71		Process	Successful	Freq.		
1A, page 71	Referred by	Process	Successful	Freq.		
2, page 72	Type of Dispute	Outcome	5-7 days-effect		3.92	
3, page 74	Strong/weak	Outcome	Resolution	Freq.		
3A, page 74	Grade	Disputant	Resolution		2.09	
3B, page 75	Age	Disputant	Resolution		0.15	
3C, page 76	Grade point average	Disputant	Resolution		0.39	
3D, page 77	Sp. Ed. student	Disputant	Resolution		0.22	
3E, page 78	ESOL Student	Disputant	Resolution		0.68	
3F, page 79	Gender	Disputant	Resolution		0.02	
3G, page 80	Culture	Disputant	Resolution		5.04	
3H, page 81	Previous use of med.	Disputant	Resolution		0.22	
3I, page 82	Attendance	Disputant	Resolution		1.32	
3J, page 83	Time disputants have known one another	Disputant	Resolution		10.01	
3K, page 84	Disputant relationship	Disputant	Resolution		5.00	
4A, page 86		Outcome	Med. helpful	Freq.		
4C, page 88		Outcome	Med. helpful to other disputant	Freq.		
5, page 89		Outcome	Agreement- fair	Freq.		
5A, page 90	Age	Outcome	Agreement- fair		7.27	Residual Table26.1
6A, page 92		Process	What was dispute about	Freq.		
6B, page 92		Process	Resolution	Freq.		
8A, page 96		Mediators	Trust	Freq.		
8B, page 96		Mediators	Confidence	Freq.		
8C, page 96		Mediators	Respect	Freq.		
8D, page 96		Mediators	Listened to	Freq.		
8E, page 96		Mediators	Understood	Freq.		
9, page 96			Use med.-future	Freq.		
9A, page 97	Culture	Outcome	Use med.-future		9.96	Residual Table32.1

Research Question 1: What percentage of the peer mediations ended with a written agreement?

Table 3 Frequencies & Percentages of Successful Mediations

Successful	Unsuccessful	Total
111 (93%)	9 (7%)	120 (100%)

Findings

One hundred eleven (93%) of the total one hundred twenty were successful by definition. Successful by definition of this dissertation was that the disputants signed a written agreement. Nine (7%) of the total one hundred twenty were unsuccessful.

1a: Are administration-referred mediations more likely to end with a written agreement than security-referred mediations?

Table 4 Frequencies & percentages of administration and security referrals

Referral Source	Successful	Unsuccessful	Total
Administration	46 (92%)	4 (8%)	50 (100%)
Security	25 (83%)	5 (17%)	30 (100%)

Findings

Forty-six (92%) of the successful mediations were referred by the administration. Twenty-five (83%) of the successful mediations were referred by security. Therefore, more administration referred mediations did end in a written agreement than security-referred mediations.

Research Question 2: What percentage of the written agreements are still in effect five to seven days after the mediation?

Table 5 Frequencies & percentages of agreements in effect 5 to 7 days after mediation

Yes	No	Total
92 (83%)	19 (17%)	111 (100%)

Findings

Ninety-two (83%) of the one hundred eleven successful agreements were still in effect five to seven days after mediation. Nineteen (17%) were no longer in effect.

Table 6 Frequencies & percentages of agreements by dispute type in effect 5 to 7 days after mediation

Type of Dispute	Yes	No	Total
Fights	11 (92%)	1 (8%)	12 (100%)
Verbal Disagreements	38 (76%)	12 (24%)	50 (100%)
Rumors	36 (90%)	4 (10%)	40 (100%)
Property	7 (78%)	2 (22%)	9 (100%)
Total	92 (83%)	19 (17%)	111 (100%)

TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	3.916	3	0.271

Findings

Ninety-two (83%) of the agreements were still in effect five to seven days after mediation. Eleven (92%) of the agreements involving fights were still in effect. One (8%) of the

agreements involving a fight was no longer in effect. Thirty-eight (76%) of the agreements involving verbal disagreements were still in effect five to seven days after mediation. Twelve (24%) of the agreements involving a verbal disagreement were no longer in effect. Thirty-six (90%) of the agreements involving rumors were still in effect five to seven days after mediation. Four (10%) of the agreements involving rumors were no longer in effect. Seven (78%) of the agreements involving property were still in effect five to seven days after mediation. Two (22%) of the agreements involving property were no longer in effect. The statistical test for association is the Chi-Square test. The obtained Chi-Square value of 3.92, $p=.27$ is not statistically significant. This indicates that there is no relationship between the type of dispute and whether or not it is in effect five to seven days after mediation.

Research Question 3: This research question examines some specific characteristics of the disputants that may help explain the strength of their resolution. The responses after determining what their agreement was about were categorized into "strong" and "weak". A "strong" response was defined by the disputants talking out their differences, addressing each other's feelings, and having an interest in maintaining the relationship. A "weak" response was defined by a resolution that did not

include the disputants interacting with one another after the mediation.

The total sample size was 120. Of those 120, 111 were successful by definition. Ninety-nine disputants involved in a successful mediation reported the resolution. Twelve did not report. For this reason, each part of the following research question uses ninety-nine as the total sample size of disputants who reported a resolution.

Research Question 3: What is the percentage of agreements that were strong? What is the percentage of agreements that were weak?

Table 7 Frequencies and percentages of strong and weak agreements

Strong	Weak	Total
37 (37%)	62 (63%)	99 (100%)

Does the strength of the resolution differ with regard to:

3a. Grade levels?

Table 8 Frequencies & percentages of the strength of the resolution by grade level

Resolution	9 th	10 th	11 th	12 th	Total
Strong	22 (59%)	6 (16%)	6 (16%)	3 (9%)	37 (100%)
Weak	28 (45%)	16 (26%)	12 (19%)	6 (10%)	62 (100%)
Total	50 (50%)	22 (22%)	18 (18%)	9 (9%)	99 (100%)

TEST STATISTIC

VALUE

DF

PROB

PEARSON CHI-SQUARE 2.085 3 0.555

Findings

Fifty (50%) of the successful agreements were written by ninth graders. Twenty-two (22%) were written by tenth graders. Eighteen (18%) were written by eleventh graders. Nine (9%) were written by twelfth graders. The statistical test for association is the Chi-Square test. The obtained Chi-square of 2.09, $p=0.56$ is not statistically significant. This indicates there is no association between the strength of the resolution and the disputants' grade level.

3b: Age?

Table 9 Frequencies & percentages of the strength of the resolution by age

Resolution	< 16 yrs. Old	≥ 16 yrs. Old	Total
Strong	20 (54%)	17 (46%)	37 (100%)
Weak	36 (58%)	26 (42%)	62 (100%)
Total	56 (57%)	43 (43%)	99 (100%)

TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	0.152	1	0.697

Findings

Fifty-six (56%) were written by disputants under the age of 16. Forty-three (43%) were written by disputants either 16 or older. Thirty-seven (37%) were strong agreements. Sixty-two (62%) were weak agreements. The statistical test for association is the Chi-square test. The obtained Chi-square of 0.15, $p=0.70$ is not

statistically significant. This indicates there is no relationship between the strength of the resolution and the disputant's age.

3c. Grade point average?

Table 10 Frequencies & percentages of the strength of the resolution by grade point average

Resolution	≤ 2.0	2.1- 3.0	≥ 3.1	Total
Strong	9 (50%)	7 (39%)	2 (11%)	18 (100%)
Weak	18 (44%)	16 (39%)	7 (17%)	41 (100%)
Total	27 (46%)	23 (39%)	9 (15%)	59 (100%)

TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	0.393	2	0.822

Findings

Twenty-seven (46%) of the disputants have a grade point average (GPA) of ≤ 2.0 . Twenty-three (39%) of the disputants have a GPA between 2.1 and 3.0. Nine (15%) of the disputants have a GPA ≥ 3.1 . The statistical test for association is the Chi-square test. The obtained Chi-square value of 0.39, $p=0.82$ is not statistically significant. This indicates there is no relationship between the strength of the resolution and grade point average.

3d: Disputants receiving Sp.Ed. services?

Table 11 Frequencies & percentages of the strength of the resolution by disputants receiving special education services

Resolution	Yes	No	Total
Strong	8 (22%)	29 (78%)	37 (100%)
Weak	16 (26%)	46 (74%)	62 (100%)
Total	24 (24%)	75 (75%)	99 (100%)

TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	0.221	1	0.638

Findings

Twenty-four (24%) of the successful mediations were written by disputants whom receive special education services. Eight (33%) of the twenty-four written agreements by disputants whom receive special education services were strong. Sixteen (66%) of the twenty-four agreements by disputants whom receive special education services were weak. Seventy-five (75%) agreements were written by disputants whom do not receive special education services. Twenty-nine (38%) of the seventy-five agreements written by disputants whom do not receive special education services were strong. Forty-six (61%) of the agreements written by disputants whom do not receive special education services were weak. The statistical test for association is the Chi-square test. The obtained Chi-square value of 0.22, $p=0.64$ is not statistically significant. This indicates that there is no relationship between the strength of the resolution and whether or not they receive special education services.

3e: Disputants receiving ESOL services?**Table 12** Frequencies & percentages of the strength of the resolution by disputants receiving ESOL services

Resolution	Yes	No	Total
Strong	1 (3%)	36 (97%)	37 (100%)
Weak	4 (6%)	58 (94%)	62 (100%)
Total	5 (5%)	94 (94%)	99 (100%)

TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	0.679	1	0.410

Findings

Five (5%) of the successful mediations were written by disputants whom receive ESOL services. One (20%) of the agreements written by disputants whom receive ESOL services was strong. Four (80%) of the agreements written by disputants whom receive ESOL services were weak. Ninety-four (94%) were written by disputants whom do not receive ESOL services. Thirty-six (38%) of the agreements written by disputants whom do not receive ESOL services were strong. Fifty-eight (61%) of the agreements written by disputants whom do not receive ESOL services were weak. The statistical test for association is the Chi-square test. The obtained Chi-square value of 0.68, $p=0.41$ is not statistically significant. This indicates that there is no relationship between the strength of the resolution and whether or not they receive ESOL services.

3f: Gender?**Table 13** Frequencies & percentages of the strength of the resolution by gender

Resolution	Male	Female	Total
Strong	16 (43%)	21 (57%)	37 (100%)
Weak	26 (42%)	36 (58%)	62 (100%)
Totals	42 (42%)	57 (57%)	99 (100%)

TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	0.016	1	0.899

Findings

Forty-two (42%) of the successful mediations were written by male disputants. Fifty-seven (57%) of the successful mediations were written by female disputants. Of the forty-two resolutions written by males, sixteen (38%) were strong and twenty-six (61%) were weak. Of the fifty-seven resolutions written by females, twenty-one (36%) were strong and thirty-six (63%) were weak. The statistical test for association is the Chi-square test. The obtained Chi-square value of 0.02, $p=0.90$ is not statistically significant. This indicates that there is no relationship between the strength of the resolution and the gender of the disputants.

3g: Culture?**Table 14** Frequencies & percentages of the strength of the resolution by culture

Resolution	African American	Caucasian	Asian	Hispanic	Other	Total
Strong	9 (24%)	9 (24%)	4 (11%)	12 (32%)	3 (8%)	37 (100%)
Weak	24 (39%)	9 (15%)	6 (10%)	13 (21%)	10 (16%)	62 (100%)
Total	33 (33%)	18 (18%)	10 (10%)	25 (25%)	13 (13%)	99 (100%)

TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	5.035	4	0.284

Findings

Thirty-three (33%) of the successful mediations were written by African Americans. Only 9 (27%) of those agreements written by African Americans were strong, leaving twenty-four (73%) of the agreements weak. Eighteen (18%) were written by Caucasians. Nine (50%) of those agreements were strong, and nine (50%) of those agreements were weak. Ten (10%) of the successful agreements were written by Asians. Four (40%) of those agreements were strong, while six (60%) of those agreements were weak. Twenty-five (25%) of the successful agreements were written by Hispanics. Twelve (48%) of those agreements were strong, while thirteen (52%) were weak. Thirteen (13%) of the disputants self-reported "other" as their category of preference for ethnicity. Three (23%) of these resolutions were strong, while ten (77%) were weak. The statistical test for association is the Chi-square test. The obtained Chi-square value of 5.04,

$p=0.28$ is not statistically significant. This indicates that there is no relationship between the strength of the resolution and the culture of the disputants.

3h: Previous use of mediation?

Table 15 Frequencies & percentages of the strength of the resolution by whether or not the disputant had used the mediation process previously

Resolution	Yes	No	Total
Strong	12 (32%)	25 (68%)	37 (100%)
Weak	23 (37%)	39 (63%)	62 (100%)
Total	35 (35%)	64 (64%)	99 (100%)

TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	0.221	1	0.639

Findings

Thirty-five (35%) of the disputants writing a resolution had used the mediation process previously. Of those thirty-five, twelve (34%) wrote a strong resolution. Twenty-three (66%) disputants, previously using the mediation process, wrote weak agreements. Sixty-four (64%) of the disputants had not used the mediation process previously. Of those 64, twenty-five (39%) wrote a strong agreement. Thirty-nine (61%) wrote a weak agreement. The statistical test for association is the Chi-square test. The obtained Chi-square value of 0.22, $p=0.64$ is not statistically significant. This indicates that there is no relationship between the strength of the resolution and whether or not the

disputant has used the process previously.

3i: Attendance?

Table 16 Frequencies & percentages of the strength of the resolution by attendance

Resolution	Excellent 94- 100%	Good 87- 93%	Fair 80- 86%	Poor < 80%	Total
Strong	31 (84%)	2 (5%)	2 (5%)	2 (5%)	37 (100%)
Weak	47 (76%)	7 (11%)	5 (8%)	3 (5%)	62 (100%)
Total	78 (79%)	9 (9%)	7 (7%)	5 (5%)	99 (100%)

TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	1.316	3	0.725

Findings

The categories for attendance are Maryland state guidelines. Seventy-eight (79%) of the disputants who wrote successful agreements had excellent attendance. Thirty-one (39%) with excellent attendance wrote a strong agreement. Forty-seven (60%) with excellent attendance wrote a weak agreement. Nine (9%) of the disputants who wrote successful agreements had good attendance. Two (22%) with good attendance wrote strong agreements. Seven (77%) with good attendance wrote weak agreements. Seven (7%) of the disputants who wrote successful agreements had fair attendance. Two (28%) with fair attendance wrote strong agreements. Five (71%) with fair attendance wrote weak agreements. Five (5%) of the disputants who wrote successful agreements had poor attendance. Two (40%) with poor

attendance wrote strong agreements. Three (60%) with poor attendance wrote weak agreements. The statistical test for association is the Chi-square test. The obtained Chi-square value of 1.32, $p=0.73$ is not statistically significant. This indicates that there is no relationship between the strength of the resolution and the disputants' attendance.

3j. The length of time the disputants have known one another?

Table 17 Frequencies & percentages of the strength of the resolution by the length of time the disputants have known one another

Resolution	<1 yr.	1-2 yrs.	2-3 yrs.	3-4 yrs.	4-5 yrs.	>5 yrs.	Total
Strong	13(35%)	2 (5%)	6(16%)	14(38%)	1 (3%)	1 (3%)	37(100%)
Weak	31(50%)	8 (13%)	8 (13%)	8(13%)	4 (6%)	3 (5%)	62(100%)
Total	44(44%)	10(10%)	14(14%)	22(22%)	5 (5%)	4 (4%)	99(100%)

TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	10.011	5	0.075

Findings

Forty-four (44%) of the disputants had known one another less than one year. Of those 44, thirteen (30%) wrote strong agreements. The remaining thirty-one (70%) wrote weak agreements. Ten (10%) knew one another for between one and two years. Of these ten, two (20%) wrote strong agreements while eight (80%) wrote weak agreements. Fourteen (14%) of the disputants knew one another between two and three years. Of

those, six (43%) wrote strong agreements while the remaining eight (57%) wrote weak agreements. Twenty-two (22%) of the disputants knew each other for between three and four years. Of these, 14 (64%) wrote strong agreements while eight (36%) wrote weak agreements. Five of the disputants knew each other for between four and five years. From this group, one (20%) wrote a strong agreement while four (80%) wrote weak agreements. Four (4%) of the disputants knew each other for longer than five years. One (25%) of these disputants wrote a strong agreement while three (75%) of these disputants wrote weak agreements. The statistical test for association is the Chi-square test. The obtained Chi-square value of 10.01, $p=0.08$ is not statistically significant. This indicates that there is no relationship between the strength of the resolution and the length of time the disputants have known one another.

3k: The disputant's relationship?

Table 18 Frequencies & percentages of the strength of the resolution by the type of relationship the disputants had before mediation

Resolution	Another Student	Acquaintance	Friend	Best Friend	Total
Strong	9 (24%)	13 (35%)	10 (27%)	5 (14%)	37 (100%)
Weak	25 (40%)	13 (21%)	20 (32%)	4 (6%)	62 (100%)
Total	34 (34%)	26 (26%)	30 (30%)	9 (9%)	99 (100%)

TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	4.978	3	0.173

Findings

Thirty-seven (37%) of the total 99 resolutions written were strong. Sixty-two (63%) of the total resolutions written were weak. Nine (24%) of the strong resolutions were written between students who saw the other disputant as just another student. Twenty-five (40%) of the weak resolutions were written between disputants who saw each other as just other students. Thirteen (35%) of the strong resolutions were written between disputants who saw the other disputant as being an acquaintance. Thirteen (20%) of the weak resolutions were written between disputants who saw the other disputant as being an acquaintance. Ten (27%) of the strong resolutions were written by disputants who saw the other disputant as being a friend. Twenty (32%) of the weak resolutions were written by disputants who saw the other disputant as being a friend. Five (13%) of the strong resolutions were written by disputants who saw the other disputant as being a best friend. Four (6%) of the weak resolutions were written by disputants who saw the other disputant as being a best friend. The statistical test for association is the Chi-square test. The obtained Chi-square value of 4.97, $p=0.17$ is not statistically significant. This indicates that there is no relationship between the strength of

the resolution and the type of relationship the disputants had prior to mediation.

Research Question 4: Do the disputants think the mediation process was helpful?

4a. Did the disputants think the mediation process was helpful to them?

Table 19 Frequencies & percentages of whether or not the disputants thought the mediation process was helpful to them

Yes	No	Total
82 (73%)	29 (27%)	111 (100%)

Findings

Eighty-two (73%) out of one hundred eleven disputants thought mediation was helpful to them. Twenty-nine (27%) thought mediation was not helpful to them.

4b. Why or why not?**Table 20** Reasons disputants thought mediation was helpful:

Reason	Count
Were able to talk to one another	12
Were able to talk and listen to the other person	10
The mediators helped them see new ways to solve a problem	8
Provided an option rather than fighting	6
Provided an opportunity to see mistakes in the relationship	2

Table 21 Reasons disputants thought mediation was not helpful:

Reason	Count
Felt they didn't need help solving the problem	8
The mediators were not helpful	3

4c. Did the disputant feel that the mediation process was helpful to the other disputant?

Table 22 Frequencies & percentages of whether or not the disputants thought the mediation process was helpful to the other disputant

Yes	No	Not Sure	Total
60 (67%)	18 (20%)	11 (13%)	89 (100%)

Findings

Sixty (67%) of the eighty-nine disputants who answered this question felt that the mediation process was helpful to the other disputant. Eighteen (20%) of the disputants felt that the mediation process was not helpful to the other disputant, and eleven (13%) are not sure.

4d. Why or why not?

Table 23 Reasons disputants thought mediation was helpful to the other disputant:

Count	Reason
38	Were able to talk to each other (explain, apologize, or resolve)
5	Provided an option for the other disputant to stay out of trouble
4	Were able to sign an agreement not to fight

Table 24 Reasons disputants thought mediation was not helpful to the other disputant:

Count	Reason
6	Something was "wrong" with the other disputant (for example, they needed professional help, they were too immature, or they didn't take the process seriously
6	There were problems with the mediators not being neutral

Research Question 5: Did the disputants feel the agreement was fair at the time of mediation?

Table 25 Frequencies & percentages of whether or not the disputants felt the agreement was fair at the time of mediation

Yes	No	Total
97 (88%)	14 (12%)	111 (100%)

Findings

Ninety-seven (88%) out of one hundred eleven disputants thought their agreement was fair at the time of mediation. Fourteen (12%) did not feel the agreement was fair.

5a. Is there a difference in whether or not the disputants think the agreement was fair with regard to age?

Table 26 Frequencies & percentages of whether or not the disputant felt as though the agreement was fair at the time of mediation by age

Agreement/Fair	< 16 yrs. Old	≥ 16 yrs. Old	Total
Yes	58 (60%)	39 (49%)	97 (100%)
No	3 (21%)	11 (79%)	14 (100%)
Total	61 (55%)	50 (45%)	111 (100%)

TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	7.274	1	0.007

Findings

Ninety-seven (87%) of the disputants felt as though the agreement was fair at the time of mediation. Fourteen (13%) did not feel as though the agreement was fair at the time of mediation.

Fifty-eight (95%) of the disputants under 16 years of age felt their agreement was fair at the time of mediation. Three (5%) of the disputants under age 16 thought their agreement was not fair at the time of mediation. Thirty-nine (78%) of the disputants 16 years or older felt as though their agreement was fair at the time of mediation. Eleven (22%) of the disputants 16 years or older felt their agreement was not fair at the time of mediation. The statistical test for association is the Chi-square test. The obtained Chi-square of 7.27, $p=0.007$ is statistically significant. That indicates that there is a relationship between the age of the disputant and whether they felt the agreement was fair at the time of mediation.

Table 26.1 Standardized residuals of whether or not the disputant felt as though the agreement was fair at the time of mediation by age

Agreement/Fair	< 16 yrs. Old	≥ 16 yrs. Old
Yes	.64	-.71
No	-1.69	1.87

Positive and negative signs of the residual table

Agreement/Fair	< 16 yrs. Old	≥ 16 yrs. Old
Yes	+	-
No	-	+

The flip flop pattern in what would be expected from this table gives it the statistical significance. The large numbers in each of the "no" categories make it significant. The large negative number of disputants under 16 years of age feeling the agreement was not fair is proportionately fewer than expected. In addition, the large positive number of the disputants 16 years or older feeling the agreement was not fair is proportionately more than expected.

Research Question #6: How much knowledge about the dispute and resolution can the disputants recall five to seven days after the mediation?

6a. Can the disputants report what the dispute was about five to seven days after mediation?

The disputant's responses concerning what the dispute was

about were sorted into the following categories: fights, verbal disagreements, rumors, and property. A direct comparison of agreement rates using these categories can be analyzed using research conducted by Jones (1995 and 1998). For a complete explanation of the method used to sort the responses into categories please refer to Chapter 3, page 65, "Categorization of the Data".

All one hundred eleven disputants could describe what the dispute was about five to seven days after the mediation.

Table 27 Frequencies & percentages of types of disputes

Fights	Verbal Disagreements	Rumors	Property	Total
12 (11%)	50 (45%)	40 (36%)	9 (8%)	111 (100%)

Findings

Fifty (45%) of the disputes were verbal disagreements. Forty (36%) of the disputes were rumors. Twelve (11%) of the disputes were fights. Nine (8%) of the disputes were over property.

6b. Can the disputants report the resolution five to seven days after mediation?

Table 28 Frequencies & percentages of disputants able to report the mediation agreement 5 to 7 days after mediation

Could Remember	Couldn't Remember	Total
99 (89%)	12 (11%)	111 (100%)

Could Remember	Couldn't Remember	Total
99 (89%)	12 (11%)	111 (100%)

Findings

Ninety-nine of the one hundred eleven disputants (89%) surveyed could report the resolution five to seven days after mediation. Twelve (11%) of the disputants could not remember what the resolution was five to seven days after the mediation.

Research Question #7: How do the disputants describe what happened in the mediation process that brought about them signing an agreement with the other disputant?

The comments were divided into the following five categories: (1) those where the disputants felt it had something to do with talking, (2) those which had to do with talking and being able to express feelings, (3) those which had to do with mediation as a process, (4) those which had to do with the mediators, and (5) those that either left the question blank or said they couldn't describe what happened to bring them to signing an agreement. A complete explanation of the method used to sort the disputant's answers into categories can be found in Chapter 3, page 66, "Categorization of the Data". Table 29 on the following page, lists the responses from the disputants under each category.

Table 29

Disputants' descriptions of what happened in the mediation process that brought about a successful agreement for them.

<u>Talking</u>	Count
1. "We talked".	40
2. "I realized that I misunderstood something".	4
3. "The other disputant told the truth".	4
4. "I apologized for being wrong".	2
<u>Talking and being able to express their feelings</u>	
1. "I was able to express my feelings".	9
2. "Our relationship was made stronger because we expressed how we felt about one another".	6
<u>The mediation process</u>	
1. "The mediation process."	8
2. "The process helped me find a solution".	6
3. "The process helped me find the root of the problem".	3
4. "The written agreement"	2
<u>The mediators</u>	
1. "The mediators".	2
2. "The mediators told me the consequences if I would ever come back to mediation with the same disputant".	2
3. "The mediators rushed through the process".	2
<u>No response or not being able to describe what brought about success</u>	
1. No response	18
2. "No".	2
3. "I realized the other person was immature as he talked".	1

Findings

Fifty out of the one hundred eleven disputants responded

that talking had something to do with their signing an agreement. Fifteen disputants felt that their success had something to do with being able to talk and, in addition, be able to express their feelings to the other disputant. Nineteen of the one hundred eleven disputants felt the mediation process itself brought about success for them. Six disputants responded that for them success had something to do with the mediators, and twenty disputants either left the question blank or could not describe what brought about success for them.

Research Question #8. How did the disputants perceive the mediators during the mediation?

8a. Did the disputants trust the mediators?

8b. Did the disputants think the mediators seemed confident with the process?

8c. Did the disputants think the mediators treated them with respect?

8d. Did the disputants think the mediators genuinely listened to them?

8e. Did the disputants think the mediators understood their point of view?

Table 30 Frequencies & percentages of how the disputants perceived the mediators in all categories

Factors	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Total
Trust	4 (4%)	3 (3%)	27 (24%)	27 (24%)	50 (45%)	111 (100%)
Confidence	3 (3%)	10 (9%)	20 (18%)	39 (35%)	39 (35%)	111 (100%)
Respect	1 (10%)	7 (6%)	23 (21%)	37 (33%)	43 (39%)	111 (100%)
Listened to	2 (2%)	6 (5%)	20 (18%)	41 (37%)	42 (38%)	111 (100%)
Understood	2 (2%)	10 (9%)	23 (21%)	34 (31%)	42 (38%)	111 (100%)

Findings

Table 30 represents the distribution of scores from each of the disputants on the variables as they perceived the mediators. No further statistical analysis was completed other than the frequencies. By inspection, the pattern appears to be very similar. The disputants appear to be very pleased with the way the mediators handled the mediation process and the disputants.

Research Question #9: Would the disputants use the mediation process to solve conflicts in the future?

Table 31 Frequencies & percentages of whether or not the disputants would use mediation in the future

Yes	No	Total
91 (82%)	20 (18%)	111 (100%)

Findings

Ninety-one (82%) of the one hundred eleven disputants felt as though they would use mediation in the future. Twenty (18%) felt as though they would not use mediation in the future.

9a. Is there a difference in whether or not the disputants would use mediation in the future by culture?

Table 32 Frequencies & percentages of whether or not the disputants would use mediation in the future by culture

	African American	Caucasian	Asian	Hispanic	Other	Total
Yes	36 (40%)	18 (20%)	7 (7%)	18 (20%)	12 (13%)	91 (100%)
No	3 (15%)	2 (10%)	5 (20%)	7 (35%)	3 (15%)	20 (100%)
Total	39 (35%)	20 (18%)	12 (18%)	25 (23%)	15 (14%)	111 (100%)

TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	9.955	4	0.041

Findings

Thirty-six (92%) African Americans felt as though they would use mediation in the future. Three (8%) African Americans felt as though they wouldn't use mediation in the future. Eighteen (90%) Caucasians felt as though they would use mediation again. Two (10%) Caucasians thought they wouldn't use mediation in the future. Seven (58%) Asians felt they would use mediation again, and five (42%) felt they would not use it again. Eighteen (72%) Hispanics felt as though they would use mediation again, while seven (28%) felt they would not use it again. Twelve (80%) of

the disputants who categorized themselves as "other" felt as though they would mediation in the future, while three (20%) did not. The statistical test for association is the Chi-square test. The obtained Chi-square value of 9.96, $p=0.04$ is statistically significant. This indicates that there is a relationship between the culture of the disputant and whether or not he/she would use mediation in the future.

Table 32.1 Standardized residuals of whether or not the disputants would use mediation in the future by culture

	African American	Caucasian	Asian	Hispanic
Yes	.69	.38	-.91	-.57
No	-1.49	-.82	1.97	1.22

Positive and negative patterns of the residual table

	African American	Caucasian	Asian	Hispanic
Yes	+	+	-	-
No	-	-	+	+

The positive numbers in the "no" category of Asians and Hispanics are proportionately higher than expected concerning whether or not they would use mediation in the future. The high negative number in the "no" category of African Americans suggests that this group would use mediation in the future.

Structured Interview Results

At the end of April, twenty-four disputants were randomly selected from four sites to be individually interviewed. The structured interview questions are in Appendix B. The purpose of the interview was to try and obtain more in-depth information from the disputants as to what happened in the mediation process personally for them that resulted in a successful mediation.

Twenty-two of the disputants found mediation helpful. Two of the randomly selected disputants did not find the process helpful or think the process had any effect on them. Even though they did write an agreement, they didn't really want to go through the process. In both instances, the disputants had been referred by administration and they didn't really feel as though they had any choice about going to mediation. If given a choice, both disputants said they would not have gone to mediation. They didn't care whether or not that conflict was resolved. The situation wasn't important enough to them to resolve. When asked if they would voluntarily use the process if they were wrestling with a conflict that they were invested in resolving, both disputants immediately responded that they would.

All twenty-two disputants who did answer that they found mediation helpful, responded that what produced success for them was the opportunity to talk openly and honestly to the other disputant, listen to their side of the story, and express their

feelings. All of the disputants reported a desire to have some sort of a relationship with the other disputant following the mediation.

All twenty-four disputants would use mediation in the future. Most agreed that what was important was that they saw a need to resolve the conflict. The disputants did not like someone else referring the conflict to be resolved. When asked if they would have then self-referred, the response was consistent; only if it was a situation that they wanted resolved. When the disputants were asked if they could describe what happened during the mediation that brought about success for them, all twenty-two of the disputants immediately answered that it was the opportunity to sit down and discuss the dispute with the other disputant. When queried further about whether or not they would have been able to reach an agreement if just put in a room by themselves, eighteen thought they would not have come out with an agreement. Eight thought immediately their conflict would have escalated to a physical confrontation. Ten thought they would have been able to talk, but didn't think they would have come to resolution.

When asked if the process helped structure the situation, all twenty-four disputants agreed that it did. What they didn't agree on was what part of the process was the turning point to bring about success. Sixteen of the twenty-four thought that it

was the fact that each disputant had a chance to talk without interruption. The disputants felt safe in knowing that that would really happen because of the mediators being present.

All twenty-four disputants felt the expertise of the mediators played a role in the success of the mediation. They all responded that if the mediators didn't know the process or didn't take control of the situation in the room, the mediation would have fallen apart. What the interviewed disputants didn't agree on, however, was how much expertise the mediators needed. Nineteen of the twenty-four disputants interviewed had only been through mediation once and felt as though they had nothing to compare. Of the five that had been through the process more than once, they still could not determine the expertise of the mediators. The disputants responded by listing the qualities of the mediators they thought most important. The disputants listed the following in order of importance:

1. Knowledge of the mediation process
2. Being able to take control of the process
3. Treating both disputants fairly
4. Allowing both disputants equal time for their side

Summary

The findings in this study confirm the research data that states that peer mediation is one successful strategy to teach

high school students to resolve conflicts. This study provides data to validate that peer mediation can be used successfully with all high school students, in any grade, with any culture, either gender, and students receiving either special education or ESOL services. This study examined several factors associated with how high school disputants view peer mediation. All of the statistically significant findings can be categorized into areas that relate to the outcomes of mediation, or how the disputants felt after having been through the mediation process. Disputants under the age of sixteen felt the agreement was more fair at the time of mediation than those disputants who were sixteen and older. If the disputant felt the agreement was fair, they also saw the process as being helpful to them. There are statistically significant findings in the ethnicity of the disputant and whether or not they would use mediation in the future. Those disputants who would use it in the future also felt as though the agreement they wrote was fair. For those who indicated they would use mediation in the future, there was a statistically significant relationship with their reporting that mediation was also a helpful process. The next chapter summarizes the research, interprets the results within the framework of operational peer mediation programs, and suggests areas for future research.

Chapter Five

Summary, Conclusions, and Recommendations

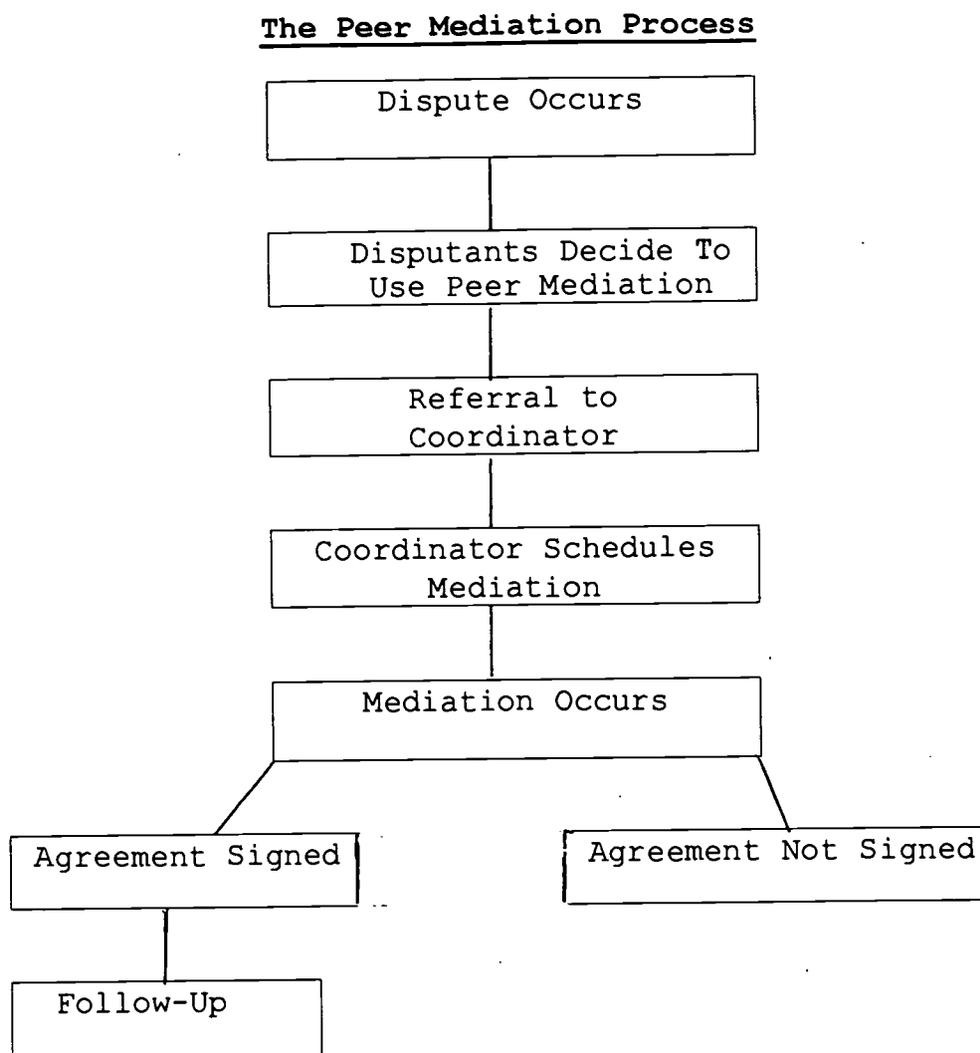
Introduction

The purpose of this study was to gather perceptions from high school disputants in an ethnically diverse suburban school system on the short-term impact of the mediation process. A review of research was used to develop a survey to gather the perceptions of the disputants. Researchers and practitioners in the field of peer mediation and conflict resolution provided input toward the refinement of the revised survey distributed to disputants. This study investigated the following factors to examine the short-term (five to seven days) impact of the peer mediation process and the likelihood of it being successful for the disputants: the number of signed agreements, the number of agreements still in effect after five to seven days, the number of disputants that thought mediation was helpful, the number of disputants that thought their agreement was fair, the number of disputants that would use mediation in the future, and whether or not the disputants could describe what the dispute was about or describe the agreement. Another important question addressed was could the disputants describe what happened during the process that brought them to a successful signing of an agreement? Success rates were compared to the following demographic information about the disputants; grade levels, ages, grade point

averages, those receiving special education services, those receiving ESOL services, gender, culture, previous use of mediation, and attendance. Several questions addressing the disputants' perceptions about the mediation process were addressed. For example, the disputants were questioned about the process being helpful to them or the other disputant, and the process being fair to them or the other disputant. Who referred the dispute to mediation was also asked. The final questions addressed the disputants' perceptions of the mediators in the process. This chapter summarizes the findings of these questions, discusses the implications of the results, and provides recommendations for future research.

The figure on the following page illustrates the mediation process. This outlines the series of steps once a conflict or dispute has occurred until the end of the process.

Figure 1.



Note: The peer mediation process is voluntary. The process is ended if the disputants do not sign an agreement.

Implications of Results

Peer mediation programs have been around for at least fifteen years in schools. Based on this history, it cannot be considered a fad. This study examined several facets of peer mediation; the origin of the referral, several factors trying to categorize the disputants in some way, whether or not the

disputants could remember what the dispute was about or what the resolution was about five to seven days after the mediation, factors concerning the relationship between the disputants, whether or not the disputants felt as though mediation was helpful or the agreement they wrote was fair, whether or not the disputants would use mediation in the future, why mediation was successful for them, and the disputants' perception of the mediators.

Jones and Kmita (1998) report that peer mediation is an effective, though underutilized, means of handling peer disputes at all educational levels. This study confirms that statement for high school disputants surveyed in the ethnically diverse suburban school system surveyed. Generalizing to other settings may be limited. In addition, this study surveyed the disputants via self-report during the third marking period in a school year. Therefore, this study is also limited to the extent that all self-report studies are limited, and the ability to generalize the results of the surveys at other times of the school year may be limited.

Peer mediation appears to be an excellent strategy to teach all high school students, regardless of their gender, ethnicity, grade, age, grade point average, attendance, or whether or not they are in special education or ESOL, to handle conflict. Eighty-nine percent of the disputants could remember what the

dispute and agreement was five to seven days after mediation. The disputants found the peer mediation process helpful, thought their agreements were fair, and would use peer mediation again in the future.

Research Questions

1. What percentage of the peer mediations ended with a written agreement?

Jones (1997) evaluated twenty-seven schools in three communities (Philadelphia, Laredo, and Denver). Ninety-one and one-half percent of the cases reported ended in a written agreement. Jones (1995) evaluated three hundred sixty disputes mediated in the Philadelphia School District between 1992-1994 with an average agreement rate of 90%. This researcher, with a 93% success rate, found similar results.

1a. Are administration-referred mediations more likely to end with a written agreement than security-referred mediations?

Of the forty-six administration referred mediations, only four were unsuccessful. Of the twenty-five security referred mediations, five were unsuccessful. That means administration-referred mediations were more successful than security-referred mediations. It is interesting to note that all nine of the unsuccessful mediations were referred by either administrators or security. It could be that these two groups are viewed as

disciplinarians in schools, and the disputants might not have gone to mediation through totally voluntary means. If the mediation was referred from any other source, a successful agreement was written.

Jones and Kmitta (1997) report that the more voluntary the referral, the more satisfied the disputants were with the agreement and the process. When the disputants referred themselves to mediation they were the most satisfied; when other students or counselors referred them they were more satisfied than when teachers, administrators, or disciplinarians referred them. This has to do with students' perception of the program. If disputants view peer mediation as a consequence to behavior, this will have a definite influence on their attitude toward mediation. Perhaps this negative attitude will also have a negative impact on their willingness to solve the conflict during the process. On the other hand, if disputants perceive peer mediation as a viable way for them to resolve their conflicts, then it is understandable that they are more satisfied with the agreement that is written.

2. What percentage of the written agreements are still in effect five to seven days after the mediation?

Ninety-two (82%) of the agreements were still in effect five to seven days after mediation. Those agreements involving fights

and rumors were still in effect more than three times the rate than were verbal disagreements or conflicts involving property. Why are certain types of agreements are still in effect at a higher rate than other types? Does it mean that disputants are more committed to resolving certain types of agreements, and then sticking to them, than others? This is a topic requiring further research.

3. What is the percentage of agreements that were strong? What is the percentage of agreements that were weak?

Only thirty-seven (37%) of the agreements written were strong. Sixty-two (63%) of the agreements written were weak. This could be due to the immaturity of students at this age in regard to the depth of their relationships. It could be that the more important point is that they were able to sit down and talk out the problem with the other disputant at all.

3. Does the strength of the resolution differ with regard to:

3a. Grade levels?

Fifty percent of the agreements were written by ninth graders. Only nine percent were written by twelfth graders. This can probably be explained due to the maturation of the students as they pass through high school. Unfortunately, the twelfth graders were writing much weaker agreements by

definition. There was a fifty-fifty chance that a ninth grader would write a weak agreement, and a two-to-one chance that a tenth, eleventh, or twelfth grader would write a weak agreement. This may be due to the lack of investment on the relationship on the part of the older student.

3b. Age?

There is no relationship between the disputant's age and whether or not they will write a strong or a weak agreement. Fifty-six of the disputants were under 16 years old. More of the disputants under 16 wrote weak agreements. Forty-three of the disputants were either 16 or older. Perhaps more of the disputants 16 years or older wrote stronger agreements because they were more committed to maintaining the relationship after mediation.

3c. Grade point averages?

Fifty of the fifty-nine disputants (85%) reporting their grade point average had a grade point average of 3.0 or lower. From those disputants reporting their grade point average, there was twice as much chance of them writing a weak agreement as writing a strong one. From this data it should be evident that peer mediation strategies should be directly taught to high school students.

3d. Students receiving special education services?

Olczak, Grosch, and Duffy (1991) suggest that for students receiving special education, mediation may not be helpful. Shaw (1998) reports that mediation with Attention Deficit Hyperactivity Disorder (ADHD) At-Risk students is just like working with any other youth in mediation. Kaplan (1998) similarly reports that students with an emotional disability can also benefit from mediation.

This study found that twenty-four percent of the successful agreements were written by disputants whom received special education services. Peer mediation does appear to provide an alternative to violence for these special populations. Even though students receiving special education services may already have extra support systems, this population is using peer mediation as a means of solving conflicts.

3e. Students receiving (ESOL) services?

In this study, only five percent of the successful agreements were written by disputants whom received ESOL services. Of those five successful agreements, four were weak. The issue of language must be raised as an area of concern. Are the students receiving ESOL services not accessing the process due to their inadequacy of English? Are the students receiving

ESOL services writing weak agreements due to their inadequacy of the English? Peer mediation can provide an alternative to violence for this population. Unfortunately, in this study, the ESOL population was not proportionately represented to the extent they are in the county.

3f. Gender?

Jones (1998) reported the following gender differences: boys are more likely to start or initiate a conflict and to use aggressive, confrontational tactics than girls; and, girls are more likely to avoid conflict, are better able to take the perspective of the other and use more varied conflict resolution strategies than boys. Jones (1995) reports that females are more likely to be involved in mediation than males. This is in agreement with this researcher's findings. There were more girls, 57, than boys, 42, involved in the mediation process.

3g. Culture?

Jones (1995) evaluated programs in the Philadelphia Public Schools. She found a greater number of disputant-evaluation forms were completed by African-Americans than Caucasians, Hispanics, or Asian-Americans. The data of this study found similar results. More African-Americans used peer mediation than Caucasians, Hispanics, or Asian-Americans. Unfortunately, there

was almost a fifty-fifty chance of Asians, Hispanics, or Caucasians writing a weak agreement, whereas, there was three times the chance that African Americans or "Others" wrote a weak agreement. Jones (1998) conducted research on the efficacy of peer mediation programs in Philadelphia, Laredo, and Denver, and reported that race differences do not impact program efficacy. She concluded that peer mediation programs are beneficial for diverse populations.

3h. Previous use of mediation?

Jones (1995) reported that although small, a number of students were already repeat users of the mediation process from the Philadelphia School District she was evaluating. Almost one-third of the disputants answering this survey were repeat users of the process.

3i. Attendance?

Eighty-seven (88%) of the disputants had either "excellent" or "good" attendance according to the state guidelines.

3j. The length of time the disputants have known one another?

Almost half (44%) of the disputants had known one another less than one year when entering the mediation. A little more than one-fifth of the disputants had known each other between

three and four years. The number of conflicts between those disputants that knew each other four or more years was less than ten percent. It seems logical that if disputants haven't known each other for very long, they might be engaged in more disputes. If they haven't established any working relationship with the other person, there could be more issues that create disagreement.

3k. The disputant's relationship?

There was no relationship between the disputant categorizing the other disputant as "another student", an "acquaintance", a "friend", or a "best friend" and the resolution. The categories of "another student", "acquaintance", and "friend" roughly were even with about 30% in each category. The remaining 10% were categorized as "best friend". This supports the premise that peer mediation works for all students.

4. Do the disputants think the mediation process was helpful?

4a. Did the disputants think the mediation process was helpful to them?

4b. Why or why not?

Eighty-two (73%) of the one hundred eleven disputants thought the mediation process was helpful to them. Most of those disputants that responded by describing why they thought

mediation was helpful said that it had something to do with providing an opportunity to talk, be heard, listen to the other person, and see mistakes in the relationship they had with the other disputant. These are compelling comments about the power of the process to resolve a conflict between people who are going to continue a relationship. It speaks to the commitment of the disputants to work on solving a problem without losing the relationship with the other person.

4c. Did the disputant feel that the mediation process was helpful for the other disputant?

4d. Why or why not?

Sixty (67%) of the eighty-nine disputants answering this question thought it was helpful to the other disputant. Eleven (13%) were not sure, leaving eighteen (20%) feeling that it was not helpful to the other disputant. Several of the disputants felt that the process was not helpful to the other disputant because of something being wrong with the person. For example, some thought the other disputant needed professional help, or they didn't feel the other disputant was mature enough to take the process seriously. Again, the reasons they thought the process was helpful had to do with talking and listening to each other.

5. Did the disputants feel the agreement was fair at the time of mediation? Why or why not?

Ninety-seven (88%) felt that the agreement was fair at the time of mediation. The number one reason the disputants didn't feel it was fair had to do with the lack of neutrality or objectivity of the mediators. This is one reason that adequate training on the part of the mediators is a must. The mediators must remain objective and in control of the process. If they don't, even disputants who have not been through the process before can sense their inadequacy.

Table 26 breaks out by age whether or not the disputants felt as though the agreement was fair at the time of mediation. The Chi-Square value of 7.27, $p=0.007$ is statistically significant. When examining the standardized residual table, clearly, the disputants under the age of 16 felt the agreement was much more fair at the time of mediation than the disputants age 16 or older. The statistical significance of this Chi-Square suggests that the factor of age has a huge impact on the disputants' perception of the agreement being fair. Research needs to continue in this area to determine if the mediators need to incorporate the age of the disputant into the process or what goes on in the process depending upon the age of the disputant.

6. How much knowledge about the dispute and resolution can the

disputants recall five to seven days after mediation?

6a. Can the disputants report what the dispute was about five to seven days after mediation?

This study found that all one hundred eleven disputants could report what the dispute was about five to seven days after mediation. That indicates that this process is being used for incidents involving conflict that are important or matter to these high school students. The incident was important enough for them to use the process, and then to remember it 5-7 days later.

Jones (1995) reported that the majority of conflicts referred to mediation involved verbal disagreements, physical fighting, and rumors. Agreement rates were similar for all three types of disputes. Although this researcher found the same three categories to be the factor in the majority of disputes, the agreement rates found in this study significantly fluctuated. One hundred two of the one hundred eleven (92%) mediations in this study involved either fights, verbal disagreements, or rumors.

In 1998, Jones reported the following disputes being referred to mediation from three school districts; Philadelphia, Laredo, and Denver. 28.1% were physical fights, 38.1% were verbal disagreements, 11.9% were rumors, 1.1% were over property, 7.4% were over other causes, and 13.3% of the cases lacked

information about the type of dispute. Jones reported that the type of dispute from this research did not affect the agreement rates. The disputant's chances of agreeing according to this study were three times better if the dispute involved a fight or rumor rather than a verbal disagreement or property.

6b. Can the disputants report the resolution five to seven days after mediation?

Ninety-nine of the one hundred eleven disputants (89%) surveyed could report the resolution five to seven days after mediation. Jones (1995) reported that the agreements written in the Philadelphia School District were most likely to be simple, usually consisting of promises to "be friendly, keep the peace, or stop disruptive behavior" or agreements to avoid one another. By definition, this researcher categorized all of those agreements as weak. In order to be classified as a strong written agreement, there had to be some level of commitment on the part of the disputants to talk or work out the conflict. Unfortunately, in this study, sixty-two (63%) of the resolutions written were weak, leaving only thirty-seven (37%) strong.

7. How do the disputants describe what happened in the mediation process that brought about them signing an agreement with the other disputant?

As described in Table 29, page 94, most of the disputants felt their success could be attributed to being able to talk to the other person. The success of mediation has something to do with the mediators, neutral third parties, being present to make sure both disputants get a chance to tell their side of the story without being interrupted. This was most important to the disputants. To have a chance to tell their side of the story to the person they were having a conflict with was a high priority for them. The presence of the mediators allowed the disputants to work through this process and be able to work on resolving their conflict. Sixty-five of the one hundred eleven disputants felt their success had to do with having the opportunity to talk to the other disputant. Fifteen of these sixty-five felt that their success had to do with not only being given the opportunity to talk but also express their feelings in a safe place attributed to their success.

In the structured interview, the researcher asked the disputants if they would have had the opportunity to talk to the other disputant without the mediator present, did they think they would have resolved the conflict? Overwhelmingly, every disputant said no. Every disputant felt as though there was something about the rules and the process that allowed the disputants to work to an agreement. They all felt that without a doubt just talking between themselves would not have been

productive. Several disputants said that in their specific cases, they were sure the dispute would have escalated into a fight. Several others felt as though they would not have listened to one another without interrupting and would not have come to resolution.

8. How did the disputants perceive the mediators during the mediation?

8a. Did the disputants trust the mediators?

8b. Did the disputants think the mediators seemed confident with the process?

8c. Did the disputants think the mediators treated them with respect?

8d. Did the disputants think the mediators genuinely listened to them?

8e. Did the disputants think the mediators understood their point of view?

As Table 30, page 96, displays, the disputants viewed the mediators in a very positive light. The disputants viewed the mediators as being able to be trusted, appearing to be confident with the process, treating the disputants with respect, genuinely listening to the disputants, and understanding the disputants' point of view. The scores were very consistent in all categories. About 68-74% viewed the mediators as being highly

competent in these areas. About 18-20% were uncertain, leaving about 7-10% that viewed the mediators as being incompetent in these areas.

9. Would the disputants use the mediation process to solve conflicts in the future?

Ninety-one (81%) of the disputants would use mediation in the future. This is a large number of students that would use the process again. They must have felt that it helped them get at issues if not solve the dispute. Something good happens through this process.

9a. Is there a difference in whether or not the disputants would use mediation in the future by culture?

When breaking out whether or not students would use mediation again by ethnicity, the Chi-square value of 9.95, $p=0.04$ proved statistically significant. There is a relationship between the culture of the disputant and whether or not they would use mediation in the future. The African Americans clearly were the ethnic group that would most use peer mediation in the future followed by the Caucasians. The Hispanics and the group categorized as "other" were very similar in their ratios of whether or not they would use it in the future. The Asians and Hispanics reported being least likely to use mediation in the future, but more than 50% said they would use it again. The two

groups that meet with some level of resistance about using peer mediation are Hispanics and Asians. More research needs to be conducted to see if other research would support this finding. Program administrators should target these two ethnic groups to inform them more about peer mediation and role-play mediations to answer questions they might have about the program to make them more comfortable with it.

In this study, most of the mediations were referred by other people. In other words, the students were not self-referring. Given the fact that that is true, is mediation, or some aspects of mediation being used in an informal way? Given the fact that most students who have gone through mediation would use it again, are they using some of the process in an informal way to diffuse or resolve conflicts on their own? They are not coming back to mediation on their own, but are they using some of what they learned during the process to resolve conflicts in their daily lives?

Conclusions

The purpose of this study was to determine if high school disputants in an ethnically diverse suburban school system felt peer mediation was effective for them. It is clear from this study that mediation is successful for students of all ethnic backgrounds. Ninety-three percent of the disputants involved in mediation wrote an agreement. Eighty percent were referred by

administration or security. Only fifteen percent were self-referrals. However, eighty-one percent of the disputants responded that they would use mediation in the future. There is a statistically significant relationship between the ethnicity of the disputant and whether or not he/she would use mediation in the future. African Americans and Caucasians responded at a much higher rate to being willing to use the process in the future than the Asians, Hispanics, or category described as "other".

Eighty-two percent of the agreements were still in effect five to seven days after mediation. This process had some short-term impact. Eighty percent of the mediations involved either verbal disagreements or rumors, leaving the remaining twenty percent involving fights or property. The high success rate involving verbal disagreements and rumors makes sense when compared to the responses of the disputants as to what part of the mediation process brought about success for them. Fifty-six of the disputants answered that it had to do with being able to talk and express their feelings to the other disputant. If the original dispute was caused by a lack of communication, it makes sense that the mediation process can be very successful to resolve that type of conflict. Another nineteen disputants responded that they felt their success could be attributed to them going through the mediation process. This doesn't rule out the possibility that these disputants could just not delineate

which part of the process determined success for them. Six disputants felt that the mediators played some role in their being successful. The remaining twenty-one disputants did not respond.

Ninth graders accounted for fifty percent of all of the mediations. Twenty-four percent of the disputants were students who received special education services. Five percent of the disputants received ESOL services. This appears to be an over representation of students receiving special education services and an under representation of students receiving ESOL services.

Seventy-three percent of the disputants responded that they felt mediation was helpful to them. Eighty-eight percent felt that their agreements were fair at the time of mediation. There is a statistically significant relationship between the age of the disputant and whether or not they felt the agreement was fair at the time of mediation. African American and Caucasian students responded much more favorably about their feeling of their agreement being fair than the Asians, Hispanics, or category described as "other". Disputants younger than sixteen years of age felt that their agreement was much more fair than those disputants sixteen years or older.

Recommendations for Future Research

Whereas this study concentrated on the short-term impact of peer mediation on high school disputants in an ethnically diverse

suburban school system, it is recommended that similar studies be conducted in other geographic areas to determine if the disputants' perceptions about peer mediation are similar.

Data for this study were collected during the third marking period of the year. Future research should collect data during other marking periods during the year to determine if the time of the year has an impact on the number of mediations and the factors addressed by the disputants. In addition, since all data were collected from disputants in the same school district, this study should be replicated across a variety of school districts.

Johnson and Johnson (1996) suggest the problem with the research of peer mediation programs is the lack of a theoretical base for them. They suggest the use of peer mediation programs in the schools is a classic example of practice being developed separate and apart from theory and research. Johnson and Johnson (1996) report this is the reason that it is difficult to assess a program's effectiveness. They contend that until peer mediation programs are clearly defined, their effectiveness cannot be reliably assessed. Research cannot be replicated and refined until programs are defined. This is very difficult due to the vast differences in peer mediation programs.

Greater attention needs to be made in the research designs of projects. It is almost impossible to design randomly selected treatment/control conditions given the voluntary nature of peer

mediation programs. Quasi-experimental models using stringent matched comparison groups are a possible approach and should be included in future research.

The question of why mediation works needs to be constantly asked. Practitioners answer this question based solely on their own experience with their program. Research needs to evaluate programs and begin to answer the question of why. Currently most research has merely described the program as it exists. The research clearly addresses the need for the establishment of evaluation criteria (Cutrona & Guerin, 1994; Morse & Andrea, 1994; Wilson-Brewer et al., 1991; Khattri, 1991; Johnson & Johnson, 1996). Until peer mediation programs are clearly defined, their effectiveness cannot be reliably assessed. There needs to be standardization of reliable and valid instruments to measure the constructs that peer mediation programs claim to effect.

In the field of mediation, there has been a greater awareness and recognition of the interaction between all of the participants, both disputants and mediators. This interaction is extremely complex. The researcher and practitioner needs to continue dialogue about what specific knowledge does the mediator need to possess to best guide the disputants through the process. Through analysis of this complex interaction, research can begin to determine what is necessary during mediation to produce a

successful outcome as opposed to an unsuccessful outcome. The results of a successful as compared to an unsuccessful outcome are much more complex than merely determining if an agreement was written.

Practitioners and researchers in mediation from all disciplines need to collaborate. The areas of law, government, social psychology, public policy, counseling, and education need to share information to prevent any fragmentation of research or practice. The implications of this collaboration is necessary for the future consistency of programs, training procedures, competency-based evaluations of mediators, and program evaluations. Continued collaboration between practitioners and researchers can continue at regional, national, or international conferences on peer mediation. Participants can share information and ideas informally and formally. These interactions continue to fuel the process, leading to improved practice and research.

There are few longitudinal studies on peer mediation programs (Warner, 1992; Wilson-Brewer et al., 1991; Webster, 1993; Johnson & Johnson, 1996). There need to be longitudinal studies on the impact of the training of students, and the constancy of the programs over time.

Summary

Conflict and resolution have been studied by many

disciplines for many years. Peer mediation programs are not new and cannot be considered a fad. Yet, when conducting a review of the literature, it was startling not to be able to find any two studies with similar evaluation measures of peer mediation programs. Some may argue that the reason for this is that each peer mediation program in each school is run differently, or that it is too difficult to conduct scientific research in public school settings. Both of these statements may be partially true, however, peer mediation programs must work to improve program evaluation to further strengthen their use in schools.

Jones and Kmitta (1998) report that peer mediation is an effective, although underutilized, means of handling peer disputes at all educational levels. Children come to school having learned their conflict attitudes and behaviors by modeling their parents and immediate family members. Peer mediation offers students an alternative means of solving conflicts that they might not have been exposed to before. There is a very high rate of agreement and high mediator and disputant satisfaction. However, the number of cases documented suggests that mediation may be underutilized in school settings in comparison to its potential benefits. Only 120 disputants used peer mediation in the 9 week period. Clearly this study concurs with the research on the success rate of peer mediation programs. Schools would benefit from support, attention to program implementation, and

sustained utilization.

Peer mediation does not provide an answer to deal with all of the conflicts in schools today, but it does offer an empowering, humanistic, and educational alternative (Robertson, 1991). As our society becomes more diverse, peer mediation offers a solution for all students to learn to live and work together. This study confirms that peer mediation is a positive strategy against violence for students of all ethnic backgrounds. Ninety-three percent of the mediations resulted in a signed agreement. Statistically significant findings with regard to ethnicity were found with whether or not the disputants thought the agreement was fair at the time of the mediation, and whether or not they would use mediation in the future. The Caucasians felt most strongly their mediation was fair and the category of "other" felt most strongly that their mediation was not fair. African Americans were the ethnic group responding most favorably that they would use peer mediation in the future. The Hispanics exhibit some resistance to using the program in the future with the Asians appearing the most resistant. These last two groups should be targeted for more education concerning the program to take place in schools that are ethnically diverse.

Peer mediation does have a short-term impact on high school disputants. This study concludes that the disputants found the process helpful, thought their agreements were fair, and would

use it again in the future. Statistically significant findings were obtained in disputants who were under 16 years of age. This group thought their agreements were fairer than did those disputants who were 16 years or older. Statistically significant findings were also found in whether or not the disputants would use mediation again by culture. In order to make schools safe, peaceful places in which high quality education can take place, peer mediation programs offer an alternative to constructively manage violence.

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Appendix A

Disputant Assent Form

Title of the study: The short-term impact of peer mediation on high school disputants in an ethnically diverse suburban school system

Investigator: Ms. Kathy Kolan, Ed. S. 301-929-2076

I am being asked to help Ms. Kolan in a project. The purpose of this project is to determine if there is any short-term impact of the peer mediation process on the disputant who has participated in the process.

I understand that I will fill out a survey. This project has been explained to me and I have been allowed to ask questions about it. I understand that I do not have to fill out the form and no one will treat me unfairly. I can stop part way through if I want to and skip questions I do not want to answer. I have read this form, understand the project, and agree to participate.

_____ Date: _____
Student

_____ Date: _____
Peer mediation coordinator

Appendix C

Date of mediation:
Site #__

Date of Survey:
Mediation #__A B

Purpose: This information is being collected on all high school disputants to determine their perspective of the effectiveness of peer mediation programs.

Follow-up information from the disputants

Directions: Please check the appropriate answer or write in the correct information.

1. Male ___ Female ___ 2. Age ___ 3. Grade ___ 4. Grade point average ___

5. Ethnic Background:

African American _____

Caucasian _____

Hispanic _____

American Indian _____

Asian _____

Other _____

6. What was the dispute about?

7. What was the agreement?

8. Is the agreement still in effect? Yes ___ No ___ If not, what happened? When?

9. Did you feel the agreement was fair at the time of mediation? Yes ___ No ___ If no, please explain.

10. Did you find mediation helpful to you? Why or why not?

11. Would you use mediation to solve conflicts in the future? Why or why not?

12. Why do you think mediation was successful for you? What contributed to the success?

PLEASE TURN OVER

13. Have you used peer mediation before your recent experience? Yes ___ No ___
If yes, how many times? ___

14. How did your dispute get to mediation?

Self referred ___ Administration referred ___ Other, please explain _____
Teacher referred ___ Security referred ___ _____

15. Did your participation in mediation decrease the number of days you would have been suspended? Yes ___ By how many days? _____
No ___

No, suspension was not an issue connected with my mediation ___

16. How long have you known the other disputant?

___ less than 1 year ___ 1 year but less than 2 years ___ 2 years but less than 3 years
___ 3 years but less than 4 years ___ 4 years but less than 5 years ___ 5 years or more

Assume these 4 items are on a continuum from not knowing someone to knowing someone very well. Please check only one line.

17. How would you describe the relationship you had with the other disputant?

___ Another student ___ An acquaintance ___ A friend ___ A best friend

18. Do you feel the mediation was helpful for the other disputant? Why or why not?

Circle the number that most closely relates your perception of the mediators.

5=Strongly Agree

4=Agree

3=Neither Agree or Disagree

2=Disagree

1=Strongly Disagree

- | | | | | | |
|--|---|---|---|---|---|
| 19. Did you trust the mediators? | 5 | 4 | 3 | 2 | 1 |
| 20. Do you think the mediators seemed confident with the process? | 5 | 4 | 3 | 2 | 1 |
| 21. Do you think the mediators treated you with respect? | 5 | 4 | 3 | 2 | 1 |
| 22. Do you think the mediators genuinely listened to you during mediation? | 5 | 4 | 3 | 2 | 1 |
| 23. Do you think the mediators understood your point of view? | 5 | 4 | 3 | 2 | 1 |

Appendix D
The Relationship of the Survey Questions
to the Research Questions

Survey Question #1

1. Male ___ Female ___

Research Question #3f

Does the strength of the resolution differ with regard to the gender of the disputants?

Survey Question #2

2. Age ___

Research Question #3b

Does the strength of the resolution differ with regard to the age of the disputants?

Survey Question #3

3. Grade

Research Question #3a

Does the strength of the resolution differ with regard to the grade level of the disputants?

Survey Question #4

4. Grade point average ___

Research Question #3c

Does the strength of the resolution differ with regard to the grade point average of the disputants?

Survey Question #5

5. Culture:

African American ___ Caucasian ___ Hispanic ___

American Indian ___ Asian ___ Other ___

Research Question #3g

Does the strength of the resolution differ with regard to the culture of the disputants?

Survey Question #6

6. What was the dispute about?

Research Question #6a

Can the disputants report what the dispute was about 5-7 days after mediation?

Survey Question #7

7. What was the agreement?

Research Question #6b

Can the disputants report the resolution 5-7 days after mediation?

Survey Question #8

8. Is the agreement still in effect? Yes ___ No ___

If not, what happened? When?

Research Question #2

What percentage of the written agreements are still in effect 5-7 days after the mediation?

Survey Question #9

9. Did you feel the agreement was fair at the time of mediation?

Yes _____ No _____ If no, please explain.

Research Question #5.

Did the disputants feel the agreement was fair at the time of mediation?

Survey Question #10

10. Did you find mediation helpful to you? Why or why not?

Research Question #4

Did the disputants think the mediation process was helpful to them?

Survey Question #11

11. Would you use mediation to solve conflicts in the future?

Research Question #9

Would the disputants use the mediation process to solve conflicts in the future?

Survey Question #12

12. Why do you think mediation was successful for you? What contributed to the success?

Research Question #7

How do the disputants describe what happened in the mediation process that brought about them signing an agreement with the other disputant?

Survey Question #13

13. Have you used peer mediation before your recent experience?
 Yes _____ No _____ If yes, how many times? _____

Research Question #3h

Does the strength of the resolution differ with regard to disputants who have previously used the mediation process?

Survey Question #14

14. How did your dispute get to mediation?

Self referred _____ Administration referred _____ Other, please
 Teacher referred _____ Security referred _____ explain _____

Research Question #1a

Are administration referred mediations more likely to end with a written agreement than security referred mediations?

Survey Question #15

15. Did your participation in mediation decrease the number of days you would have been suspended?

Yes _____ By how many days? _____

No _____

No, suspension was not an issue connected with my mediation _____

Survey Question #16

16. How long have you known the other disputant?

- less than 1 year 1 year but less than 2 years
 2 years but less than 3 years 3 years but less than 4 years
 4 years but less than 5 years 5 years or more

Research Question #3j

Does the strength of the resolution differ with regard to the length of time the disputants have known one another?

Survey Question #17

17. How would you describe the relationship you had with the other disputant?

- Another student An acquaintance
 A friend A best friend

Research Question #3k

Does the strength of the resolution differ with regard to the type of relationship of the disputants?

Survey Question #18

18. Do you feel the mediation was helpful for the other disputant? Why or why not?

Research Question #4c

5b. Did the disputant feel that the mediation process was helpful for the other disputant? Why or why not?

Survey Question #19

19. Did you trust the mediators?

Research Question #8a

8a. Did the disputants trust the mediators?

Survey Question #20

20. Do you think the mediators seemed confident with the process?

Research Question #8b

8b. Did the disputants think the mediators seemed confident with

the process?

Survey Question #21

21. Do you think the mediators treated you with respect?

Research Question #8c

8c. Did the disputants think the mediators treated them with respect?

Survey Question #22

22. Do you think the mediators genuinely listened to you during mediation?

Research Question #8d

8d. Did the disputants think the mediators genuinely listened to them?

Survey Question #23

23. Do you think the mediators understood your point of view?

Research Question #8e

8e. Did the disputants think the mediators understood their point of view?

Research Question #1

1. What percentage of the peer mediations ended with a written agreement?

Data Collected

Data was collected from the referral forms and written agreements.

Research Question #3d

Is there a differential success rate based upon disputants who receive special education services when compared to regular students?

Data Collected

Data was collected from the peer mediation coordinators.

Appendix E
Inter-rater reliability for Research Question #6A

<u>Remark</u>	<u>Verbal Disagreements</u>	<u>Fights</u>	<u>Rumors</u>	<u>Property</u>	<u>Other</u>
Verbal harassment from name calling	K, J, G, E, D, A				
a racial remark	K, J,				G,E,D,A
she got an attitude with me	K, J, G, E,	D, A			
a sexual remark	K, J,				G,E,D,A
name calling	K, J, G, E, D				A
stolen shoes				KJGEDA	
throwing an apple		G, D		K, E	J, A
an argument	K, J, G, E, D				A
friend talking trash about me			K, J,E,D,A		G
someone was threatening me	E		K,J,G,D,A		
someone told him I called him gay			KJGEDA		
he was talking about me			KJGEDA		
a chair				K,J,G,E,D	A
he said- she said			KJGEDA		
talking behind my back			KJGEDA		
we just didn't get along	K, J	E, D, A			G
him running his mouth and acting hard		A	K, J, E, D		G
telling a friend's secret	E		K, J, G, A		D
a friend was talking a lot of mess about me			K,J,E,D,A		G,
some girl was cursing at me	K, E, D		J, A		G
my best friend thought I was saying stuff about him			K, J, G, E, D, A		
jealousy	K, J				G,E,D,A
someone was laughing at me	K	E	J		G, D, A
she was disrespectful to me	K, E, D		J		G, A
mis-communication	K, J, E		D, A		G
fight		K, J, G, E, D, A			



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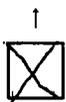
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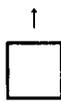
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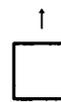
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