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The Impact of Peer Mediation as a Violence Prevention Curriculum

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Angela M. Wolf

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THE IMPACT OF PEER MEDIATION AS A VIOLENCE PREVENTION CURRICULUM

Ву

Angela Marie Wolf

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ABSTRACT

THE IMPACT OF PEER MEDIATION AS A VIOLENCE PREVENTION CURRICULUM

By

Angela Marie Wolf

Youth violence is an issue receiving increasing attention from law makers, law enforcement personnel, and institutions that service young people. Increasing pressure is being placed on schools to address the communities growing concern of school violence. One popular response to this issue of youth violence is the utilization of youth settings such as schools to implement violence prevention and conflict resolution programs. Currently, one of the most widely spread violence prevention programs in schools is peer mediation.

Peer mediation's popularity is, in part, supported by endorsements from students, parents, and school staff in addition to positive conclusions reached by researchers. However, very few studies on peer mediation have successfully demonstrated actual reductions in school violence. The aim of the present study was to provide empirical support for the use and dissemination of peer mediation curriculums as violence prevention programs. Additionally, this study addressed issues contributing to the success of peer mediation including it's efficacy in resolving disputes, the type of disputes referred, the sources of the referral, and knowledge on the disputants' outcomes.

The current study examined the effectiveness of a peer mediation program executed in a middle school after its first year through secondary analysis of data collected during an evaluation of a school district's implementation of violence prevention curriculums. Data in this study included students' academic and discipline data in addition to peer mediation report and referral forms.

Results indicated that peer mediation was successful at resolving a variety of conflicts between students in majority of the conflicts referred. School wide findings of this study suggests that the implementation of peer mediation in a school may have resulted in a decrease in violence related infractions and suspensions within the school. However, an important caveat in the interpretation of these findings is that the results found in examining the disputants and their matched comparison group. Both groups demonstrated decreases in their violence related infractions and suspension at the same rate indicating that contrary to the proposed hypothesis, involvement directly in the intervention did not make a significant difference in amounts of violence. Discussion of these results includes theoretical and methodological issues as well as directions for future research.

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Chapter One

INTRODUCTION

Violence is an increasing problem in today's schools. Many students are being forced to learn in environments where they fear for their safety. Teachers face increasingly difficult and dangerous situations without proper preparation and training. School funds are being drained by the necessary employment of extra personnel such as security guards and the purchase of security equipment like metal detectors needed to combat the threat of dangerous conflict within schools (Noguera, 1995; Zins, Travis, Brown, & Knighton, 1994). While some schools are ignoring this growing problem, others are attempting to prevent and decrease school violence. To accomplish this goal, many schools are implementing violence prevention curriculums, including peer mediation. While violence prevention programs like peer mediation offer encouraging results ranging from endorsement by school staff to successful resolution of referred conflicts (Benson & Benson, 1993; Burrell & Vogl, 1990; Cameron & Dupuis, 1991; Johnson et al., 1994; Johnson, Johnson, Dudley, & Magnuson, 1995; Johnson et al., 1996; Ray, 1985), further research is needed to establish peer mediation as effective in reducing school violence. The following literature review describes the current status of and popular responses to youth violence in schools and communities.

Youth Violence

Violence is not new to American culture. Though most Americans do not want violence in their homes, communities, and schools, society as a whole tolerates violent images. This tolerance is evidenced by the wide attendance at violent movies, the purchase of toy guns and knives for children's play, and the popularity of violent video games with many adolescents (Commission on Youth and Violence, 1993). Today's young people in America are growing up surrounded by images of violence, and many are growing up with violence itself.

The United States has the highest homicide rate in the world, and this rate is several times higher than the country with the next highest reports of homicide (Commission on Youth and Violence, 1993). Against the backdrop of societal violence, American youth are increasingly becoming both victims and offenders of violence. Accounting for one out of every five deaths among the 15 to 24 year-old population, homicide is the second leading cause of death for adolescents and young adults in America (Commission on Violence and Youth, 1993; Gorski & Pilotto, 1993; Lowry, Sleet, Duncan, & Kolbe, 1995; Thornberry, Huizinga, & Loeber, 1995). In addition, for every recorded homicide, there are an estimated 100 nonfatal assaults, many of which result in serious injury and hospitalization (DeJong, 1994). For African American youth, the statistics are even worse. Homicide is the number one cause of death, responsible for 58% of the deaths of African American males between the ages of fifteen and nineteen

(Commission on Violence and Youth, 1993; DeJong, 1994; Thornberry, et al., 1995; Webster, 1993).

Recent trends indicate that youth violence may be on the decline. Since 1995, there has been an overall decrease of youth violence including juvenile arrests for violent crime. Juvenile arrests for violent crime have decreased from 1994 to 1996 by 11.9 % (OJJDP, 1997). However, even within the context of decreasing youth violence, there is reason to take steps to further prevent this social problem. Despite the current trends suggesting a decrease in juvenile crime, the number of juveniles incarcerated, on probation, on parole, or in alternative programs like boot camps has increased (Abruzzese, 1997). Today, more juvenile offenders are committing offenses of violence. For example, a greater proportion of the overall juvenile offenders in 1995 had committed at least one violent offense than their 1980 counterparts (OJJDP, 1997).

Inner city children are especially vulnerable to violence, and exposure to violence occurs at very young ages. In a study conducted in Washington, DC, of the first and second graders surveyed, 45% reported witnessing a mugging, 31% said they had witnessed shootings, and 39% reported that they had seen a dead body (Commission on Youth and Violence, 1993). Seventy-three percent of eighth graders in Chicago had witnessed someone getting shot, stabbed, robbed, or killed (Commission on Youth and Violence, 1993). Another study in one school in Chicago reported that by age five, 26% of children had witnessed a shooting (Gorski & Pilotto, 1993). Of the Los Angeles homicides in 1982, 10-20% were witnessed by children (Gorski & Pilotto, 1993). In a

1985 study, 17% of children in urban Detroit witnessed a homicide (Gorski & Pilotto, 1993).

Clearly, violence or the threat of violence is an unfortunate reality for far too many children in the United States. The current level of interpersonal violence among young people in schools and surrounding communities has demanded national attention. In 1991, the National Educational Goals Panel reported that present educational goals include every school in the United States to be free of violence and to provide an environment which is both disciplined and conducive to learning by the year 2000. National objectives for preventing violence in schools has led many schools to incorporate these objectives into their curriculums.

School Violence

Traditionally, schools have looked toward other public and private organizations to handle the problem of violence (Gorski & Pilotto,1993). However, the increasing number of violent offenses on school grounds has forced many educators to revise their agendas (Commission on Violence and Youth, 1993; Thornberry, et al., 1995). In some school districts, concerns about threats to the safety of children have surpassed academic achievement as the highest priority for reform (Noguera, 1995). In a 1997 survey of 1,234 schools in the nation, school principals reported that violence is a significant problem in their schools. In these schools, there were 11,000 violent incidents that involved a weapon (National Center for Education Statistics, 1998). In 1992, the Centers for Disease Control reported that an alarming number of children (50% of boys and 25%

of girls) reported being physically attacked by someone during school. Thus, there is a pressing need for schools to join law enforcement and criminal justice systems in preventing the problem of youth violence. Although violence prevention programs are not required by state or federal regulations, it was recently estimated that over half of the nation's school districts have implemented education programs aimed at violence prevention (Weiler & Dorman, 1995).

For some students, concerns about safety supersede concerns about learning.

Menacker et al. (1990) surveyed a population of about 2,400 students in Chicago schools.

They found that almost half of the students did not feel safe at school and just over a third of the students carried a weapon to school. Of teachers, only 38% felt safe in their classroom and 95% reported feeling unsafe in the parking lot. This fear is not limited to large urban environments like Chicago. Reed (1989) reported that 66% of middle school teachers and 52% of high school teachers in Oklahoma City considered quitting due to physical and verbal abuse from students.

In conclusion, violence in schools is a problem for many communities, teachers, administrators, tax payers, and especially students. Interpersonal violence among youth is increasing in schools and surrounding communities, and thus, demanding increasing amounts of national attention. Children are being asked to embrace education in an environment in which there are actual or perceived threats to their personal safety, and the concerns of these children must be addressed. This national attention on violence reduction and prevention has resulted in an increasing number and variety of schools

responding to the threat of school violence with policies and programs including peer mediation.

Responses to School Violence

Schools are no longer relying on the resiliency of children to overcome violence, nor are they relying exclusively on outside assistance. Many schools are taking steps to reduce the number of violent encounters on school property. An educator was quoted as saying, "I have come to the conclusion that any event that we could imagine today as too horrific to have ever occurred has already happened, and a school has dealt with it!" (Poland, 1994, p. 175).

Schools are responding to increased violence in a variety of ways. Some have increased the penalty for engaging in violent behavior in the school such as increasing expulsions, suspensions, and detentions. Some schools have altered access to the school by building fences or walls around the perimeters of the school, installing metal detectors at school entrances, or hiring professional guards to stand watch over children (Morrison, Furlong, & Morrison, 1994). Such attempts to reduce school violence, although possibly helpful, do not provide youth with the ability to avoid conflict themselves. In addition, these types of structural changes are costly. The purchase and maintenance costs for one metal detector is approximately \$100,000 per year (DeJong, 1994).

Other schools have developed curriculums in an attempt to reduce school violence. Curriculum developers have created conflict resolution curriculums which typically frame the problem of school violence within the context of safe and healthy

lifestyles. Most curriculums incorporate both developmental and educational concepts from the prevention literature (Morrison, et al., 1994). For example, the widely disseminated Violence Prevention Curriculum for Adolescents developed by Prothrow-Stith (1987) focuses mainly on education on violence in society, anger as a healthy emotion, the process by which fights begin and escalate, and choices available to resolve conflict.

Another popular form of curriculum used in schools today is peer mediation. Peer mediation differs from the Prothrow-Stith curriculum in that it focuses on a specific conflict resolution tactic: the mediation of student conflict by youth peers. The next section will describe peer mediation programs, discuss a theoretical rationale for peer mediation, and review the literature providing support for the use of mediation as a violence prevention program in schools.

Peer Mediation Programs

The most popular and widely disseminated form of school violence prevention program is peer mediation. Peer mediation is most popular in elementary schools, but its popularity has increased its use in both middle and high schools (DeJong, 1994; Umbreit, 1991). The focus of peer mediation is to give the power of nonviolent conflict resolution to the disputants and their peers (Lane & McWhirter, 1992; Umbreit, 1991). These programs view anger as a normal, natural emotion, and aim to teach youth a constructive, positive approach to dealing with anger in their lives (Benson & Benson, 1993; Lane & McWhirter, 1992). The objectives of peer mediation include modeling alternate ways to

deal with conflict, teaching negotiation and other healthy conflict resolution skills, and perhaps most importantly, empowering youth by providing students with some control over the events of conflict (Lane & McWhirter, 1992; Umbreit, 1991).

The referral and program procedure processes are fairly consistent across peer mediation programs. In the majority of programs, mediation of student conflict is typically available by means of student request or staff referral. Peer mediation programs typically train a small number of youth leaders in mediation and listening skills (Benson & Benson, 1993). The peer leaders are trained through traditional, direct instruction followed by practice (Benson & Benson, 1993; Cameron & Dupuis 1991). The mediator remains impartial and provides no judgments or advice, but instead, facilitates the communication between disputants, clarifies issues, and helps disputants come to an acceptable, mutually satisfying solution (Cameron & Dupuis 1991). During mediation, both parties have an opportunity to communicate their side with the mediator present. Mediation sessions usually take place during lunch or other times students do not have class (DeJong, 1994; Umbreit, 1991). Extreme situations which involve weapons, drugs, or severe fights are not usually referred to peer mediation on the basis that these situations would need adult input (Burrell & Vogl, 1993; DeJong, 1994; Umbreit, 1991). Most conflicts mediated in middle school and high school involve rumors, stolen property, or disputes between boyfriends and girlfriends (Burrell & Vogl, 1993).

Theory Underlying Peer Mediation

It is important to note that peer mediation is an example of program development that lacks a clearly articulated theoretical rationale. The use of peer mediation in schools was adapted from strategies of nonviolence advocates, anti-nuclear war activists, and lawyers (Johnson & Johnson, 1996). In the literature, the application of theory transpired only after peer mediation was implemented in schools throughout the country (Johnson & Johnson, 1996). Social learning theory is most often considered the basis for use of peer mediation (Rodriguez & Zayas, 1990; Duke, 1980).

Social learning theory posits that people are not born with repertoires of violent behaviors, but that these behaviors must be learned through social interaction (Bandura, 1973). Specifically, violent behaviors must be learned through the same processes that govern the acquisition of all other behaviors: direct experience and observation of models. Further, social learning theorists have suggested that peer leaders serve as particularly effective models of behavior because they are in a position to reinforce behavior more efficiently than subordinate group members (Bandura, 1973; Damon, 1984). These theoretical underpinnings are evidenced in peer mediation programs. Specifically, peer mediation advocates theorize that violence is a learned response to interpersonal conflict and that violence is learned though modeling and direct experience. In keeping with social learning theory, peer mediation focuses on providing both experiences of nonviolent conflict resolution and peer leaders to model nonviolent

conflict resolution to decrease violence and promote the use of nonviolent responses to conflict.

Interpersonal conflict as the cause of violence. The first premise of social learning theory is that violence is not typically the result of a spontaneous outburst; there is usually some precipitation event. Bandura (1973) stated that violence is usually caused by seemingly trivial interpersonal verbal conflicts. In fact, most assaults and even homicides occur between acquaintances over conflicts. Often these conflicts occur over matters which at first may seem trivial (Lockwood, 1997; Prothrow-Stith, Spivak, & Hausman, 1987). In schools, conflict predominately consists of gossip/rumors, friendships, teasing, disagreements/misunderstandings, possession of resources, jealousy, violations of privacy, and nonverbal communication such as "dirty looks" (Araki, 1990).

Obviously, not all interpersonal conflict leads to violence. However, since violence is often precipitated by interpersonal conflict, peer mediation programs theorize that violent prevention programs should utilize conflict as the point of intervention.

<u>Direct experience</u>. As previously stated, direct experience is one way in which behavior is formed. According to social learning theory, the consequences of past actions are instrumental in shaping behavior. For example, behaviors which are successful in eliciting the desired outcome will be reinforced while behaviors which are unsuccessful in eliciting the desired outcome will be discarded and replaced by more successful behaviors (Bandura, 1973). Thus, violent behaviors will be utilized to the extent to which these behaviors elicit the desired result. When violence produces the desired outcome,

the use of violence will increase. Conversely, when violence is unsuccessful, the use of violence will decrease. Also, Bandura stated that once violence is established as a conflict resolution strategy, the use of violence will continue until new, more effective behaviors are learned and reinforced.

Peer mediation applies this knowledge by providing students with interpersonal conflicts an opportunity to experience a nonviolent method of conflict resolution. To the extent that peer mediation is successful in resolving student conflict, mediation skills will be reinforced. Theoretically, the nonviolent conflict resolution provided by mediation will be a more efficient tactic to resolve youth conflict, will receive reinforcement by both peers and authority figures, and will replace the use of violence.

Modeling. Social learning theory postulates that modeling is the second critical way in which behaviors are learned. Modeling is a continuous process which affects the acquisition of new behaviors as well as the modification of preexisting behaviors (Bandura, 1973). By observing models' behaviors and its consequences, individuals learn which behaviors are appropriate or inappropriate, desirable or undesirable (Akers, 1985; Bandura, 1973). According to Bandura, learning through modeling takes place in several ways. First, people can acquire new patterns of behavior through the observation of others. Second, the actions of models can strengthen or weaken inhibitions of behaviors previously learned. Third, the behaviors of models can prompt similar behaviors in others.

Like all other behaviors, models can teach aggressive or violent behaviors. For example, research has demonstrated that even the mere presence of a model displaying violent behaviors is enough to produce significant increases in violence (Kuhn, Madsen, & Becker, 1967). Bandura (1973) postulated that people will persist in using violent behaviors when they have not learned other ways of handling situation demands and that models can be instrumental in teaching and reinforcing nonviolent responses to conflict. Peer mediation utilizes this knowledge by providing students with models of nonviolent conflict resolution skills which will theoretically influence the behavior of others.

Peer leaders as central to the peer mediation intervention. The use of peer leaders is another example of the utilization of social learning theory as the theoretical base in peer mediation programming. Advocates of social learning theory have suggested that peer leaders serve as particularly effective models of behaviors (Bandura, 1973; Damon, 1984). Individuals who are viewed as group leaders have greater potential to alter or reinforce behaviors than subordinate group members (Bandura, 1973). Among adolescents, peer leaders may be particularly important determinants of behavior through peer influence and pressure (Brownfield & Thompson, 1991). Research has demonstrated that adolescents learn both social skills and instructional messages more effectively from their peers (Murry, Johnson, Luepker, & Mittelmar, 1984). Further, peers are instrumental in teaching both prosocial and delinquent behaviors (Damon, 1984). Duke (1980) stated that the peer group is often primary in teaching adolescents to act in ways that are not sanctioned or encouraged by authorities. For example, research

has demonstrated that youth model the delinquent behaviors of peers, and in turn, receive reinforcement through peer approval with their primary groups (Bahr, Hawks, & Wang, 1993; Rodriquez & Zayas, 1990).

Peer mediation programs rely on peer learning to model and reinforce healthy conflict resolution behaviors to the student body. Peer leaders are selected and trained in listening and conflict resolution skills and then serve as both models and social reinforcers for other students (Benson & Benson, 1993; Burrell & Vogl, 1993; DeJong, 1994; Lane & McWhirter, 1992).

To summarize, social learning theory states that learning occurs through both direct experience and observation of the modeling behaviors of peer leaders. These components appear to provide a model for the implementation of peer mediation as a violence prevention strategy. As depicted in the model presented in Figure 1, peer leaders are selected and trained to use and model healthy conflict resolution skills.

Trained peer mediators learn nonviolent conflict resolution skills and then use these skills in their own behavior in addition to using these skills in the mediation of peer conflict.

Other students learn nonviolent conflict resolution skills in two ways. First, youth learn healthy conflict resolution skills through the direct experience of the mediation of their own disputes. Mediation sessions that are successful in resolving conflict reinforce the use of nonviolent conflict resolution. Second, students not involved in mediation directly as disputants would still learn nonviolent conflict resolution skills through the modeling behaviors of both the mediators and disputants. Over time, the student body's mastery of

nonviolent conflict resolution skills would result in an increase in healthy, nonviolent conflict resolution, and ultimately, a decrease in school violence. See Figure 1 for a summary of peer mediation's impact on school violence.

Evaluations of Peer Mediation Programs

The above theory provides rationale for the potential success of mediation as a violence prevention curriculum. In theory, peer mediation should work as prescribed in Figure 1. In practice, however, the success of peer mediation is reliant on the extent to which the theory is meaningfully put into practice. Currently, many researchers have attended to the successful implementation of social learning theory's key processes necessary in their investigations of peer mediation. However, little research is available to address the overall efficacy of peer mediation as a violence prevention program.

Research on violence does offer support to the assumption that violence is a result of conflict (Lockwood, 1997; Prothrow-Stith, Spivak, & Hausman, 1987). Currently, literature on peer mediation addresses types of conflict that result in mediation, the selection of mediators from peer leaders, and the effectiveness of the training of the mediators (Araki, 1990; Burrell & Vogl, 1993; Johnson et al., 1996; Johnson, Johnson, Dudley, Ward, & Magnuson, 1995). Further, research supports the assumption that mediators model conflict resolution skills in their own behavior (Johnson, Johnson, Dudley, & Magnuson, 1995; Johnson, Johnson, Dudley, Ward, & Magnuson, 1995; Gentry & Benenson, 1992). Finally, there is evidence to suggest that mediation resolves conflicts between peers, and thus contributes to preventing and reducing school violence

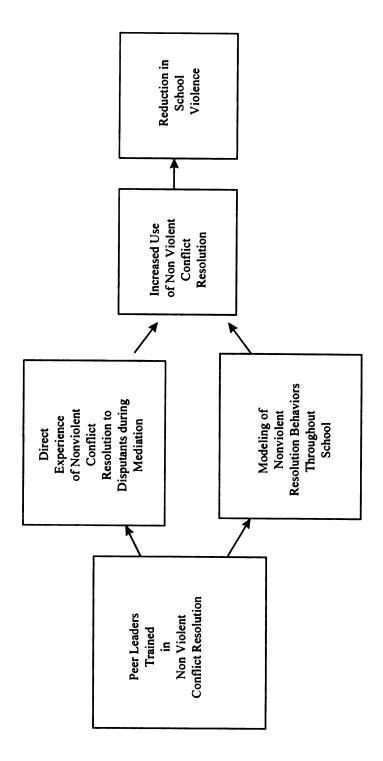


Figure 1. Model of peer mediation's impact on school violence

(Johnson, et al., 1994; Johnson, Johnson, Dudley, & Magnuson, 1995; Ray, 1995). The next sections will discuss the findings of recent studies examining the theoretical components of peer mediation. This type of evaluation is important because it will provide the foundation for future evaluations about the efficacy of peer mediation.

<u>Violent Conflict.</u> According to social learning theory, violence often begins over conflict that could be successfully mediated using nonviolence tactics. As previously discussed, literature on youth violence supports the premise that violence is often a result of interpersonal conflict. Most assaults and even homicides occur between acquaintances over conflicts, and often these conflicts occur over matters that seem trivial at the onset (Lockwood, 1997; Prothrow-Stith, Spivak, & Hausman, 1987).

The second aspect of this theory is that conflicts that could potentially lead to violence could, instead, be successfully mediated. Research demonstrates that mediation can be used to resolve the most common types of conflict. For example, Johnson et al., (1996) and Johnson, Johnson, Dudley, Ward, & Magnuson, (1995) found that most of the conflicts that were resolved by mediation were conflicts over property and preferences.

Peer Mediators. Another of the key components of peer mediation is that the most effective mediators are peer leaders (see Figure 1). Most peer mediation programs stress the importance of training peer mediators selected for their leadership skills. For the selection of peer mediators, school staff are directed to look for assertive leaders that will represent both the formal and informal groups within the school. Mediation programs warn school staff to be cautious of the exclusive selection of students based on

performance in classes, but to also include nontraditional school leaders (Benson & Benson, 1993; Burrell & Vogl, 1993; DeJong, 1994; Lane & McWhirter, 1992).

Currently, the available research on peer mediation has yet to investigate the programs' success at selecting students that would be identified by their peers as leaders.

Peer mediators as models of conflict resolution skills. The assumption that conflict resolution skills are mastered and used by the peer models is another important factor that has been addressed in the literature. These skills are then taught to other students through mediation and the modeling of behaviors. Mastery of mediation skills is essential for the mediator to then be able to apply these skills to assist in the resolution of conflict and modeling of prosocial conflict resolution skills. Thus, some of the research on peer mediation programs has focused on the mediator's mastery of the negotiation skills taught by mediation curriculums. Recent research in elementary schools has demonstrated that students are able to learn and apply the negotiation and mediation skills required of mediators in a peer mediation program. An evaluation of a peer mediation program conducted by Johnson, Johnson, Dudley, & Magnuson (1995) found that elementary school students trained as mediators were able to master the negotiation and mediation strategies used in peer mediation and recall these strategies in a follow-up. After mastery of these strategies, mediators were able to apply negotiation and mediation in response to conflict scenarios.

The evaluation of this peer mediation program continued to assess if these conflict resolution skills performed in conflict scenarios could be transferred to real life settings.

It was found that elementary school children who received mediation training reported the use of negotiation strategies at home more often than children that did not receive training to be mediators (Johnson, Johnson, Dudley, Ward, & Magnuson, 1995). Other investigators also found that conflict resolution skills taught during mediation training are successful in reducing conflicts at home. Parents of the mediators perceived that sibling conflict in their home declined in both the frequency and intensity after the mediation training (Gentry & Benenson, 1992).

Thus, there is evidence that peer mediation is effective in teaching children to master negotiation and mediation skills (Johnson, Johnson, Dudley, & Magnuson, 1995). After learning these skills, mediators are able to use negotiation and mediation skills in their own lives and perceive reduction of conflicts in their own interpersonal conflict (Gentry & Benenson, 1992; Johnson, Johnson, Dudley, Ward, & Magnuson, 1995).

Peer mediation's success at conflict resolution. As previously discussed, Bandura (1973) stated that once violence is established as a conflict resolution strategy, the use of violence will continue until new, more effective behaviors are learned and reinforced. Thus, another important theoretical component of peer mediation is that the use of mediation will result in the effective resolution of the conflict and will thus reinforce the use of nonviolent conflict resolution skills. Consequently, some researchers have examined the success rate of peer mediation at conflict resolution (Cameron & Dupuis, 1991; Johnson et al., 1996).

Johnson et al. (1996) found that mediation was successful at resolving conflict between elementary school students. Mediation resulted in the successful resolution of the conflict in 98% of the cases. As in elementary schools, results in middle schools and high schools indicate that mediation is successful at resolving conflicts between peers. For example, Cameron and Dupuis (1991) found that in a New Zealand high school, all 63 mediated disputes reached an agreement. Similarly, in a Midwestern high school, 60 agreements were reached of the 69 mediations conducted, and a two week follow-up revealed that 55 of the agreements remained intact (Cameron & Dupuis, 1991).

Decrease in school violence. The last and perhaps the most important postulate of mediation programs is that providing experiences and models of nonviolent conflict resolution will eventually lead to a decrease in school violence. In past evaluations, researchers have concluded that the implementation of peer mediation programs potentially leads to a reduction in school violence (Benson & Benson, 1993; Johnson, et al., 1994; Johnson, Johnson, Dudley, & Magnuson, 1995; Ray, 1985). Most of this evidence was ascertained through staff opinions and observations.

In general, elementary school staff provided positive reports about the peer mediation programs in their schools. In one study, elementary school staff and teachers attributed a perceived decrease in school violence to their peer mediation program. These teachers reported less frequent, less severe, and less destructive conflicts after the implementation of peer mediation in their school (Johnson, Johnson, Dudley, & Acikgoz, 1994). All six of the teachers participating in the Johnson, Johnson, Dudley, and

Magnuson (1995) evaluation endorsed the use of peer mediation to encourage students to solve their own conflicts. Benson and Benson (1993) found that administrators and teachers perceived a reduction in the time they spent on student conflict.

Although teachers and staff perceive reductions in violence, there is little empirical research on the impact of mediation programs on school violence. Thus far, the extent of empirical support for mediation's impact on amount of school violence is provided by Ray (1985). During a pilot study of a peer mediation program implemented in an elementary school, the suspension rate for fighting in the school decreased by 50%. It should be noted that the variable presented in this study pertained to punishment not the violent infraction itself.

In middle and high schools, no studies carefully examined the efficacy of peer mediation in preventing and reducing violence. Like in elementary schools, the literature does address the popularity of peer mediation among students and school staff. When surveyed, students in middle schools and high schools responded positively to peer mediation programs in their school. Burrell and Vogl (1990) found that students reported feeling empowered by the availability of peer mediation and felt that they were contributing to the health of their school. Also, they reported anecdotal evidence that indicated that peer mediation had been received positively by students, faculty, and administrators. In another study, teachers and administrators indicated that the results of the mediations were acceptable and advantageous (Cameron & Dupuis, 1991).

Overall, there is preliminary evidence to support the use of peer mediation in schools. As indicated in Table 1, the literature has established that violence is often a result of conflict, students resolve conflicts during mediation, the perception exists that peer mediation reduces violent conflict (Benson & Benson, 1993; Johnson et al., 1994; Johnson, Johnson, Dudley, & Magnuson, 1995; Johnson et al. 1996; Ray, 1985). Further, peer mediation programs are supported by positive student and staff ratings (Burrell & Vogl, 1990; Cameron & Dupuis, 1991).

Table 1 also illustrates an important factor in the widespread use of peer mediation programs: the preponderance of evidence for the effectiveness of peer mediation programs is based on the fact that school staff and students respond positively to the implementation of peer mediation programs when surveyed. These studies credit peer mediation with a variety of positive outcomes including the improvement of the mediator's conflict resolution skills and perceived reduction in student violence (Benson & Benson, 1993; Burrell & Vogl, 1990; Cameron & Dupuis, 1991; Johnson, et al., 1994; Johnson, Johnson, Dudley, & Magnuson, 1995; Johnson, et al., 1996).

Further, from Table 1 it is noticeable that information on the disputants is surprisingly absent in the literature. As stated, peer mediation's purpose is to provide models and direct experiences of nonviolent conflict resolution strategies. However, in part mediation's success rests upon the assumption that students who are at risk for violence will receive access to the program. Unfortunately, the literature on peer mediation has yet to address this important assumption. Also, Table 1 illustrates that

empirical evidence supporting mediation's successful impact on school violence is sparse. Although research assessing staff's feelings towards mediation program is important, it is not sufficient to establish peer mediation's efficacy as a violence prevention curriculum.

Critique of Past Evaluations

Despite the recent abundance of evaluations of peer mediation programs, questions remain pertaining to mediation's efficacy as a violence prevention curriculum. These questions remain for two primary reasons. First, there are considerable gaps in the research questions addressed by these evaluations. Second, in many of the studies, the research questions that have been addressed lack conclusive empirical evidence due to lack of control in methods.

One important aspect of peer mediation that has received a surprising lack of attention from evaluators pertains to knowledge surrounding the disputants. To date, no research has attempted to describe the population that is utilizing peer mediation as disputants. Understanding who mediation is targeting, whether there is anything unique about this population, and if they are at risk for violent conflict in important in understanding the mediation process. Further, although it appears that the mediators are successful in learning the nonviolent conflict resolution tactics, no investigations have been conducted to assess if the disputants are learning these skills. Also, the social learning theory requires direct experience and modeling. Although this is an essential

Table 1

<u>Literature Summary</u>

	Positive Effects on Mediators	Mediators Use Negotiation Skills After Training	Mediation Sessions Resolve Youth Conflict	Positive Perceptions Held By School Staff About Mediation Programs *	Description of Disputants	Mediation Impact of Amount of School Conflicts and Violence
Johnson, Johnson, Dudley, & Magnuson, 1995		Х	х	х		
Johnson, Johnson, Dudley, Ward, & Magnuson, 1995		x				
Araki, 1990	x					
Benson & Benson, 1993	x			x		
Johnson, et al., 1996			х	x		
Gentry & Benenson, 1992	x					
Ray, 1985						X
Johnson, et al., 1994				x		
Burrell & Vogl, 1990				x		
Cameron & Dupuis, 1991			x	x		

^a This category includes studies which addressed school staff's perception of levels of violence after the implementation of peer mediation. This studies only addressed the staff's *perception* and did not collect empirical data on actual amount of conflicts or violence in school either before or after implementation of peer mediation.

theoretical component, no research has been conducted to ascertain if students who are at risk for violence receive access to mediation or models of nonviolent conflict.

Another essential area that has been largely neglected by researchers is peer mediation's impact on amount of violence. In order to assess if peer mediation is a successful violence prevention curriculum, research must be conducted to examine the impact of peer mediation programs on actual incidents of school violence. Anecdotal evidence towards the popularity of peer mediation is not substantial evidence to justify the current dissemination of mediation as a violence prevention program.

Moreover, research examining peer mediation's effect on violence suffers from the lack of control in methods. Research tools like control groups and follow-up are used primarily to assess the impact on the mediators, not to assess reductions of violence. The use of a control group and follow-up were used only to assess the utility of mediation training on teaching and using negotiation skills, maintaining negotiation steps over time, and examining types of conflicts mediated (Johnson, Johnson, Dudley, & Magnuson, 1995; Johnson, Johnson, Dudley, Ward, & Magnuson, 1995). Only Cameron and Dupuis (1991) conducted a follow-up of the mediation session over time.

Table 2 provides a summary of the methods used in assessing only two of the variables related to peer mediation's success as a violence prevention curriculum: efficacy at conflict resolution and reductions in school violence. As illustrated by Table 2, measurements of peer mediation's success have heavily consisted of documentation of peer mediation sessions, observation, and surveys directed at school staff, students,

Table 2

Methods for Measurement of Mediation Success or Reductions of School Violence

	Observation Conducted by Evaluators	Survey of Mediation Participants	Survey or Interview of School Staff or Parents	Quantitative Measures of Violence	Peer Mediation Report Forms
Araki, 1990	x		X		x
Johnson, et al., 1996					x
Gentry & Benenson, 1992		x	х		
Ray, 1985				x	
Johnson, et al., 1994			x		
Burrell & Vogl, 1990		x	x		x
Cameron & Dupuis, 1991		x	x		

Note. References in Table 2 represent only data on mediation outcomes including resolution of conflict and reductions in school violence.

and/or parents (Johnson, et al., 1994; Johnson, et al., 1996). Finally, with the exception of Ray (1985) measures of violence are noticeably absent from discussions of peer mediation's success.

Addressing all of the gaps in the current literature is beyond the scope of the current study. However, this study contributes to the existing knowledge on peer mediation in several ways. First, this study builds on research conducted by other researchers in the areas of type of conflict mediated and source of referral. Second, this study attempts to address two major gaps in past research: the nature of the disputants and peer mediation's impact on school violence. Specifically, this study attempts to further contribute to the literature on peer mediation by examining the type of conflict mediated, the outcome of the mediation session, and whether the source of referral is an important component to the success or failure of mediation. Also, this study examines the disputants and assess the extent to which mediation contributes to a reduction in their violence in school using a matched comparison group. Finally, the current study addresses efficacy of peer mediation as a violence prevention curriculum by comparing the amount of school violence in the year prior to the implementation of the program and the year after implementation.

The Present Study

This study uses data from researchers who conducted an evaluation of a school district's implementation of a conflict resolution curriculum. In one middle school, a peer mediation program was introduced. Data collection began in the 1995-1996 school

year, and thus, 1995-1996 will be referred to as the baseline year. The 1996-1997 school year is the first year of implementation of the peer mediation program and will be referred to as the program year. Secondary analysis of the data collected by the evaluators was conducted to further understanding of peer mediation as a violence prevention curriculum.

This study attempted to answer four research questions. 1a) First, was peer mediation successful in resolving conflicts between peers? This question expanded on the preliminary evidence that peer mediation does resolve conflict which is supported by Cameron and Dupuis (1991), Johnson, Johnson, Dudley, and Magnuson, (1995), and Johnson, et al. (1996). The aim of the current study was to examine whether peer mediation was successful as a violence prevention curriculum. Thus, it was important to establish proof for the assumption that mediation is successful at conflict resolution between peers. According to social learning theory, in order to replace old behaviors, new behaviors must be successful at eliciting the desired response.

A second component of this question is, 1b) what types of conflicts were successfully mediated? In order to address this question, the types of conflicts referred to peer mediation and the types of conflicts were successfully mediated will be described.

2) Was the referral source important to the outcome of the mediation? The current study built upon research by Cameron and Dupuis (1991), Burrell and Vogl (1990), and Johnson et al. (1996) and addressed whether the source of referral was related

to the success of mediation in resolving conflict. Other studies have attended to referral source but not examined its importance to the outcome of mediation.

- 3a) Third, who was using peer mediation? As noted earlier in the discussion of Table 1, no research had been conducted to describe the population that is referred to peer mediation. It was important to explore who was being exposed to peer mediation as a disputant, and further, establish if the disputants were comprised of students that might have been at-risk for resolving conflict with violence. Data on gender, ethnicity, age, discipline referrals and academic performance for all students who utilized peer mediation will be presented.
- 3b) Were students who utilized peer mediation involved in fewer conflicts in school when compared to similar students who did not utilize peer mediation? A major gap in the literature (see Table 1) remained as to the effectiveness of peer mediation in preventing and reducing further violence committed by the disputants. It was hypothesized that students who utilized peer mediation would have significantly fewer discipline referrals for conflict related situations including fights, threats, verbal and physical assault, and battery than students who were matched on age, gender, ethnicity, academic performance in the baseline year, and discipline referrals for the baseline year, but who did not utilized peer mediation.
- 4) Lastly, did a peer mediation curriculum impact school violence? Much of the research on peer mediation provided anecdotal evidence to suggest that peer mediation contributes to a reduction in school violence. Parents, teachers, and other

school staff perceived a decrease in the amount of school violence after the implementation of peer mediation (Benson & Benson, 1993; Burrell & Vogl, 1990; Cameron & Dupuis, 1991; Gentry & Benenson, 1992; Johnson, et al., 1994; Johnson, Johnson, Dudley, Magnuson, 1995; Johnson, et al., 1996). Unfortunately, only one study pilot provided empirical evidence to suggest a decrease in violence conflict after the implementation of peer mediation (Ray, 1985).

For this study, it was hypothesized that there would be a decrease in violence related suspensions in the school after the implementation of peer mediation.

Specifically, it was hypothesized that there would be a decrease in the number of discipline infractions for fights, threats, verbal and physical assault, and battery in the program year discipline records when compared to the baseline year. Further, there would be a decrease in out of school suspensions for fights, threats, verbal and physical fights, and battery in the program year discipline records when compared to the baseline year.

Chapter Two

METHOD

Design and Setting

Data for this study were collected from a middle school in the school district of a medium-sized city in the midwest. The student body consists of sixth, seventh, and eighth graders.

Participants

Students that were enrolled in the program school during either the school year of 1995-1996 or 1996-1997 were included in this study. In total, data on 1,414 students were collected by the evaluators of the peer mediation program. Data on gender and ethnicity were missing on 22 cases accounting for 1.6% of the sample. Of the 1,414 students, 50.9% were male and 47.5% were female. Most of the students at the school during the two data collection years were White, (44.8%). The remaining students were African American (28.1%), Latino (16.0%), Asian (8.6%), and Native American (1%). For some individual analyses, an appropriate subset of the participants was used. The appropriate subset of participants will be noted during the discussion of analyses.

Of the students enrolled during the intervention year (1996-1997), 253 participated in the peer mediation process as disputants. More females (53%) than males (47%) utilized the program. Most of the disputants (41.9%) were sixth graders with seventh graders accounting for 26.5% and eighth graders accounting for 31.6% of the disputants.

Measures

Demographics and Student Background

Information on students' age, gender, ethnicity, cumulative grade point average, and number of absences from student academic records were used to describe disputants.

Also, this information was used to compare disputants to the rest of the student body.

Mediation Referral Source

The referral source for the mediation was examined for this study. On the peer mediation request form (see Appendix A), students were asked to check who requested or encouraged the peer mediation session. Responses included self, other student, security, teacher, counselor, administration, or other. Because only one request form was recorded for each mediation, if either of the disputing parties requested the mediation, that specific mediation was considered "participant referred." Referrals from other student, teacher, counselor, administration, or other were considered "referred by other."

Mediation Processes and Outcomes

The peer mediation report forms (see Appendix B) contained information on the type of conflict that was mediated. Disputants involved in the peer mediation session were asked to discuss and check the type of conflict in a space provided on the peer mediation form. Types of conflict included the following categories: teasing (put-downs, name calling), aggression (pushing, shoving, harassment, intimidation, threats), property disputes (theft, destruction of property), friendship disputes (boyfriend/girlfriend, rumors/gossip, arguments), and other/specify. The conflict

resolution was also examined. On the peer mediation form, mediators and disputants responded to a question about the resolution of the conflict. Students checked a blank indicating whether or not the conflict was resolved.

In School Violence

Discipline infractions for violence and suspensions for violence were examined.

Data on suspensions were collected from two sources: 1) the suspension data maintained at the school district's student services office and 2) the middle school's discipline data maintained at the school itself. All student discipline infractions are managed by the vice principals in the school. In cases where the response to a student infraction was suspension from school, the vice principals were required to send documentation of the suspension to the student service's office in addition to maintaining that information in the school records. Thus, there were two sources of records on student suspensions: student services and the school. Records of discipline infractions that did not result in suspension are only maintained in the school. No documentation occurred at the student services office.

An infraction or suspension was considered violence related if the infraction was for hitting a teacher, fighting, assault, battery, threat, and other violence. Nonviolence related infractions included the following: truancy, tardiness, smoking, possession of tobacco, use of drugs or alcohol, possession of drugs or alcohol, possession of fireworks, possession of an illegal device, theft, trespassing, vandalism, disorderly conduct,

misconduct, insubordination, lewd behavior, sexual misconduct, and other. These categories were defined by the school district.

Procedures

The implementation of the peer mediation intervention occurred during the school year of 1996-1997. From the beginning of the program school year, steps were taken to ensure student awareness of the availability of peer mediation to facilitate healthy, nonviolent conflict. Teachers went to a total of six hours of training comprised of a three hour workshop on two separate days to learn about the purpose of peer mediation and the several ways students could become involved.

Teacher Training

The teacher training began with introductory games and exercises to introduce the teachers to each other and the topic of conflict. Teachers then broke up into groups to discuss a variety of issues surrounding conflict in schools including the following: 1) the possible sources of youth conflict; 2) typical conflict resolution strategies employed by students; 3) possible positive outcomes of student conflict; 4) the school's response to student conflict; 5) lessons the teachers hoped students learned from the school's responses to conflict; 6) peer mediation's place as a school response to conflict; 7) lessons the teachers hoped students learned from mediation. During the remaining training time at the workshop, teachers were instructed on the process of mediation and how students can become involved. Also, the teachers role-played conflict and practiced mediation.

Descriptions of the program were included in the daily announcements and posters advertised mediation's availability in classrooms and hallways. In addition, the room set aside for the peer mediation to occur was designated as the "peace room" and students were encouraged to visit to promote student comfort.

Mediator Training

The mediators received approximately 12 hours of training over a two-day period. The mediators were allowed to miss one day of classes to attend mediation training and were required to attend training on the following Saturday. The training began with introductory games which encouraged students to get to know each other and create a relaxed atmosphere. After the introductory period, all of the students took turns sharing why they were interested in becoming peer mediators. Responses included objectives such as "making my school a safer place," "changing the way kids act towards each other," "learn how to stay out of trouble," "stop violence," "help people solve their problems," and "tell kids that fighting will get you into trouble."

Each student was then asked to work in a group, and share their own conflict style with other students in the group. The groups then brainstormed responses to the questions: 1) What is conflict? 2) What do we think? 3) How do we feel? and 4) What do we do? Students were then asked to list feelings, thoughts, and actions and make the distinction between the three. Students assembled again in the large group and discussed positive outcomes of conflict and the role of a good mediator. The remainder of the day was spent with varying students completing role plays of positive and negative responses

to conflict. Day two of training was comprised of a review of the previous day and actual examples of mediations and practice for each student.

Peer Mediation

Throughout the year, students engaged in conflict were able to get involved in mediation either by self- referral or by referral from others. Disputing students could request the intervention of peer mediation by completing a brief peer mediation request form. Friends of the disputants, teachers, counselors, administrators, and other school personnel also could request the intervention of peer mediation by filling out a request form. On the day the request was made, disputants and peer mediators went to the peace room to resolve the conflict. The peer mediation coordinators reported that for most incidents the disputing students were able to have their conflict mediated as soon as two mediators could be present. Usually, this was within minutes.

Disputants participating in mediation met in the "peace room" with a pair of trained mediators. Each student was asked to share his/her interpretation and feeling about the conflict. The mediators' role was to remain impartial and to facilitate communication between disputants. The mediators assisted the disputants in negotiating a resolution to the conflict. Although no adults were present for the mediation session, an adult was always in the room next to the peace room if needed at anytime throughout the mediation. During the mediation, the mediators and disputants worked together to complete the peer mediation report form which provided information on the nature of the conflict and its resolution (See Appendix B). It should be noted that school officials kept

no records on the mediation referral if the student chose not to participate in mediation.

Thus, it is impossible to know how many youth were referred to peer mediation, but refused mediation of their conflict.

Data Collection

For the purposes of this study, permission to use several anonymous databases was obtained. These databases included student academic and discipline records maintained at the school, student suspension records maintained at student services, and peer mediation report forms. The procedure for data collection for all sources is described below.

Demographics and Student Background

Evaluators collected students' academic electronic files for the school years of 1995-1996 and 1996-1997. Evaluators collected files with the student names and identification numbers attached to the files. To ensure student anonymity, researchers involved in the data collection removed student names from all files accessed for this study. These academic records contained information on each student's academic grade point average, student's absences, ethnicity, gender, and year in school. This information was used to describe the disputants and compare the disputants with the rest of the student body.

In School Violence

Two vice principals at the school were responsible for disciplining and documenting all students' behavior infractions. One of the vice principals administered

discipline to students with last names beginning with the first half of the alphabet, A-M. The second vice principal dealt with students with last names beginning with the last half of the alphabet. The principals maintained their designated students during both the baseline and program year. That is, the principal that disciplined youth with last names starting with A-M in the baseline year also disciplined these same students in the program year.

When students were sent to the office for behavior infractions, the vice principals documented the infraction and the method of discipline. Methods of discipline were sometimes unique to the behavior infraction, but commonly used methods included warning, detention, parent-teacher conference, apology, time-out, and suspension.

Unfortunately, no records were maintained of student behavior infractions that did not receive the attention of the vice principals so this study included only infractions that reached the vice principals. Data included in this study are further restricted by the fact that only violence related infractions are included.

Suspension records were also maintained at the school district's student services office. When a student is suspended from any school in the school district, the student's suspension must be referred to student services. Evaluators collected electronic files containing suspension records from student services in addition to the records collected from the school's vice principals. The electronic suspension files that evaluators collected from student services contained the students' name with identification numbers.

To ensure student anonymity, evaluators staff members removed student names from all files accessed for this study.

It should be noted that although the suspension records from the school and student services were in 96% agreement during the baseline year, there is a greater discrepancy between the two data files for the program year. During the program year, 74% of the suspensions documented at the school were also documented at student services. Another 16% of suspensions were documented only at student services, and 10% of suspensions were documented only at the school.

Mediation Process and Outcomes

Peer mediation forms were completed to request peer mediation and to document the peer mediation process. These peer mediation forms were entered into a database on site by school officials. Evaluators collected copies of these mediation forms as part of their evaluation. Research assistants randomly selected 20% of the mediation forms to check the reliability of the data. No errors were found. Research assistants replaced student names with identification numbers so that the disputants could be matched with the appropriate student discipline records and academic files while maintaining student anonymity.

Chapter Three

RESULTS

Examining the Proposed Research Questions

This study examined the following research questions: 1a) Is peer mediation successful in resolving conflicts between peers? 1b) What types of conflicts are successfully mediated? 2) Is the referral source an important variable related to the outcome of peer mediation? 3a) Who are the disputants? 3b) Are disputants involved in less violence after mediation then a matched comparison group? 4) Does a peer mediation curriculum impact school violence?

Peer Mediation

There were 286 mediations during the program year involving 253 different disputants (some students were disputants several times). A conflict was considered successfully resolved if both of the disputants agreed to a resolution. According to the peer mediation report forms, mediation was successful at resolving student conflict. Disputants reported that mediation resulted in the successful resolution of the referred conflict in 89.2% of mediations. Mediation serviced a variety of conflicts throughout the program year including conflicts over teasing/insulting (30.8%), rumors/gossip (30.1%), shoving/pushing (22.7%), friendship disputes (17.8%), threats (14.0%), harassment (5.6%), property disputes (4.2%), intimidation (1.7%), girlfriend/boyfriend disputes (1.4%), and other (6.3%). A mediation could be referred for more than one type of conflict.

Additionally, frequencies were computed for types of conflicts *successfully* mediated. Frequencies of types of conflict that were successfully resolved were fairly representative of all conflicts referred to mediation meaning there was no particular type of conflict more likely to remain unresolved. Table 3 summarizes these results.

Table 3

Types of Conflict Referred to Mediation

Category	All Conflicts Mediated (n=286)	Successfully Resolved Conflicts (n=255)	Conflicts Not Resolved (n=31)
Teasing/Insulting	30.8% (88)	31.8% (81)	22.6% (7)
Rumors/Gossip	30.1% (86)	29.4% (75)	35.5% (11)
Shoving/Pushing	22.7% (65)	23.1% (59)	9.4% (6)
Friendship Disputes	17.8% (51)	17.6% (45)	19.4% (6)
Threats	14.0% (40)	12.9% (33)	22.6% (7)
Harassment	5.6% (16)	4.7% (12)	12.9% (4)
Property Disputes	4.2 % (12)	3.9% (10)	6.5% (2)
Intimidation	1.7% (5)	1.6% (4)	3.2% (1)
Girlfriend/Boyfriend Disputes	1.4% (4)	1.6% (4)	0% (0)
Other	6.3% (18)	6.7% (17)	3.2% (1)

Note. Mediations could be referred for more than one type of conflict

Referral Source

Analyses were conducted to ascertain whether referral source was an important variable in the outcome of peer mediation. Only 20.6% of the conflicts mediated were referred to mediation by one of the disputants. The remaining mediations were referred by a teacher (23.8%), an administrator (14.3%), security personnel (13.3%), a student not involved in the conflict (11.9%), a counselor (6.3%), or other (3.1%). Data on initiation source was missing on 6.6% of the report forms. Referrals were coded as a dichotomous variable of referral by "self" or "other" as demonstrated in Table 4. A phi coefficient did not reveal that referral source was significantly related to the outcome of peer mediation $(r_{xy}$ =.054, p>.05).

Table 4

Referral Source

Referral Source	Reso	olve	Total
	Yes	No	
Disputants/Self	54	5	59
Others	201	26	227
Total	255	31	286

Disputants

Of the 927 students present during the program year, 253 participated in mediation as disputants. More females (53%) than males (47%) utilized peer mediation,

and the majority of disputants were White (44.7 %). Most of the disputants (41.9%) were sixth graders with seventh graders accounting for 26.5% and eighth graders accounting for 31.6%.

Statistically, disputants differed from the other students at the school on a number of variables. Analysis of variance indicated that the disputants did not perform as well academically as the students that did not use mediation. It should be noted that of the 927 students, 25 students were missing data on GPA and absences. The group of students that did not use peer mediation (non disputants) had a GPA that was significantly higher than disputants, $\underline{F}(1,900) = 12.27$, $\underline{p}<.05$, $\eta^2=.01$. The mean GPA for disputants was 2.28 compared to non disputants' mean of 2.55. For absences, the difference between disputants ($\underline{M}=24.28$) and non disputants ($\underline{M}=21.32$) approached significance, $\underline{F}(1,900) = 3.45$, $\underline{p}=.06$.

Before the disputants are compared to the remaining student body on the violence variables, these variables will be discussed. This study utilized data from school records maintained at the school and suspension records maintained at student services. The exclusive source for infractions that resulted in disciplinary actions other than suspension from school was the school records maintained by the school's two vice principals. In cases where the penalty was suspension from the school, the infraction was referred to student services, and was thus, documented in both the school's records and student services' records. However, there was a discrepancy between the two records of suspensions. The data files maintained at the school assert that during the baseline year

196 youth were suspended for a total of 283 suspensions (some youth were suspended several times). Suspension files maintained at student services assert that during the baseline year 203 youth were suspended for a total of 281 incidents of suspension.

During the program year, the discrepancy increases. Suspension files maintained at the school indicate that 169 youth were suspended for a total of 230 suspensions, and the student services' files indicate that 225 youth were suspended for a total of 311 incidents of suspension.

The records for violence maintained at the school indicated that disputants differed from the other students at the school in violence reported. Disputants were involved in more violence related infractions that the rest of the student body during the program year, $\underline{F}(1,925) = 93.10$, $\underline{p}<.05$, $\eta^2=.09$. Disputants also had significantly more violence related suspensions, $\underline{F}(1,925) = 97.89$, $\underline{p}<.05$, $\eta^2=.10$. Additionally, the records from student services also indicated that disputants were suspended for violence more often than the rest of the student body, $\underline{F}(1,925) = 20.57$, $\underline{p}<.05$, $\eta^2=.02$. See Tables 5-10 for a summary of comparisons between the disputants and the other students.

Disputants' Level of School Violence

It was predicted that students who utilized peer mediation would be involved in fewer conflicts than matched group of students who did not utilize peer mediation. Specifically, it was hypothesized that disputants would have significantly fewer discipline referrals for conflict related situations including fights, threats, verbal and physical assault, and battery than students who were matched on age, gender, ethnicity, academic

Table 5

Percentages for Disputants and Non Disputants on Gender

Gender	Disputants (N=253)	Non Disputants (N=674)
Male	47%	54.6%
Female	53%	45.4%

Table 6

Percentages for Disputants and Non Disputants on Ethnicity

Ethnicity	Disputants (N=253)	Non Disputants (N=674)
White	44.7%	45.8%
Black	33.2%	26.0%
Latino	17.8%	16.2%
Asian/Pacific Islander	3.6%	11.0%
Native American	.8%	1.0%

Table 7

Percentages for Disputants and Non Disputants on Grade Level During Program Year

Grade	Disputants (N=253)	Non Disputants (N=674)
Sixth	41.9%	31.0%
Seventh	26.5%	32.8%
Eight	31.6%	36.2%
Missing	5.6%	0.0%

Table 8

Percentages for Disputants and Non Disputants on GPA During Program Year

Grade	Disputants (N=253)	Non Disputants (N=674)
4.0 > X > 3.5	11.1%	23.0%
3.499 > X > 3.0	13.8%	17.5%
2.999 > X > 2.5	19.8%	13.4%
2.499 > X > 2.0	18.2%	16.3%
1.999 > X v 1.5	17.0%	13.1%
1.499 > X > 1.0	9.9%	6.7%
.999 > X > 0.0	10.3%	9.9%
Missing	0%	0.1%

Table 9

Percentages for Disputants and Non Disputants on Absences During Program Year

Absences	Disputants (N=253)	Non Disputants (N=674)
0	.8%	1.9%
1 to 5	10.3%	15.9%
6 to 10	13.4%	21.2%
11 to 15	16.2%	16.9%
16 to 20	12.6%	9.6%
21 to 30	18.2%	12.2%
31 to 50	17.4%	11.1%
51 to 131	11.1%	11.1%

Table 10

Means and Standard Deviations for Disputants vs. Non Disputants During Program Year for Violence

Variable	Group	<u>N</u>	Mean	Standard Deviation
Infractions for Violence	Disputants	253	.70	1.03
During Program Year	Non Disputants	674	.19	.58
Suspensions for	Disputants	253	.52	.82
Violence Recorded by the Principal	Non Disputants	674	.12	.40
Suspensions for	Disputants	253	.31	.76
Violence Recorded at Student Services	Non Disputants	674	.13	.46

performance in the baseline year, and discipline referrals for the baseline year, but who did not utilized peer mediation as disputants. To address this question, records from peer mediation report forms were used to identify students that used mediation as disputants. The discipline infraction data maintained at the school was used to match disputants with a non-disputant comparison group and also to compare these groups on discipline infraction in the program year. In addition, the school's academic files were used to provide information on academic performance, ethnicity, gender, and grade level.

Groups Matched on Baseline Year Variables

In order to match students on variables present during the baseline year and compare these students during the program year, only students that were present during both years were utilized for matching. Of the 253 disputants involved in peer mediation

during the program year, only 106 disputants had data available for both the baseline and program years. These 106 disputants were matched with students that did not participate in mediation as disputants. Unfortunately, given the constraints of the sample size, matching was performed on only two of the originally targeted variables: gender and number of discipline infractions during the baseline year. Although the disputants and the matched comparison group were not matched on year in school and ethnicity, the two groups were similar on these variables. Disputants and their matched comparison group differed on their academic performance in baseline year and number of absences. For GPA and absences, the disputants differed slightly, but not significantly, from their comparison group. The disputants' mean GPA for baseline year was 2.5 compared to the matched group's mean GPA of 2.71. The disputants averaged 22.6 absences and the comparison group averaged 19.2 absences during the baseline year. These differences on GPA and absences between the two groups were not significant. Refer to Tables 11 through 13 for descriptions of ethnicity, gender, and grade level.

Pre/Post Comparisons

Each of the 106 disputants was matched to a specific comparison student. These students were then paired together by date of the mediation. For each pair, every violence related discipline infraction or suspension that occurred before the date of the disputant's mediation was considered pre-mediation and every violence related discipline infraction or suspension that occurred after the date of the disputant's mediation was considered post-mediation. After the 106 disputants were paired with the other 106

Table 11

Ethnicity of Disputants and Matched Comparison Group

Ethnicity	Disputants (N=106)	Matched Comparison Group (N=106)
White, not Hispanic	49%	47%
Black, not Hispanic	26%	31%
Latino or Hispanic	22%	11%
Native American	0%	1%
Asian/Pacific Islander	3%	10%

Table 12

Percentages for Disputants and Matched Comparison Group on Gender

Gender	Disputants (N=106)	Matched Comparison Group (N=106)
Male	50%	50%
Female	50%	50%

Table 13

<u>Percentages for Disputants and Matched Comparison Group on Grade of Student in</u>

Baseline Year

Grade	Disputants (N=106)	Matched Comparison Group (N=106)	
Sixth Grade	47%	48%	
Seventh Grade	53%	52%	

students on the matched variables, students were compared on violence related infractions per month after their initial peer mediation session. Repeated measures analysis of variance was conducted to examine the effect of peer mediation on amount of disputant's school violence. It should be noted that students were matched on violence related infractions during the baseline year. This is before peer mediation was introduced to the school. Thus, as reported in Table 14, the two groups' means and standard deviations for infractions related to violence are equal for the baseline year. However, the variables utilized here were intended to compare students on amounts of violence pre and post mediation. Pre mediation included all infractions that occurred during the baseline year plus all infractions that occurred during the program year previous to the mediation. As Table 14 illustrates, the mean number of pre mediation infractions for disputants is larger than for their matched comparison group. However, analysis of variance was performed

and the two groups' means for pre mediation infractions did not differ significantly, $\underline{F}(1, 210) = 1.2, \underline{p} = .27.$

Three variables were examined: 1) infractions for violence from records maintained at the school, 2) suspensions for violence from records maintained at the school, and 3) suspensions for violence from records maintained at student services. For infractions for violence, only a significant main effect for time was found, $\underline{F}(1,210) = 12.47$, $\underline{p}<.05$, $\eta^2=.06$. Both groups demonstrated decreases in violence related infractions post mediation. There was no significant main effect for group and no significant interaction between group and time. Thus, the only effect was that both the disputants and their matched comparison group had fewer discipline infractions for violence over time. See Table 15.

Further, to examine if program effects were being masked by the variables GPA and absences, analysis of covariance was performed for year GPA and absences during the program year. The ANCOVA failed to reveal any significant between group differences or interactions for violence related infractions. In fact, the main effect for time disappeared after GPA and absences were covaried in the analyses. Instead, the covariates were significant. The two groups were significantly different on program year GPA, $\underline{F}(1, 208) = 5.63$, $\underline{p}<.05$, $\eta^2=.03$ and absences, $\underline{F}(1,208) = 6.88$, $\underline{p}<.05$, $\eta^2=.03$. These results would indicate that for violence related infractions, variance over time was not significant after difference on GPA and absences were accounted for by the analyses. See Table 16 for a summary of results.

Table 14

Discipline Infractions for Disputants and Matched Comparison Group

	Disputants (N=106)	Matched Comparison Group (N=106)
Mean Number of Discipline Infractions for Baseline year	.71	.71
Mean Number of Discipline Infraction Pre Mediation	.96	.76

Table 15

Analysis of Variance for Infractions for Violence

Source	df	F	<u>p</u>
Group	1	1.58	.21
Error (Group)	210	(.013)	
Time	1	12.47*	.00
Time*Group	1	.006	.94
Error (Time)	210	(.005)	

Note. Values enclosed in parentheses represent mean square errors.

^{*&}lt;u>p</u> < .05

Table 16

Analysis of Covariance for Infractions for Violence

Source	df	F	р
Absences Covariate	1	6.88*	.009
GPA Covariate	1	5.630*	.019
Group	1	.364	.547
Error (Group)	208	(.011)	
Time	1	1.365	.244
Time*Absences Covariate	1	.062	.804
Time*GPA Covariate	1	.260	.611
Time*Group	1	.017	.868
Error (Time)	208	(.005)	

Note. Values enclosed in parentheses represent mean square errors.

For suspensions for violence from records maintained at the school, main effects for time, $\underline{F}(1, 210) = 4.58$, $\underline{p} < .05$, $\eta^2 = .02$ and group $\underline{F}(1, 210) = 4.04$, $\underline{p} < .05$, $\eta^2 = .02$ were found. As indicated by Table 17, there was not a significant interaction between group and time.

Table 17

Analysis of Variance for Suspensions from School Records

Source	df	F	<u>p</u>
Group	1	4.038*	.046
Error (Group)	210	(.006)	
Time	1	4.58*	.033
Time*Group	1	.661	.417
Error (Time)	210	(.004)	

Note. Values enclosed in parentheses represent mean square errors.

To examine if an interaction between time and group was being masked by the variables of GPA and absences, analysis of covariance was performed for program year

^{*}p < .05

p < .05

GPA and absences during the program year. The ANCOVA failed to reveal a significant interaction for time and group on violence related suspensions recorded at the school. In fact, after GPA and absences were covaried in, the main effects for time and group disappeared and the covariates were not significant. See Table 18.

Table 18

Analysis of Covariance for Suspensions from School Records

Source	df	F	р
Absences Covariate	1	3.26	.072
GPA Covariate	1	2.037	.155
Group	1	.2.50	.116
Error (Group)	208	(.005)	
Time	1	1.575	.211
Time*Absences Covariate	1	.160	.689
Time*GPA Covariate	1	1.649	.200
Time*Group	1	1.167	.281
Error (Time)	208	(.004)	

Note. Values enclosed in parentheses represent mean square errors.

For suspensions for violence from records maintained at student services, neither of the main effects for time or group were significant. For summary, see Table 19.

^{*}p < .05

Table 19

Analysis of Variance for Suspensions from Student Services

Source	df	F	<u>p</u>
Group	1	1.72	.191
Error (Group)	210	(800.)	
Time	1	3.33	.069
Time*Group	1	.104	.747
Error (Time)	210	(.004)	

Note. Values enclosed in parentheses represent mean square errors. *p < .05

Again, analysis of covariance was performed for GPA and absences during the program year, but only main between group effects were found for the covariates of GPA, $\underline{F}(1, 208) = 4.40$, $\underline{p}<.05$, $\eta^2=.02$ and absences, $\underline{F}(1, 208) = 5.26$, $\underline{p}<.05$, $\eta^2=.03$. See Table 20 for summary.

Table 20

Analysis of Covariance for Suspensions from Student Services

Source	df	F	<u>p</u>
Absences Covariate	1	5.256*	.023
GPA Covariate	1	4.395*	.037
Group	1	.530	.468
Error (Group)	208	(.007)	
Time	1	1.598	.208
Time*Absences Covariate	1	.623	.431
Time*GPA Covariate	1	.743	.390
Time*Group	1	.138	.710
Error (Time)	208	(.004)	

Note. Values enclosed in parentheses represent mean square errors.

See Table 21 for means and standard deviations for discipline infractions, suspensions according to school records, and suspensions according to student services.

p < .05

Table 21

Descriptive Statistics for Disputants and Matched Comparison Group Pre and Post Mediation

Variable	Group	N	Mean Pre	SD	Mean Post	SD
Infractions for Violence per	Disputants	106	.066	.093	.042	.115
Month	Matched Group	106	.052	.085	.027	.086
Suspensions for Violence per	Disputants	106	.041	.721	.033	.091
Month from School Records	Matched Group	106	.031	.056	.013	.055
Suspensions for Violence per	Disputants	106	.045	.068	.035	.077
Month from Student Services	Matched Group	106	.356	.061	.022	.097

There was a concern about the discrepancy in record keeping for suspensions at the school verses student services. In order to address this discrepancy, a new variable for suspensions was created. Suspensions that were noted either in the records at the school or in the records at student services were included in the new variable.

Suspensions that were recorded at both the school and student services were only counted once. Repeated measures ANOVA was conducted on the new variable. For this new variable of suspension, there were no significant effects for time or group. See Table 22

Analysis of covariance was performed for GPA and absences during the program year for the new variable of suspension. As noted by Table 23, between group effects

were found for the covariate of GPA, $\underline{F}(1, 205) = 4.59$, $\underline{p} < .05$, $\eta^2 = .02$ and absences, $\underline{F}(1, 205) = 5.26$, $\underline{p} < .05$, $\eta^2 = .03$.

Table 22

Analysis of Variance for Suspensions from Both Sources Combined

Source	df	F	<u>p</u>
Group	1	2.244	.136
Error (Group)	210	(.009)	
Time	1	.560	.455
Time*Group	1	.372	.543
Error (Time)	210	(.005)	

Note. Values enclosed in parentheses represent mean square errors.

Table 23

Analysis of Covariance for Suspensions from Both Sources Combined

Source	df	F	<u>p</u>
Absences Covariate	1	5.256*	.023
GPA Covariate	1	4.395*	.037
Group	1	.530	.468
Error (Group)	208	(.007)	
Time	1	.501	.480
Time*Absences	1	.099	.754
Covariate			
Time*GPA Covariate	1	.376	.540
Time*Group	1	.449	.504
Error (Time)	208	(.006)	

Note. Values enclosed in parentheses represent mean square errors.

In summary, differences between the disputants and their matched comparison group on the three variables of violence related infraction, violence related suspensions services were not significant. Thus, peer mediation did not appear to significantly

p < .05

^{*}p < .05recorded at the school, and violence related suspension recorded at student

decrease the disputants' amount of violence related suspensions compared to their matched group.

Peer Mediation's Impact on School Violence

It was hypothesized that there would be a decrease in the number of discipline infractions for violence in the program year when compared to the baseline year. In order to address the hypothesis, only students that had data available for both years were included in these analyses (n=523). Students that were enrolled in the school for only one of the years were excluded in these analyses because these students had insufficient data. This generally excluded students that were in the sixth grade during the program year, students that were in the eight grade during the baseline year, and students that transferred schools during either the baseline or program year from these analyses.

Repeated measures ANOVA was conducted on the three variables: number of suspensions at student services, number of suspensions recorded at the school, and number of discipline infractions recorded at the school. These analyses revealed only one significant finding for number of discipline infractions that did not result in suspension. There was a significant decrease of discipline infractions for violence recorded at the school for the program year, $\underline{F}(1, 522) = 27.278$, $\underline{p} < .05$, $\eta^2 = .223$. The number of suspensions recorded at student services decreased in the program year with the relationship approaching significance $\underline{F}(1, 522) = 3.206$, $\underline{p} = .074$, $\eta^2 = .077$. There was not a significant decrease in suspensions for violence recorded at the school in the program year.

As previously stated, there was a concern about the discrepancy in record keeping for suspensions at the school verses student services. In order to address this discrepancy, a new variable for suspensions was created. Suspensions that were noted either in the records at the school or in the records at student services were included in the new variable. Suspensions that were recorded at both the school and student services were only counted once. Repeated measures ANOVA was conducted on the new variable. Analysis utilizing suspensions that were recorded at either place indicated a significant decrease in the number of suspensions for violence from the baseline to the program year, $\underline{F}(1,522) = 4.106$, $\underline{p} < .05$, $\eta^2 = .01$.

Chapter Four

DISCUSSION

The objective of this study was twofold. The first objective was to build on previous research regarding the types of conflict mediation resolves, mediation's success rate, and importance of referral source. The second objective was to address research questions largely ignored in the literature regarding the nature of the disputants and provide an evaluation of mediation's efficacy at violence prevention.

Summary of Major Findings

Findings with regards to the types of conflicts mediated, success of the mediation, referral source to mediation, and reductions in amount of school violence were consistent with previous literature. Specifically, the types of conflicts referred to mediation in the current study were congruent with the results of prior studies (Johnson, Johnson, Dudley, Ward, & Magnuson, 1995; Johnson et al., 1996). In this study, students reported that most of the conflicts mediated during the program year were disputes over teasing/insults and rumors/gossip.

Findings also corroborated earlier research which suggested that mediation is a successful method of conflict resolution between peers (Cameron & Dupuis, 1991; Johnson et al., 1996; Johnson, Johnson, Dudley, & Magnuson, 1995). According to the peer mediation report forms, the majority of mediations performed resulted in the successful resolution of the conflict.

Results indicated that referral source was not an important variable related to the outcome of the mediation session. Previous studies had discovered that most mediations in elementary school were referred by someone other than the disputing parties while in high school the number of self referrals increased (Burrell & Vogl, 1990; Cameron & Dupuis, 1991). In the middle school setting of this study, most of the disputes were referred by someone other than the disputing parties. However, referral source was not related to the success of mediation at resolving the dispute.

Further, past evaluations of peer mediation programs based on anecdotal information have supported the continued use of peer mediation as a violence prevention program (Benson & Benson, 1993; Burrell & Vogl, 1990; Cameron & Dupis, 1991; DeJong, 1994; Johnson et al., 1994; Johnson, Johnson, Dudley, & Magnuson, 1995; Johnson et al., 1996; Umbreit, 1991). Likewise, empirical evidence from this study also provides partial support for the hypothesis that the implementation of a peer mediation curriculum would result in decreased incidents of school violence. Specifically, during the program year there was a significant decrease in the number of violence related discipline infractions and the number of suspensions on the collapsed variable of suspensions.

Previous research has focused on the mediators and their experiences with the program. To that aim, the literature has already established that mediation has positive effects on the mediators (Araki, 1990; Benson & Benson, 1993; Burrell and Vogl, 1990; Johnson et al., 1994; Johnson, Johnson, Dudley, & Magnuson, 1995; Johnson, Johnson,

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Dudley, Ward & Magnuson, 1995; Johnson et al., 1996; Umbreit, 1991). In contrast, one goal of this study was to describe the disputants and evaluate the effects of their involvement with mediation on their amount of violent conflicts.

Ethnically, the disputants resembled the school population. More females utilized peer mediation than males, and most of the disputants were sixth graders. Disputants did not perform as well academically as the rest of the student body. In this study, disputants had significantly lower grades and were involved in more infractions and suspensions for violence related activities than the rest of the student body during the program year.

The analyses conducted on the disputants and their yoked comparison group suggested that contrary to the proposed hypothesis, the experience of mediation was not effective at reducing violence among its participants. Both groups had a decrease in violence related infractions and suspensions after the intervention, but the lack of significant interaction indicates that the groups were decreasing at similar rates.

Theoretical Implications

The above findings have interesting theoretical implications for the efficacy of peer mediation. Social learning theorists postulate that violence is a learned response to interpersonal conflict often over matters which may be perceived as trivial on the onset. Violent responses may be unlearned through successful experiences with nonviolent methods. The present findings indicated that the mediation wass addressing these postulates of social learning theory. Specifically, mediation wass accessing the types of

conflicts that are typical of a school settings, and the mediation of conflicts did provide students an experience with a successful method of nonviolent conflict resolution.

Disputants did not perform as well academically as the rest of the student body.

Disputants had lower grades, more absences, and significantly more violence related infractions and suspensions. One interpretation of these findings is that the at-risk population is in fact receiving exposure to mediation that would be essential for social learning to transpire. Specifically, social learning theory states that learning occurs and is reinforced through observation of models and direct experience. This finding indicates that the disputants in this study are, at the very least, receiving access to models and experiencing nonviolent conflict resolution during mediation.

One of the most interesting findings of this study was that, as hypothesized, there was a significant decrease in school violence for students that were present for both years of the study. This decrease was also exhibited by the disputants and their matched comparison group. However, it was hypothesized that students who are receiving direct intervention (i.e, disputants) would demonstrate decreases in violence over and above their matched counterparts who are not receiving direct access to the intervention. This hypothesis was not supported in that both groups decreased at the same rate. There are a number of possible explanations for these findings. The most optimistic interpretation is that mediation was so effective at modeling and reinforcing nonviolent conflict resolution that all students in the school altered their conflict resolution behaviors even without the direct experience. Unfortunately, this is not the most plausible explanation. Social

learning theorists argue that behavior modification takes repeated exposure to models and direct experiences (Akers, 1985; Bandura, 1973), and most of the students at the school did not participate directly in mediation. Further, within the context of this study there is no way to discern whether either mediators or disputants were modeling nonviolent conflict resolution skills.

Perhaps a more probable explanation for these findings is maturation effects. For these sets of analyses, only students that had been at the school during both the baseline year and the program year were used, and thus, students had one year to grow out of violent conflict resolution methods. Since disputants and their matched comparison group decreased in incidents of violence at the same rate, maturation effects could explain the significant decreases in school violence for the analyses of the disputants and their matched comparison group as well as the overall decreases in school violence.

If maturation explains the decrease in school violence, then one can conclude that within this study mediation was not successful at reducing violence after one year of implementation at the school. When program failure occurs, there are a number of possible explanations. One possibility is that the theoretical foundation of the program is not an appropriate explanation of the targeted behavior. Although the current study did not provide support for the theoretical model of peer mediation as a violence prevention curriculum, there is evidence from other researchers to suggest that the underlying relationships described in the model may still explain the process whereby peer mediation could encourage nonviolent behaviors (Bandura, 1973; Gelfand, 1975; Kuhn, Madsen, &

Becker, 1967). Therefore, theoretical failure is not the most likely basis for lack of program efficacy.

Another possible explanation is failure to operationalize the theory adequately. In his writings on interventions utilizing social learning theory, Bandura (1973) made several recommendations. He suggested the optimal design of programs intended to create enduring changes in violent behaviors includes methods to alter the social instigators and reinforcements prevailing in the setting's culture. Specifically, interventions targeted at reducing violent responses should provide models for alternative behaviors repeatedly within the context that a violent response would naturally occur. Second, new, nonviolent methods of conflict resolution should be practiced with supervision. Also, new behaviors will be used only to the extent that they are more effective than old behaviors.

In theory, peer mediation addresses Bandura's postulates. Mediation takes place in the school which is the natural setting targeted by school violence prevention. This intervention intends that models and direct experience are available repeatedly, and disputants explore mediation skills with the mediators as their supervisors. However, many components of social learning theory remain unexamined. For example, perhaps mediation simply is not as effective at resolving conflicts as violence. Or, mediation does not receive sufficient reinforcements to replace violence as a conflict resolution strategy. It is difficult to demonstrate that the modeling behaviors are actually occurring.

modeling behaviors learned in mediation, this study was not able to ensure that modeling is occurring.

Another way in which that mediation programs may fall short of actualizing Bandura's recommendations is providing repeated exposure. In this study individual students were afforded varying degrees of exposure to peer mediation. It is possible that students do not have enough access to models and direct experiences of nonviolent conflict resolution skills. Research in prevention has demonstrated that the intensity and duration of the intervention is crucial to its success in prevention (Durlack & Wells, 1997). In this study the duration of the direct intervention was relatively short, and most students did not even receive direct exposure. Most of the students at the school did not utilize peer mediation, and the ones that did received the intervention for approximately thirty minutes. Given the short duration of a mediation session and lack of intensity of most peer mediation programs, it is not surprising that peer mediation would not yield significant results as a prevention program.

Another source of operationalization failure could have been that the program failed at selecting group leaders. Peer leaders are central to the mediation intervention as they have the greatest potential to alter or reinforce behaviors (Bandura, 1973; Danmon, 1984). Failure to select appropriate models could result in a lack of suitable reinforcements. Specifically, the selected mediators may not have the leadership to influence the climate's acceptance of violence.

Also, this study was not able to speak to the disputants' opinion about their mediation experience. Bandura (1973) suggested that new behaviors and reinforcement will be incorporated into existing patterns of behaviors only to the extent to which these behaviors are valued. If disputants and other students do not value the behaviors or the reinforcements provided by mediation, then mediation programs in the school will likely have little success.

Limitations

This work has some methodological limitations which suggest caution when interrupting the results. For example, results indicated that contrary to the hypothesis, disputants were not involved in significantly less violence than their matched comparison group. However, selection bias is a widespread methodological problem associated with control groups (Lipsey & Wilson, 1993). This bias would have affected this study's ability to find significance due to the intervention. Although efforts were undertaken to ensure equivalent comparison groups at pre-intervention, it is possible that by post-intervention the comparison group may have been better students, resulting in a less than ideal match.

Another possible problem with this evaluation is that is that school officials may have used mediation in conjunction with traditional punishments for violence such as suspension. Specifically, instead of being used as prevention, mediation becomes a response to violence. This use of mediation would increase the possibility that students

who used mediation as disputants would also automatically have greater number of suspensions.

Also, the peer mediation coordinators at the school had intended to do a two week follow-up to ascertain if the conflict remained resolved after the mediation. However, no follow-ups were conducted. Follow-ups would be useful in establishing peer mediation as an efficacious conflict resolution strategy.

Directions for Further Research

Although this study was unable to definitively address the efficacy of peer mediation as a violence prevention curriculum, this study was able to contribute to our understanding of the efficacy of peer mediation. Mediation is successful at resolving typical conflicts between students. The referral source does not significantly impact the outcome of mediation. Further, disputants, although similar to other student demographically did not perform as well academically as other students. This study may be viewed a an important step in ascertaining the potential impact of mediation in the reduction of school violence. However, more research is needed to better understand the utility of peer mediation as a violence prevention curriculum. To address mediation's effects on school violence, school level evaluations are necessary. Longitudinal designs including random assignment of comparable schools to control groups would be helpful in evaluating peer mediation's success at altering the school's acceptance of violence. Moreover, future studies should include controls to ensure that the programs are implemented correctly. Specifically, there needs to be evidence that addresses the extent

to which the modeling behaviors are occurring, and further, the extent to which mediation and its associated behaviors are valued by students. Follow-ups on the conflicts resolved by mediation should be conducted to ascertain mediation's utility at resolving conflicts.

Also, work should continue to examine mediation's effects on the disputants.

Conclusion

Recently, peer mediation has been touted as the answer for schools who are struggling with youth violence. Peer mediation is currently the most popular method of violence prevention used in schools (DeJong, 1994; Umbreit, 1991). However, evaluations of peer mediation have steered away from examining their effectiveness by focusing on benefits to mediators and the general feelings about peer mediation by staff (Benson & Benson, 1993; Johnson et al., 1994; Johnson, Johnson, Dudley, & Magnuson, 1995; Johnson et al., 1996).

As the first evaluation of peer mediation that attempted to use control groups and examine a number of violence indicators, this study is an important step in understanding the efficacy of peer mediation. Findings suggest that the implementation of peer mediation in schools may result a decrease in violence related infractions and suspensions within the school. However, interpretation of these findings should include the results found in examining the disputants and their matched comparison group which complicate the findings.

Aside from peer mediation's goal of violence prevention, evaluators have found benefits of implementing peer mediation programs beyond their effectiveness at reducing

violence that may be sufficient to argue for their continued use in schools (Benson & Benson, 1993; Burrell & Vogl, 1990; Cameron & Dupis, 1991; Johnson et al., 1994; Johnson, Johnson, Dudley, & Magnuson, 1995; Johnson et al., 1996). However, violence prevention programs should also make direct attempts at preventing violence. Through the use of control groups, this study was not able to provide adequate support for the continued use of peer mediation in a school's effort to combat violence. It did, nonetheless, contribute to the present knowledge related to conflicts resolved by mediation, importance of referral source, and, most importantly, the disputants. Future work should continue to address the questions proposed by this study to examine peer mediation's role in conflict resolution, and ultimately, violence prevention.

APPENDIX A

Appendix A

PEER MEDIATION REQUEST FORM

_	
Date:	
Who was involved in the conflict?	
1.	Grade
2	Grade
Where did the conflict occur?	
Classroom Hallway Bus Cafeteria	a Outside Other
Who requested mediation?	
Student Teacher Counselor Dean	Security Self Other
Briefly describe problem:	
Signature of person requesting mediation	

APPENDIX B

Appendix B

PEER MEDIATION REPORT FORM

Was the conflict resolved? YESNO
Was the conflict resolved?
Was the conflict resolved?
Was the conflict resolved? VES NO
was the conflict resolved: 1ES NO
agrees to: agrees to: agrees to: (disputants name)
disputants signature disputants signature

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