

School Violence: Evaluation of an Elementary School Peer Mediation Program

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Abstract

Studies and statistical reports have revealed school violence as an issue of ongoing concern. Research has identified the media, early parent-child interactions, and peer interactions as primary socializing agents in the development of aggression. Middle childhood-the elementary school years-has been identified as a key period of concern in the development of aggression and engaging in acts of violence. Studies have identified school-based peer mediation and conflict resolution programs, particularly those that incorporate cognitive behavioral approaches grounded in social learning theory, as tools for combating school violence. Peer mediation programs teach positive peer interactions and social skills to students who, in turn, model those behaviors, which are internalized by other students who begin to accept the standards and values of the program within the school community (i.e., social learning). Educators, specifically school counselors, are being called upon to create, implement, and conduct internal evaluations of school-based mediation and conflict resolution programs. The purpose of this study was to investigate the effectiveness of the Peace Pal peer mediation program implemented in September 2000 at an elementary school in Suffolk, Virginia. This outcome-oriented objectives-based internal program evaluation utilizes a quantitative and qualitative mixed-method quasi-experimental approach to assess program effectiveness in five domains: a) frequency of out-of-school suspensions, b) knowledge pertaining to conflict, conflict resolution, and mediation, c) success of conflict resolution in peer mediation sessions, d) participant perceptions of mediation session value, and e) mediator perceptions of program value. Results of the study indicate the Peace Pal program is effective in reducing school wide violence, increasing Peace Pal knowledge pertaining to mediation

and conflict resolution, experiencing successful conflict resolve during mediation sessions, and having participants and Peace Pals perceive peer mediation sessions and the Peace Pal program as valuable.

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CHAPTER I

INTRODUCTION

The propensity of our nation's people toward violence and aggression has been cited as a legal, psychological, social, and public health issue (Guetzloe, 1999). Acts of violence are not only occurring in the streets but in our backyards, neighborhoods, and schools. Our children are killing each other.

The U.S. Department of Education and the U.S. Department of Justice (DeVoe et al., 2003; Kaufman et al., 2000) joined forces to gather statistics regarding violence in our nation's schools. In one academic year, 1997 to 1998, 60 school-based violent deaths were reported of which 35 involved the death of school-age children. The following academic year, 1998 to 1999, 47 school-associated violent deaths occurred, including the homicide of 38 school-age children. The most current statistics, 1999 to 2000, report 32 school-based violent deaths, which include 22 school-age children. These 390 school-based violent deaths of school-age children, from 1992 to 2000, occurred in elementary and secondary schools in the United States.

These findings have alarmed many people in our country, opening our eyes to a contagious disease that calls for serious attention and a collaboration of efforts among all of our nation's concerned people. While the National Center for Educational Statistics (DeVoe et al., 2003) has reported a decline from 48 violent deaths and victimizations in 1992 to 28 violent deaths and victimizations in 2001, reports indicate students are currently more fearful at school than in the past and there is collective evidence that violence is still prevalent in our nation's schools requiring the development and

assessment of violence prevention programs and policies (U.S. Department of Education, 1998b).

Accordingly, several federal agencies in support of the safe and drug-free schools initiative published a report entitled *Early Warning, Timely Response: A Guide to Safe Schools* (U.S. Department of Education and U.S. Department of Justice, 1998). The guide discusses the need for both violence prevention (i.e., programs targeting all students) and intervention (i.e., programs targeting students who are identified as probable victims or perpetrators of violence). In addition to *Early Warning, Timely Response: A Guide to Safe Schools*, the *Annual Report on School Safety: 1998*, (U.S. Department of Education, 1998b), and the *Creating Safe and Drug Free Schools Action Guide* (U.S. Departments of Education and Justice, 1996) were published. These guides specifically recommend peer mediation programs, whereby students gain the knowledge and skills for productive peer interactions and peaceful problem resolution as a viable means of violence prevention.

Programs aimed at combating violence in our schools are being supported by school administrators across the nation. This support is reflected in a 40% increase in violence prevention programs from 1991 to 1994 (Shepherd, 1994) and an increase of 6,000 programs from 1992 to 1994 (Bell, Coleman, Anderson, Whelan, & Wilder, 2000).

More recent statistics show that 78% of the nation's public schools had some formal violence prevention or intervention program in place in 1996-1997. For example, 9 out of 10 schools reported zero tolerance policies for firearms and other weapons, and 8 out of 10 schools reported zero tolerance policies for violence (U.S. Department of Education, 1998b).

While creating and implementing violence prevention and intervention programs are necessary to the reduction of schoolwide violence, implementation is not enough. Program evaluation is essential to measure the effectiveness of prevention and intervention programs aimed at reducing schoolwide violence and vital to ensuring a safe learning environment for children, as emphasized by the U.S. Department of Education (1998, 1998c, 2000; Crosse et al., 2002), the American School Counseling Association (ASCA, 2003), and the Conflict Resolution Education Network (CREnet, 1996), an organization of the Association for Conflict Resolution.

Unfortunately, limited time, resources, and scheduling present a challenge for public school violence prevention program evaluation (Heppener, 1992; Zinck & Littrell, 2000). True experiments are extremely difficult and often fouled when attempted in the schools due to the large number of uncontrollable interferences (Stufflebeam, 2001). In addition, “a true controlled experiment is not possible because it would be ethically and politically unacceptable to randomly allocate children to schools and thus to the treatment conditions” (Fife-Schaw, 2000, p. 77). It would not be ethical to withhold participation in peer mediation or other related prevention and intervention activities from a specified group of children within the school or at another school identified to serve as a control or comparison group.

The limitations noted above are, at least in part, responsible for the increasing interest and desire to have practitioners, namely school counselors, conduct scholarly, applied research using quasi-experimental internal program evaluative studies as an integral part of program practices (ASCA, 2003; Borders, 2002; Carruthers, Sweeney,

Kmitta, & Harris, 1996; Hiebert 1997; Houser, 1998) and as a part of ongoing, routine program operating procedures (Joint Committee on Standards for Educational Evaluation, 1994).

The American School Counseling Association National Model (2003) advises school counselors to create, deliver, and evaluate the outcome of prevention and intervention programs. Others have encouraged practitioners to act as researchers and evaluators emphasizing the importance of “collecting and analyzing data” for the purpose of determining program effectiveness and offering continuous and systematic program improvement and accountability, which has been sorely neglected in the profession (Borders, 2002; Lane & McWhirter, 1992; Whiston, 1996, p. 25).

Experts in the field of program evaluation theory and practice offer further support for the practitioner as researcher, agreeing that the optimal situation includes evaluators who were involved with program development and design from the start (Hennessy, 1995). Although internal program evaluations by practitioners are in the embryonic stages, counseling and educational researchers such as Houser (1998) contend that program evaluation research will eventually become a regular part of counselors and educators job duties. Houser’s contentions are supported by theory and practice in the field (Sonnichsen, 2000).

ASCA standards and a growing body of research have legitimized internal evaluations by practicing counselors. Thus, a pragmatic, applied approach provides valuable information for solving practical problems and documenting program effectiveness (Bell et al. 2000; Carruthers et al., 1996; Hayes, Dagley, & Horne, 1996;

Heppner, Kivlighan, & Wampold, 1991; Hiebert, 1997; Houser, 1998; Krathwhol, 1998; Mathison, 1999; McNamara, 2002; Mills, 2000; Ryan & Johnson, 2000; Sonnichsen, 2000; Whiston, 1996; Zinck & Littrell, 2000).

Applied research in the form of internal program evaluations by practitioners is becoming more widely recognized as an empowering and powerful proactive tool for support, change, accountability, funding, and school reform. This emphasis on practitioner as program evaluator is supported in recently published articles and studies in several peer reviewed journals (Anderson, Metz, & Page, 2002; Chen, 1994; Hackney, Gilbride, & Scarborough, 2003; Hiebert, 1997; Nevo, 2001; Stufflebeam, 1994; Usher, 1995; Whiston, 1996; Zinck & Littrell, 2000).

Furthermore, counselor education programs accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP, 1994) and counselor educators adept in planning, researching, and writing dissertations are recognizing the need for scholar-clinician research. They are viewing such work as indicative of a self-reflective practice that adds to the knowledge base and solves “real world problems of the public schools” with an emphasis on the role of the school counselor as program evaluator and change agent (Anderson, Metz, & Page, 2002; Hayes, et al., 1996, p. 383; Houser, 1998; Jones, 2002; Page, 2001; Sonnichsen, 2000; Thomas & Brubaker, 2000; Whiston, 1996). Some counselor educators contend it is time for CACREP to explicitly state and formally endorse the union of practice and research (Whiston), which is responsive to the diverse needs and realities of our multicultural and rapidly changing society (CACREP, 1994; Department of Counseling and Human

Development Services, 1994).

Statement of the Problem

Limited research exists in the form of outcome-oriented evaluative studies designed to determine the effectiveness of counseling programs, specifically violence prevention and intervention programs. Moreover, outcome-oriented evaluations of an applied nature (i.e., assessing established programs that are currently in operation), that measure violence reduction using schoolwide data and methodological rigor (Bell et al. 2000; Borders, 2002; Carruthers et al., 1996; Ernst & Hiebert, 2002) are substantially limited, specifically at the elementary school level (Johnson, Johnson, Dudley, & Acikgoz, 1994).

To date, most studies evaluate peer mediation programs under optimal conditions (i.e., volunteer participation for teachers and disputing parties, controlled trials, qualitative data collection and analysis, and random assignment to treatment conditions with little external validity). These studies do not capture the essence of actual practice and thereby offer questionable support for real world peer mediation programs. Such studies also raise ethical concerns and concerns regarding the true pre program equality of the control or comparison groups and the history effects including that of schoolwide behavioral interventions if children were not denied these services during the program evaluation period.

In addition, current studies have not allowed enough time for peer mediation programs to become established and demonstrate results before engaging in evaluation. Studies suggest a timeframe of 2-5 years before meaningful results can be obtained

(Cameron & Dupuis, 1991; Dowell, 1998). Cameron and Dupuis (1991) and Dowell (1998) estimate that it takes students a minimum of 2 years to accept peer mediation as a dispute resolution process and teachers 5 years to accept the peer mediation process. There are a variety of reasons for this timeframe for program acceptance to include the time and efforts associated with publicizing the program for school community awareness, the reluctance of students, specifically males, to participate in mediation, teachers who insist upon taking ownership of student problems, the perceived forcing of students to go to mediation, and administrative support. Issues that impact the timeframe of program acceptance may vary from school to school and program to program.

This study represents the Peace Pal program's first evaluative study. The program, implemented in September 2000, is currently operating in one elementary school in the district. This study complies with the recommendations of Cameron and Dupuis (1991) and Dowell (1998) with regard to allowing the program time for acceptance by faculty, staff, and students, and to increase the likelihood of demonstrating meaningful results. Thus, the Peace Pal program evaluation data collection began during the third year of implementation and includes data through the fifth year.

This outcome-oriented evaluation study makes use of applied research in the form of an internal evaluation, institutionalized within the American Evaluation Association and adhering to the standards developed by the Joint Committee on Standards for Educational Evaluation (1994) and the *Guiding Principles for Evaluators* (1995), whereby the principal investigator (PI) is the same as the practitioner (Hedrick, Bickman, & Rog, 1993; Love, 1991; Sonnichsen, 2000; Stufflebeam, 1994; Tutty, 2004). Internal

evaluation has been identified as the preferred method of outcome evaluation for peer mediation and conflict resolution programs in the school setting (Bell, et al., 2000; Carruthers, et al., 1996).

This evaluative study makes use of a mixed method (i.e., quantitative and qualitative) quasi-experimental approach to include the underused time series design (Heppner et al., 1991) offering the same internal and external validity as the nonequivalent control group and the added benefits of feasibility and practicality (Houser, 1998). The use of this design is politically and ethically appropriate for an elementary school setting, particularly when evaluating a program that is currently operational (Hedrick et al., 1993), offering methodological rigor and meeting the requirements of empirically sound research to evaluate the effectiveness of the Peace Pal peer mediation program (Fetterman, 2001; Fife-Schaw, 2000; Heppner, Kivlighan, & Wampold, 1992; Leedy & Ormrod, 2001; Love, 1991; Thomas & Brubaker, 2000; Tutty, 2002).

Determining the effectiveness of the Peace Pal program is based on it meeting its goal and objectives. The goal of the Peace Pal program is to reduce schoolwide violence. The program's objectives are to a) enhance students' levels of understanding regarding anger and conflict, b) enhance students' knowledge pertaining to conflict, conflict resolution, and mediation, and c) resolve peer disagreements peacefully through peer mediation. Thus, for the purpose of this study, Peace Pal program effectiveness is measured on five domains that directly reflect the program's goal and objectives: a) frequency of out-of-school suspensions, b) knowledge pertaining to conflict, conflict resolution, and mediation, c) successful conflict resolution in peer mediation sessions, d)

participant perceptions of mediation session value, and e) mediator perceptions of program value.

The Peace Pal program content and evaluation process are described in sufficient detail in Chapter II and in the Appendices to serve as a model for similar program development. Detailed program descriptions and evaluation criteria will also allow for future study replication, which aids in increasing external validity, namely ecological validity.

Purpose of the Study

Evaluation of the Peace Pal peer mediation program serves many purposes. Peace Pal program evaluation a) assesses the program's effectiveness in its current environment, b) contributes to the severe lack of empirically sound outcome evaluative studies on peer mediation programs at the elementary school level, c) exemplifies the growing practitioner-researcher approach to internal program evaluation, d) illustrates the value of applied internal program evaluation in capturing the essence of a real world school setting, bridging the gap between theory and practice, e) provides information pertaining to the developmental appropriateness of peer mediation in the primary grades, f) provides schoolwide longitudinal measures of violence that have been underused in violence prevention program evaluation, g) fulfills professional accountability standards and offers a model for implementation and study replication, h) provides practical information for program improvement through mediator and participant program value perceptions, i) supports future decisions regarding the program and its continuous evaluation, j) offers inferential data that can be generalized to similar elementary schools within and outside

of the district, and k) contributes to the professional practice of peer mediation and continued violence prevention efforts.

Clearly, the purpose of this study is multifaceted. However, it is the primary intention of this study to determine the effectiveness of the program in contributing to the reduction of schoolwide violence.

Literature Review and Theoretical Foundation

Social learning, aggression, and cognitive behavioral theory. While over the years psychology has focused on personality development of the unique individual, and sociology has focused on the individual as a member of society or part of a group, many mental health professionals, counselors, psychologists, and sociologists have come to realize that both are equally active in the process of personality development (Harris, 1995). This integration has become the Zeitgeist of the 21st century and the focus of this study, which takes an interdisciplinary approach to the issue of personality development.

Social learning theory bridges behavioral and cognitive learning theories. Social learning theory holds that behavior is learned through behavioral modeling and observational learning with cognitive processes responsible for behavior regulation. Learning includes several cognitive mechanisms: a) attention, b) retention, c) reproduction, and d) motivation. Learning occurs when an individual pays attention to the modeled behavior. Individuals must then remember the behavior in order to reproduce the activity in their own behavior, which improves with practice. Finally, an individual must be motivated in order to imitate a behavior.

Social learning has been applied extensively to the understanding of aggression,

which has been identified as a socially learned behavior. Social learning theory holds that aggression frequently begins in early maladaptive interactions that include socializing agents such as family, peers, school, and the media to include video games (Bandura, 1973; Bandura, 1986; Manno, Bantz, & Kauffman, 2000; Santrock, 1995).

Television and video games. “The media reinforces aggression by showing violence as funny, entertaining, successful, and the superhero’s first choice” (Soutter & McKenzie, 1998). There is an abundance of research that indicates both television and video games have repeatedly contributed to aggressive behavior in children (Clifford, Gunter, & McAleer, 1995; Irwin & Gross, 1995; Kirsh, 1998; Sherry, 2001). The work of Albert Bandura (1973) stresses the powerful effect of television on observational learning. Bandura’s research indicates that the effects are not merely transient but have long-lasting influence on personality development.

Violent videos being viewed by our children are the same as those used in law enforcement and by the military to desensitize police officers and soldiers to killing and to improve marksmanship (Guetzloe, 1999). Children viewing antisocial behavior on television and in video games, specifically children who view such programs on a consistent basis, may ultimately internalize such aggressive behavior.

Aggressive behavior characterized in the media and in video-computer games is deemed socially acceptable and an accurate portrayal of the real world. Children mimic the aggressive thoughts and behaviors illustrated in these socially accepted modes of entertainment.

A chilling portrayal of such aggressive behavior was demonstrated in the recent

Columbine shootings. Witnesses to the violent acts described the shooters as appearing to enjoy killing others as if a “sport or source of amusement...as in a video game” (Guetzloe, 1999, p. 21).

On the other hand, studies have reported that children exposed to pro-social and educational television and video games experienced positive rewards such as increased social competence and peer acceptance, as well as improved task performance and acceptance of rules and increased patience (Clifford et al., 1995). In addition, pro-social and educational video games have been associated with improved eye-hand coordination (Funk, 1995).

Van der Voort and Valkenburg (1994) noted that although studies have found that exposure to aggressive programs and video games inhibit fantasy play and the viewing of neutral programs has no effect on fantasy play, the viewing of pro-social programs elicits children’s fantasy play. Children who engage in fantasy play have been found to be happier, more confident, more creative, and better able to concentrate (Van der Voort & Valkenburg).

Generally, however, research has indicated that children learn antisocial and aggressive behavior more often than pro-social behavior, due to the overwhelming amount of violent programs and software coupled with a lack of parental supervision. Thus, television viewing time and programs or computer play time and software need to be monitored by parents.

Early parent-child interactions. The importance of parent-child interactions cannot be overemphasized. Behaviors that are learned in infancy and early childhood are

among the first aspects of personality to be carried into the school years, or middle childhood, then into adolescence, and finally adulthood (Bandura, 1997; Bolger & Patterson, 2001; Carson & Parke, 1996; Crockenberg & Lourie, 1996; Manno et al., 2000; Schellenberg, 2000). The success or failure of peer relationships during middle childhood is a direct reflection of the social learning that took place during parent-infant and early childhood interactions (Schellenberg, 2000). Early negative parent-child interactions are key predictors of aggressive personality development.

One form of parent-child interaction occurs as children observe and imitate their parents who serve as role models. Research has found that children reared in homes where parent aggression is observed and physical discipline is emphasized become aggressive and often treat other children, and eventually their own children, aggressively (Bolger & Patterson, 2001). This phenomenon is considerably troubling and supported by research that notes that reported cases of child abuse have increased by nearly 50% since 1990 (Kane, Gordon, & Hayes, 2000).

Children deprived of contact comfort (i.e., cuddling, embracing, tickling, chasing, and wrestling) often become insecure, self-centered, and aggressive, while those who are provided with such affection establish trust, security, a greater tolerance for frustration, and emotional maturity. Contact comfort is essential to pro-social development (Santrock, 1995). Neglected and rejected children become overstimulated more easily, exhibit little emotional control, show high levels of aggression, and often become socially withdrawn (Bolger & Patterson, 2001).

Unfortunately, children with a predisposition to aggression may become more

antisocial, aggressive, and violent as they mature and enter middle childhood (Schellenberg, 2000). As a result, these children often experience negative peer interactions and have internalized poor social skills and methods of problem solving (Bolder & Patterson, 2001; Guerra, Tolan, & Hammond, 1992).

Some research has indicated that those with an early predisposition to aggression, particularly those who have experienced chronic maltreatment by parents, will likely be resistant to school socialization interventions (Bolger & Patterson, 2001; Reid & Patterson, 1991). Other research concludes that early parent-child interactions have no effect on the personality children will have as adults due to the overwhelming influence of peer interaction (Harris, 1995). It seems only logical, however, that the characteristics of the child will greatly determine the outcome of peer interactions, thereby making initial parent-child interactions a primary building block that sets the stage for future social interactions (Schellenberg, 2000).

Middle childhood peer interactions. Over 50 years of research has identified middle childhood, the elementary school years, as a critical period for personality development and the development of adult social competence, as a result of person-environment interactions, particularly peer interactions (Bandura, 1977; Berger & Luckmann, 1967; Handell, 1988; Henry, 2000; Olweus, 1979; Sullivan, 1953). Entering school rapidly expands the opportunity for peer interactions, which have been underscored by researchers as a reliable, key predictor in the development of adult personality, namely, aggressive personality (Fraser, 1996; Henry, 2000).

Dan Olweus (1978), who is regarded as the world's founding father of research on

bullying and victimization, reports that children rejected by peers, teased, and bullied often become aggressive adolescents, teens, and adults. A reminder of this shocking transformation is depicted in the recent Red Lake shootings. Jeff Weise, age 16, described as “antisocial” and “a loner,” gunned down nine people and killed himself, noting 11 months prior to the shootings and suicide that he was angry because he was being picked on in school (*The Virginian-Pilot*, March 23, 2005, p. A1).

Olweus (1978) also emphasizes that not only are the bullied and rejected children at risk for developing aggression, but, that the bullies, too, are at risk for such aggressive personality development. This view of the bully as a victim who is also at risk is often overlooked by researchers of the consequences of peer rejection.

Parker and Asher (1987) reported that adult psychotics and the most notorious mass murderers in history (e.g., Christie, the Black Panther, Blue Beard, the Michigan Murderer, the Boston Strangler) have been found to be bully-types, aggressive, socially incompetent, and withdrawn children, with abnormal social experiences in their childhoods. Several recent studies continue to identify negative peer interactions and acts of aggression toward peers during middle childhood as a key predictor of delinquent behavior, juvenile and adult crime, and adult psychopathology (Fraser, 1996; Moffitt, 1993; Olweus, 1993; Santrock, 1995).

Middle childhood marks an especially sensitive period for peer conformity as well as peer interaction. Leading theorists of human growth and development support the suppositions of social learning theory, asserting that children will conform to peer expectations, duplicating peer responses in social situations, assimilating and

accommodating the new interaction patterns, thereby developing new cognitions for future interactions (Bandura, 1977; Piaget, 1970; Vygotsky, 1962), for better or worse. These studies reiterate the profound and lasting affects of peer-enforced conformity during middle childhood.

Peer conformity may result in the development of antisocial behavior and aggression during the elementary school years. Children use peer interactions as a primary means of learning social skills such as problem solving and conflict management (Debaryshe & Fryxell, 1998; Henry, 2000). Those who associate themselves and model others who are aggressive are likely to learn aggressive behaviors (Bagwell, Coie, Terry, & Lochman, 2000; Bandura, 1986; Johnson et al., 1996). Research emphasizes the importance of successful middle childhood peer interactions in combating the development of aggressive personality. Studies encourage educators to be proactive in reducing the likelihood of aggressive personality development by equipping students with the skills for effectively and peacefully resolving disagreements through the implementation of school-based peer mediation programs.

Peer mediation in the school. The need for positive and productive peer interactions is paramount in the issue of school violence. How students react to others depends upon learned responses (Bandura, 2001). Theoretical and empirical evidence encourages the implementation of elementary school peer mediation programs that teach students more socially acceptable ways of responding to conflict situations, thereby promoting positive peer interactions and reducing schoolwide violence (Bell et al., 2000; Debaryshe & Fryxell, 1998; Powell et al., 1996).

The most widely used training programs are those that incorporate cognitive behavioral approaches into learning that are based on the theoretical foundation of social learning, specifically behavior modeling (Bandura, 1997). Cognitive behavioral learning includes education, rehearsal, and application with self-monitoring, self-reinforcement, and modeling as essential elements.

Elementary school peer mediation training programs that have been found to be the most successful in teaching conflict resolution and mediation knowledge and skills incorporate cognitive behavioral approaches (Bell et al., 2000; Graham & Pulvino, 2000; Humphries, 1999; Johnson et al., 1994). Like cognitive behavioral theory, mediation is a process that emphasizes the participants' own responsibility for making decisions that affect their lives.

Powell, Muir-McClain, and Halasyamani (1996) offer further support for the success of cognitive behavioral approaches in conflict resolution and mediation training. Powell et al. (1996) conducted two elementary school peer mediation program evaluations on two separate occasions. In the first evaluation, training consisted of 30 daily lectures. Students showed only a 4% increase in conflict resolution and mediation knowledge compared to the 64-100% increase in conflict resolution and mediation knowledge reported by those studies that incorporated cognitive behavioral approaches into peer mediation training.

As though recognizing the need to increase the effectiveness of training, the second evaluation by Powell et al. modified the existing curriculum to include cognitive behavioral approaches, namely modeling, role plays, simulations, and practice exercises.

It is regrettable that Powell et al. did not measure for knowledge development in the second study.

The Peace Pal program evaluated in this study utilizes cognitive behavioral approaches in the conflict resolution and mediation training program. Peer mediators conduct mediation sessions and engage in conflict resolution on a daily basis in the halls, cafeteria, classroom, etc. In turn, students who participate in peer mediation or observe mediators resolving day-to-day conflict, will, theoretically, duplicate conflict resolution and other positive social interactions modeled by their peers, the Peace Pals. In accordance with social learning theory, these students will assimilate and accommodate the standards and values of the peer mediation program within the school community (Bandura, 1977; Bandura & Jourden, 1991).

Peer mediation offers students the opportunity to establish positive peer relationships, while learning the social or life skills necessary for future successful communications, peaceful problem-solving, and conflict resolution. When handled constructively, the problem solving nature of conflict leads to healthy psychosocial development.

The underlying philosophy of peer mediation is that students are more likely to trust other students, learn best from other students, and have a powerful influence over each other (Bagwell et al., 2000; Lane & McWhirter, 1992; Santrock, 1995). This may be, at least in part, why school-based peer mediation programs are among the fastest-growing initiatives in the field of alternative dispute resolution as a means of resolving conflict (Williamson, Warner, Sanders, & Knepper, 1999).

Peer mediation has been cited in literature as the most successful approach for conflict resolution in communities and schools (Angaran & Beckwith, 1999; Benson & Benson, 1993). The peaceful resolve of conflict is an extremely important component of change for aggressive children.

Peer Mediation Program Review

A review of school-based peer mediation program evaluation research, focusing on the elementary level, consistently indicated positive results for peer mediation efforts. In fact, not one study could be located that yielded any evidence to the contrary.

Hanson (1994) evaluated the effectiveness of elementary school peer mediation and conflict resolution programs in terms of reduced schoolwide disruptive behavior, successful resolution of student conflicts, and changed student attitudes. Four elementary schools where selected peer mediators offered mediation to the entire study body participated in the study.

A review of mediator report forms completed throughout the year indicated that 86% of the mediation sessions resulted in conflict resolution. An examination of records of referral incidents for general disruptive behavior revealed a 36% reduction in schoolwide general disruptive behavior for all four elementary schools collectively.

Hanson points out that while the decline in incident rates may be attributed to improved student behavior, it may also indicate that teachers and administrators were using student mediation rather than disciplinary actions to handle disruptive behaviors in the schools. This issue remains unclear as Hanson did not report the number of mediation referrals or sessions conducted nor whether or not it was a student, staff, or administrator

referral. Nonetheless, Hanson raises an interesting point. This study's mediator report forms list the referring source so that this issue can be examined.

Hanson assessed changes in student attitudes using a pre- and post conflict resolution training survey. The difference in pre- and post mean scores for students who participated in the conflict resolution training revealed statistical significance indicating positive changes in student attitudes toward resolving conflict.

Johnson and Johnson, working together, and with others, offered continuous studies, over time, dedicated to the evaluation of school peer mediation and conflict resolution programs. For example, Johnson et al. (1994) conducted a four-phase evaluation (i.e., recruitment, pre measures, training, and post measures) of an elementary school peer mediation program for grades 3-6 in four classrooms of one school. The researchers administered pre-, post-, and retention measures to assess mediator knowledge development.

A repeated measures ANOVA indicated significant knowledge gains from pre- to post measure and from pre to retention measure. Pre- to post measure showed a 90% gain in knowledge as a result of peer mediation training. The difference between the post- and retention measure was not significant.

Johnson et al. interviewed the four target teachers and the principal to assess changes in referrals for conflict. The target teachers and the principal who participated in the study were enthusiastic and supportive of the program.

Frequency of conflict referrals to the target teachers was reduced by 80% and referrals to the principal were reduced to zero. However, it is unclear as to whether

referrals to the principal included teachers schoolwide or referrals from the four target teachers and classrooms only. Hence, while mediation was offered schoolwide there are no schoolwide measures. It is also unclear how and when the pre program data was obtained to determine the 80% decline in conflict frequency or the number of referrals to the principal during the pre program year.

Johnson et al. (1996) and Johnson and Johnson (2001) conducted evaluations of inner city, ethnically diverse elementary school peer mediation programs in which a small percentage of the student population were trained to serve as peer mediators for the entire study body. Results of the 1996 evaluation noted that 98% of mediation sessions were successful in resolving student conflict, while the 2001 evaluative study noted that 100% of the mediation sessions were successful. While these studies offered schoolwide mediation, neither study attempted to assess schoolwide violence reduction. Nor did the studies assess mediator knowledge development and it is unclear if participation in the program was voluntary or mandatory.

Humphries (1999) conducted an elementary school peer mediation program evaluation using observations and interviews in order to examine mediation outcomes and mediator perceptions of program value. Observations revealed that 64% of the peer mediators were able to correctly recall and apply all steps of the mediation process, and 71% of the mediation sessions were successful in resolving peer conflict. Interviews revealed that 93% of the mediators found the program to be of personal and schoolwide value.

Powell et al. (1996) evaluated nine peer mediation programs. Four of the

programs were elementary school programs across four states: Florida, Maryland, Missouri, and North Carolina. Powell et al. reported on the findings of two of the elementary school program evaluations.

Powell et al. evaluated the Fighting Fair Model elementary school peer mediation program in Florida. They used an experimental-control group approach in a classroom setting, engaging three classrooms in each group. Results indicated that program training improved students' conflict resolution knowledge and skills by 4%. Reductions in aggressive behaviors were experienced by both the experimental group with a 98% reduction in aggression and the control group with a 53% reduction in aggression. Unfortunately, the methodology for data collection, which referenced written reports by school staff, did not specify report type or time period of data collection.

Powell et al. (1996) evaluated an elementary school peer mediation project in Maryland and recorded positive changes schoolwide. Faculty attendance increased from 92 to 95% and student attendance increased from 91 to 93%. There was a 75% reduction in suspensions, a 23% reduction in referrals to the principal, and 93% of mediation sessions were successful in resolving student conflict. Alas, no data was collected for fighting or hitting, nor were the suspensions or referrals categorized, hence, reductions in violence and acts of aggression were merely inferred. Additionally, there was no indication of whether or not the suspensions were in-school, out-of-school, or both.

Recently, Graham and Pulvino (2000) modified an existing peer mediation program and limited the program to one grade level (i.e., 3rd grade) as a part of the guidance counseling milieu for the purpose of the qualitative study. Graham and Pulvino

described the implementation process and program content and conducted an evaluation based on the program's goals and objectives using volunteers. Qualitative analysis indicated a broadening in students' understanding of conflict and an increase in students' understanding of the skills needed for resolving conflict.

Graham and Pulvino reiterated throughout the study the need for future program evaluations using quantitative data in order to statistically support program success. Graham and Pulvino noted the limitations of their purely qualitative evaluation, namely, the nongeneralizability of the findings, emphasizing the lack of a "convincing body of research in the area of conflict resolution program evaluation" (p. 177).

Bell et al. (2000) also noted, "the lack of outcome studies contributes to the literature's current inability to support fully the effectiveness of peer mediation" (p. 506) with much of the peer mediation literature "based on author judgment and opinions" (p. 512). Thus, in an effort to add to the limited existing research, Bell et al. conducted an evidence-based peer mediation program evaluation using applied research and methodological rigor in a low socio-economic rural elementary school. The study offers sound research practices in an educational program evaluation contributing to the lack of evaluations with methodological rigor.

Bell et al. studied a peer mediation program that offered mediation to all students throughout the school. Bell et al. secured pre- and post program disciplinary data (i.e., school suspensions) for comparison to assess schoolwide impact, conducted pre- and post training measures as well as a measure for retention of mediation knowledge and skills. In addition, the study measured peer mediation outcomes, teacher report of changes in

classroom behavior, and peer mediator behavioral change.

The research revealed statistical significance or positive outcomes on all measures. All students experienced an increase in knowledge as a result of training, 94% of mediation sessions were successful, and school suspensions decreased from 67% of the total school population in the pre program year to 54% of the total school population during the intervention year.

Bell et al. expressed some concern with regard to the lower number of suspensions for disruptive conduct versus fighting. During the intervention year, suspensions for disruptive conduct decreased more than in the previous 3 years while fighting decreased less than in previous years. Bell et al. identified a low response rate of teacher surveys, which included the data on fighting, as one explanation for the differences, but also speculated that mediation may be more effective in resolving less severe conflicts. Accordingly, Bell et al. requests that future research examine the impact of peer mediation on verbal versus physical conflict, theorizing that peer mediation may be more effective on less severe conflicts (i.e., arguments versus physical fighting).

The Bell et al. study is not without limitations. While the study takes place in a school setting, as a 1-year controlled trial with participation deemed mandatory by administration, it does not completely capture the essence of actual practice.

In addition, the evaluation lacks post program longitudinal data, offering data that only reflects the program's controlled existence for the year of implementation. Generally, it takes more than the year of implementation for a program to show meaningful results (Cameron & Dupuis, 1991; Dowell, 1998). Finally, like the Graham

and Pulvino (2000) study, Bell et al. is the only other study that offers schoolwide measures of violence reduction, but it does not make it clear whether the suspensions were in-school, out-of-school, or both.

This evaluative study follows the research pattern of Bell et al. (2000) with regards to the methodological rigor, nonvoluntary participation, and schoolwide measures of violence. However, Bell et al. implemented the peer mediation program for the sole purpose of the 1-year study, which is not the same as evaluating an existing program and the limitation of 1 year does not allow the program time to demonstrate meaningful results. This evaluative study will examine the categorical data collected to assess schoolwide violence reduction and compare the verbal and physical conflict categories to address the concerns of Bell et al.

CHAPTER II

METHODS AND PROCEDURES

Definition of Terms

Personality. Integrating the two sciences of sociology (i.e., environment) and psychology (i.e., person), personality is defined as a distinctive style of behaviors, thoughts, and emotional responses, characteristic of an individual's adaptation to surrounding circumstances learned through the norms, values, and standards of society (Bandura, 1973; Myers, 2002).

Social learning. Social learning is the bidirectional process of human learning that is reciprocal with mutual influence between the individual and the environment. Social learning theory emphasizes the importance of an individual's thought processes, or cognitions, on behavior regulation (Bandura, 1969, 1977). People are both producers and products of social systems (Bandura, 2001).

Aggression, bullying, violence, and conflict. For the purpose of this study, aggression, bullying, and violence are defined as offensive verbal or physical actions to include physical fighting, threats, verbal insults (i.e., teasing, name-calling), gesturing, and social rejection (Olweus, 1995). Conflict or disagreement between two or more individuals may or may not involve the characteristics of violence, bullying, and aggression, however, it is important to understand that such behaviors often precipitate violence and acts of aggression.

Violence prevention and intervention programs. Violence prevention is used to reduce the risk of violence for all students, while violence intervention targets specific

students at risk or currently engaging in acts of violence (Crosse et al., 2002; U.S. Department of Education, 1998b). The U.S. Departments of Education and Justice and experts in the field of school violence, aggression, and bullying advocate for both prevention and intervention in order to reduce schoolwide violence.

Conflict resolution and mediation. Conflict resolution is a strategy used to resolve conflict peacefully through direct, positive communication, problem solving, and compromise (Johnson, Johnson, Dudley, & Acikgoz, 1994). Peer mediation is one form of conflict resolution. Peer mediation is the involvement of a neutral third party, known as a mediator, who assists disputing parties in resolving their problem peacefully (Guanci, 2002).

Internal program evaluation. Program evaluation is a type of research that makes use of basic or applied research methods in order to assess counseling or other social science program needs, effectiveness, or results (Hackney, Gilbride, & Scarborough, 2003). Internal program evaluation is conducted by staff using the program or curriculum (Love, 1991).

Peace Pal program. The Peace Pal program, operational since September 2000, is a peer mediation program implemented at Northern Shores Elementary School in Suffolk Public Schools. The Peace Pal program, created using the *Recommended Standards for School-Based Peer Mediation Programs* (CREnet, 1996), is described and the training curriculum, activities, and forms are outlined in Appendix B.

Peace Pals. Peace Pals are students selected by peers and teachers and trained in conflict resolution and mediation as a part of the Peace Pal program. Peace Pals conduct

peer mediation sessions for disputing students.

Participants. Participants are students who have not been trained in conflict resolution and mediation as a part of the Peace Pal program. Participants are students within the school who engage in peer mediation sessions conducted by the Peace Pals for the purpose of dispute resolution.

Research-Evaluation Questions

The Peace Pal program goal and objectives are directly addressed in evaluation questions 1-3. Evaluation questions 4 and 5 examine participant and mediator perceptions of program value, which offers practical information for program improvement (Humphries, 1999).

1. Does Peace Pal training impact students' knowledge pertaining to conflict, conflict resolution, and mediation?
2. Do Peace Pals facilitate mediation that results in successful conflict resolution?
3. Does schoolwide out-of-school suspensions change with the implementation of the Peace Pal program?
4. Do participants perceive peer mediation sessions as valuable?
5. Do Peace Pals perceive the Peace Pal peer mediation program as valuable?

Hypotheses and Statistical Analyses

The following directional hypotheses and null hypotheses are offered to further define Peace Pal program effectiveness:

1. There is a reduction in schoolwide out-of-school suspensions since implementation of the Peace Pal program.

Null Hypothesis: There is no reduction in schoolwide out-of-school suspensions since implementation of the Peace Pal Program.

2. Peer mediation is successful in resolving student conflicts.

Null Hypothesis: Peer mediation is not successful in resolving student conflicts.

3. There is an increase in students' knowledge pertaining to conflict, conflict resolution, and mediation as a result of training.

Null Hypothesis: There is no increase in students' knowledge pertaining to conflict, conflict resolution, and mediation as a result of training.

4. Participants perceive peer mediation sessions as valuable.

Null Hypothesis: Participants do not perceive peer mediation sessions as valuable.

5. Peace Pals perceive the peer mediation program as valuable.

Null Hypothesis: Peace Pals do not perceive the peer mediation program as valuable.

The dependent variables in this evaluative study are: a) number of out-of-school suspensions, b) peer mediation outcome (i.e., successful or unsuccessful conflict resolution), c) mediator knowledge pertaining to conflict, conflict resolution, and mediation, d) participant perceptions of mediation session value, and e) mediator perceptions of Peace Pal program value. The independent variable in this study is the Peace Pal Program.

This study utilizes the classic objectives-based evaluation approach (Stufflebeam, 2001) supported by the Joint Committee on Standards for Educational Evaluation (1994), using a quantitative and qualitative mixed method quasi-experimental design, to include

repeated measures and no control or comparison group. This design enhances the methodological rigor of the most frequently used design in internal evaluation: the quasi-experimental before and after study with pre measures and post measures and no control groups (Love, 1991; Tutty, 2004).

Love (1991) proclaims that “both external and internal evaluators have their biases, and true objectivity is an elusive commodity” (p. 5). Nonetheless, due to the dual role of practitioner-researcher in this internal evaluation design, this study makes every effort to ensure objectivity and validity by doing the following: a) utilizing triangulation, or multiple-holistic perspectives, with data collected at different points in time, on multiple levels, with quantitative and qualitative methods, descriptive and inferential statistics, and multiple data sources to include existing school records to support and challenge one another, b) selecting a classic program evaluation design, c) avoiding leading questions in the development of instrumentation, e) including live observation data sources and a qualitative component in the repeated measures questionnaire to decrease testing effects, f) making use of focus groups and a pilot study for questionnaire design to reduce instrumentation effects, and g) making the program content and evaluation process available for modeling, inspection, and study replication (Boulmetis & Dutwin, 2000; Chen, 1994; Feldman, 2003; Graham & Pulvino, 2000; Hedrick et al., 1993; Houser, 1998; Love, 1991; McConney, Rudd, & Ayers, 2002; Nevo, 2001; Posavac & Carey, 2003; Stufflebeam, 2001; Whiston, 1996; Wholey, Hatry, & Newcomer, 1994).

Furthermore, while the practitioner-evaluator in this study is called upon to be a program advocate, such advocacy precludes the manipulation of data and alteration of

findings for personal or professional gain. Finally, the Peace Pal program is not mandated and its success does not secure funding, advancement, or remuneration.

The pragmatic component of school counseling work morally obligates school counselors “to not only assess program value but also its validity” determining if the program “is well grounded, just, and can provide results” (Feldman, 2003, p. 29). In fact, Fetterman (2001), a leader in the field of internal evaluation, currently Director of the Policy Analysis and Evaluation Program at Stanford University and a former president of the American Evaluation Association, has found that “program staff members and participants are typically more critical of their own program than an external evaluator” (p. 105), due to a heightened interest in knowing if the program is effectively serving its purpose.

This evaluative study blends quantitative measures with qualitative measures for a mixed-method approach. The most recent research encourages the use of both quantitative and qualitative measures to assess the effectiveness of school violence prevention programs (McConney et al., 2002; Pulley, 1994; Steckler, McLeroy, Goodman, Bird, & McCormick, 1992; Stufflebeam, 2001; U.S. Department of Education, 1997, 2000; Worthen, 2001). A mixed-method approach allows the study to a) generalize findings of the inferential statistics to similar programs and elementary schools, b) assess the program unique to the environment in which it currently operates and to the population it serves, and c) offset the limitations of the bias of any one method.

While focusing primarily on quantitative measures of outcome, impact, or change as a result of the program, this study includes qualitative data, which aids in breathing life

into the evaluation and determining program strengths and weaknesses as well as future evaluation direction (Posavac, 1998; Posavac & Carey, 2003). This study makes use of both descriptive and inferential statistics for data analysis. A repeated measures 1 X 3 ANOVA was conducted on pre- and post training measures. Schoolwide measures of out-of-school suspensions are reported categorically (i.e., verbal conflict, physical conflict, disruption, and defiance), by frequencies, and in percentages. Mediation session outcomes (i.e., conflict resolution) are reported numerically and in percentages. Participant perceptions of mediation session value are reported categorically and in percentages. Peace Pal perceptions of program values are reported quantitatively (i.e., percentages), categorically, and qualitatively.

Procedures

This outcome-oriented internal program evaluation was conducted to determine the effectiveness of the Peace Pal peer mediation program. Research and program evaluation processes, approaches, and designs for this study were selected using a variety of professional and academic resources (American Evaluation Association, 1994, CREnet, 1996; Hadley & Mitchell, 1995; Heppner, Kivlighan, & Wampold, 1992; Houser, 1998; Joint Committee on Standards for Education Evaluation, 1994; Love, 1991; Posavac & Carey, 2003; Sonnichsen, 2000; Stufflebeam, 1994; Usher, 1995; Wholey, Hatry & Newcomer, 1994).

Pilot testing. During the academic year of 2002-2003, a pilot study was conducted using a representative subsample to investigate the study's reliability. The subsample used for the pilot study consisted of 16 students of mixed gender and race reflecting the

school's general population. The 16 students were newly selected Peace Pals at Northern Shores Elementary School in grades 3-5. The sample of 16 students were between the ages of 8 and 11 and included 12 females and 4 males. Among the females, 7 were Caucasian, 4 were African American, and 1 was Hispanic. Among the males, 2 were Caucasian and 2 were African American.

Saturation in a pilot study aided in identifying and eliminating several instrumentation issues, which were resolved prior to commencement of this study. The questionnaire had overlapping response categories and ambiguous terminology that was not appropriate to the language of the respondents. In addition, timing for the role play portion of the questionnaire exceeded the allotted training session time, offering insight into the length of sustained attention needed for this task.

In addition to identification of areas of weakness, this pilot test aided the evaluator in gaining comfort and familiarity with the data collection process and questionnaire administration. The revised questionnaire was reviewed by a focus group of subsample students and fellow counselors to assess the instrument's validity, offering confirmation or feedback for modifications.

Participants and selection process. Only Peace Pals who were new to the program during the intervention year participated in the pre- and post training questionnaire of this evaluative study. Returning Peace Pals were excluded in order to avoid pre-exposure affects. The 15 new Peace Pals were administered the pre- and post training questionnaire, providing baseline, comparative, and retention data.

Peace Pals, an intact group selected by peers and teachers prior to this study based

on leadership qualities, good academic standing, positive attitude, and exceptional character (i.e., cooperativeness, helpfulness, respectfulness, compassion), were of mixed gender and race in grades 3-5, reflecting the diversity of the school's general population as listed below. The sample of 15 students between the ages of 8 and 11 included 11 females and 4 males. Among the females, 4 were Caucasian, 6 were African American, and 1 was Hispanic. Among the males, 2 were Caucasian, 1 was African American, and 1 was unspecified.

Mediation participants, that is, students who engaged in peer mediation throughout the intervention year, were from grades 1-5 of mixed gender and race, reflecting the population of the school. Participants (i.e., students experiencing a conflict with another student) were referred for peer mediation as a result of teacher, parent, student, administrator, staff, or Peace Pal submission of a Request for Peace Talk form (Appendix B).

In addition to formal peer mediation sessions, Peace Pals engaged their communication and problem-solving skills in spontaneous conflict situations that occurred in the classroom, lunchroom, hallways, and on the playground and on bus ramps, which technically identifies the entire student body, described below, as possible participants in this study.

Setting-target population. The study is conducted in a large public suburban elementary school for grades K-5 in Northern Suffolk, Virginia. The school population is approximately 720 students. The percentage of American-Indian/Alaskan-Native students is about 1%. The percentage of Hispanic students is about 2%. The percentage of

Asian/Pacific Islander students is a little over 2%. The percentage of Caucasian students is approximately 33%. The percentage of African-American students is about 62%. Forty percent serve in a branch of the military and 60% are white-collar workers with a variety of occupations across many disciplines.

Measures. All measures are listed in Appendix A.

1. Peace Pal knowledge pertaining to conflict, conflict resolution, and mediation was measured using multiple choice items 1-8 of the pre training and post training questionnaire.
2. Mediation outcome (i.e., mediation documentation of agreement or disagreement) was measured using the Peace Treaty form, a school record maintained by Peace Pals of mediation sessions and outcome.
3. School violence was measured using longitudinal data comparing of the number of out-of-school suspensions, maintained by the Assistant Principal, from pre program year and multiple post program years.
4. Participant perceptions of peer mediation session value were measured using the four forced choice (i.e., yes-no) debriefing questions on the Peace Treaty, a school record completed by Peace Pals during mediation.
5. Peace Pal perceptions of peer mediation program value were measured using items 9 and 10 of the pre- and post training questionnaire, which were a combination of forced choice (i.e., yes-no) and open-ended question.

Instrumentation-questionnaire. The questionnaire, designed by this PI, measures students' knowledge pertaining to conflict, conflict resolution, and mediation, as well as

the Peace Pals perceptions regarding program value. The questionnaire includes a multiple-choice format for items 1-8, measured quantitatively, and short-answer closed (i.e., yes-no response) and open (i.e., perceptions) questions for items 9 and 10, measured quantitatively (i.e., percentiles) and qualitatively (i.e., perceived program value).

The multiple-choice format was selected as the developmentally appropriate and familiar format for elementary school children and is the preferred format for assessing knowledge by testing organizations and technical measurement experts for educational and psychological assessment (Haladyna, 1994; Oosterhof, 2001). Additionally, Love (1991) reports the frequent and successful use of the paper and pencil knowledge tests in program evaluation. The two short-answer questions were selected to allow participants a yes-no response and brief expression of perceived program value (Oosterhof, 2001).

The mixed-method approach in questionnaire design may reduce the threat of pre-post sensitization inherent in repeated measures. The design meets the requirements for Rapid Assessment Instruments (RAI) used in program evaluation to measure client outcomes and change (Love, 1991), thereby complementing the repeated measures design, which is also designed to assess change.

This study administered the questionnaire on three separate occasions during a year long pilot study. The pilot study aided in creating items that were developmentally appropriate, as indicative of the readability, comprehension, and appropriate responding of participants (Fife-Schaw, 2000). The questionnaire was further examined for factual validity, content validity, and face validity (Hadley & Mitchell, 1995; Hammond, 2000) by school counselors (i.e., focus group) and professors, determining that the items elicit

truthful responses, are relevant to the construct being measured, and measure what they should, respectively. Furthermore, as the items were developed directly from the program curriculum and evaluation criteria, construct validity may be inferred (Hadley & Mitchell). Examination of the questionnaire resulted in the creation of items that were consistent with the language of the respondent, eliminated ambiguous terminology, and were brief, clear, concise, culturally sensitive, and jargon free (Bernard, 2000; Miller, 1994).

The closed-ended format of the first eight items of the questionnaire allows for ease of numerical analysis, participation, clarification of responses, and a reduction in the number of ambiguous answers (Fife-Schaw, 2000b). The maximum score on the questionnaire is 10 points. The open- and closed-ended format of items numbers 6 and 7 allows for a quantitative and descriptive analysis of the program's perceived value (i.e., strengths, weaknesses, use, and effectiveness).

Data collection. Data for determining Peace Pal knowledge pertaining to conflict, conflict resolution, and mediation was obtained from the pre- and post training measures during the 2004-2005 academic year. A signed consent form from parents or legal guardians and Peace Pal students ages 8-10 was obtained prior to pre- and post program data collection (Appendix C). Prior to obtaining signed consents, students were informed that participation was voluntary and that they could withdraw from the study and/or from Peace Pals at any time and without consequence. Students and parents were informed of confidentiality, noting that all identifying information would be removed from the questionnaires, notes, forms, and other related documentation, and would remain in the

possession of the researcher or locked up at all times.

The 15 new Peace Pals completed a pre training questionnaire on the first day of training, providing a baseline measure. The questionnaire was completed in the same classroom in which the training was conducted and under standardized testing conditions (e.g., quiet, no interruptions, spaced seating). The questionnaire was read aloud to the students and time was given to complete each item to eliminate the effect of reader ability. Each item was repeated once.

In an effort to reduce socially desirable response bias and discomfort, names were eliminated from the questionnaire and students were asked to place the completed questionnaire face down in a stack on the back table. Numbers were assigned to questionnaires for the purpose of data analysis. Students placed questionnaires face down on a table in the middle of the room upon completion and sat quietly until everyone had finished.

The post training questionnaires were administered in the same manner as the pre-training questionnaire (e.g., standardized, same room, same time of day), with verbatim instructions (Appendix A), 1 week after the last day of training, providing comparison data, and 3 months after the last day of training, providing a retention measure. This study utilizes a three month retention timeframe based on similar studies, whereby evaluators administered retention measures 6 weeks to 4 months following training interventions (Bell et al., 2000; Johnson et al., 1994).

Longitudinal data was collected to measure the impact of the Peace Pal program on schoolwide out-of-school suspensions. The number of out-of-school suspensions prior

to implementation of the Peace Pal program (i.e., academic year 1999-2000) were obtained from school disciplinary records maintained by the Assistant Principal for baseline data. The number of out-of-school suspensions for academic years 2002-2003, 2003-2004, and 2004-2005, the evaluation year, were obtained for comparison data.

The number of mediation sessions resulting in the successful resolution of conflict were collected from the Peace Treaty forms. Peace treaties are school records completed by mediators during Peace Talks (i.e., mediation sessions) throughout the 2004-2005 academic year.

Peace Pal perceptions of program value were collected from items 9 and 10 of the pre- and post training questionnaire that was administered during the 2004-2005 academic year. Participant perceptions of peer mediation session value were collected from the Peace Treaty forms for the 2004-2005 academic year.

CHAPTER III

RESULTS

This study uses both descriptive and inferential statistics for data analysis. Results for each of the dependent variables are described and listed in the tables that follow.

Schoolwide Suspensions

Hypothesis 1 postulated a decline in schoolwide violence. The hypothesis was accepted; the null hypothesis rejected. Longitudinal data indicated a decline in out-of-school suspensions since implementation of the Peace Pal Program for each of the 3 post program years.

Three years post program (i.e., 2002-2003) data indicates a 76% reduction in out-of-school suspensions. Decreases in out-of-school suspensions were noted for all categories with reductions ranging from 67% to 90%, except for the category of defiance which depicts a 40% increase.

Four years post program (i.e., 2003-2004) data indicates a 68% reduction in out-of-school suspensions. Decreases in out-of-school suspensions were noted for all categories with reductions ranging from 67% to 84%, except for the category of defiance, which depicts a 60% increase.

Five years post program (i.e., 2004-2005) data indicates a 61% reduction in out-of-school suspensions. Decreases in out-of-school suspensions were noted for all categories with reductions ranging from 40% to 69%, except for the category of verbal conflict, which depicts a 33% increase.

The greatest total decrease in out-of-school suspensions from pre- to post program

year is noted for the academic school year 2002-2003. Schoolwide measures of out-of-school suspensions are reported categorically (i.e., verbal conflict, physical conflict, disruption, and defiance) and by frequencies and percentages in Table 1.

Table 1

Frequency of Out-of-School Suspension and Percentage of Difference from Pre Program Year by Behavior Category

Behavior Category	Pre Program 1999-2000		Post Program 2002-2003		Post Program 2003-2004		Post Program 2004-2005	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Defiance	5		7	-40%	8	-60%	3	40%
Disruption	29		3	90%	7	79%	9	69%
Physical Conflict	25		4	84%	4	84%	8	68%
Verbal Conflict	3		1	67%	1	67%	4	-33%
TOTAL	62		15	76%	20	68%	24	61%
Total Enrollment	646	9.6%	710	2.1%	813	2.5%	825	2.9%

Mediation Outcomes

Hypothesis 2 postulated the successful resolve of conflict during peer mediation sessions. The hypothesis was accepted; the null hypothesis rejected. Analysis of the Peace Treaties indicated the successful resolve of conflict in 100% of the 34 peer mediation sessions conducted.

Five percent of the mediation sessions were referrals submitted by administrators with 95% of the requests being submitted by fellow students and Peace Pals. Mediation

session outcomes are reported numerically and in percentages in Table 2.

Table 2

Frequency of Peer Mediation Sessions and Percentage of Successful Mediation Outcomes

<u>Mediation Sessions Conducted</u>	<u>Successful Outcomes</u>	<u>% Successful</u>
34	34	100%

Conflict, Conflict Resolution, and Mediation Knowledge

Hypothesis 3 postulated an increase in knowledge pertaining to conflict, conflict resolution, and mediation for those Peace Pals who participated in training. The hypothesis was accepted; the null hypothesis rejected. All 15 Peace Pals participated in the pre-, post- and retention measures. The pre- and post training measures showed significant differences in mean scores on main effect trail, $F(1.5, 20.35) = 40.07, p < .05$, using a corrected 1 X 3 Repeated Measures ANOVA.

Table 3 lists descriptive data for the pre-, post-, and retention measures denoting a 43% increase in knowledge from pre- to post measure and a 42% increase in knowledge from pre to retentions measure. Hence, knowledge decreased by 1% from post measure to retention measure.

Mauchley's test of sphericity was conducted (Cohen & Lea, 2004). Mauchley's test of sphericity was significant, $W(2) = .624, p < .05$, indicating a violation of the assumption of sphericity in the 1 X 3 Repeated Measures ANOVA. The Greenhouse-Geisser correction versus a MANOVA was used in this study. The use of an ANOVA

with a correction instead of a MANOVA in this study is deemed appropriate due to the study's small sample size (i.e., N=15), the use of less than 10 levels of repeated measures and the small violation of sphericity (i.e., Epsilon values > 0.7) (Algina & Keselman, 1997). Results of the corrected Repeated Measures 1 X 3 ANOVA is listed in Table 4.

Post hoc tests were conducted using Bonferroni adjustment for multiple comparisons (see Table 5). Pairwise comparisons indicated an increase in knowledge related to conflict, conflict resolution, and mediation from pre- to post- and from pre- to retention measures with significant differences in mean scores. There were no significant differences in mean scores between post- and retention measures, indicating no significant loss or gain in conflict, conflict resolution, and mediation knowledge over time.

Table 3

Descriptive Data for Knowledge Development

Trials	Mean	Standard Deviation	N	% difference
Pre	6.53	1.552	15	
Post	9.33	.617	15	43%
Retention	9.27	.704	15	42%

Table 4

Corrected 1 x 3 Repeated Measures ANOVA for Knowledge Development

	df	F	Sig.
Trial			
Greenhouse-Geisser	1.5	40.070	*.000
Error (trial)			
Greenhouse-Geisser	20.35		

* Main effect trial is significant, $F(1.5, 20.35) = 40.07, p < .05$

Table 5

Post Hoc Results with Bonferroni Adjustment for Multiple Comparisons for Knowledge Development

		Mean Difference	Sig.	95% Confidence Interval for Difference	
				Lower Bound	Upper Bound
Pre	Post	-2.800*	.000	-3.962	-1.638
	Retention	-2.733*	.000	-3.776	-1.690
Post	Pre	2.800*	.000	1.638	3.962
	Retention	.067	1.000	-.553	.687
Retention	Pre	2.733*	.000	1.690	3.776
	Post	-.067	1.000	-.687	.553

* The mean difference is significant at the .05 level

Participant Perceptions of Peer Mediation Session Value

Hypothesis 4 postulated that participants would perceive peer mediation as valuable. The hypothesis was accepted; the null hypothesis rejected. Participants expressed satisfaction in 34 of 34 mediation sessions, viewing peer mediation as effective and noting that they would use it again and would recommend it to a friend in 100% of the sessions. Participant perceptions of mediation session value are reported in percentages by yes-no response items in Table 6.

Table 6

Participant Perceptions of Peer Mediation Session Value

	Yes	No
Perception Item (n =34)	%	%
Do you both agree the problem was resolved?	100%	
Are you completely satisfied with how the session went?	100%	
Would you use peer mediation again?		100%
Will you recommend Peace Pal mediation to your friends?	100%	
Total	100%	

Peace Pals Perceptions of Peer Mediation Program Value

Hypothesis 5 postulated that Peace Pals would perceive the Peace Pal program as valuable. The hypothesis was accepted; the null hypothesis rejected. One hundred percent of the Peace Pals perceived the program as valuable as recorded on the pre- and post measures. Peace Pal perceptions of the program's value are reported in percentages and by yes-no categorical responses for each item in Table 7.

A qualitative analysis was conducted on the open-ended responses of items 9 and 10 of the pre- and post measures. Systematic comparisons of the patterns of responses regarding Peace Pal perceptions of program value revealed that all Peace Pals perceive the program as helpful with little variation in content from pre- to post- to retention measures for question 9 and 10. Peace Pals remained consistent in their positive perceptions of training and program value.

Common themes for questions 9 and 10 included providing students in conflict with someone who could help, improving friendships, learning how to help self and others to resolve conflict, teaching students to resolve their own conflicts, allowing students to express and understand feelings, and reducing school violence, which was termed as arguments, fights, threats, and problems.

In addition to gaining an understanding into what students view as valuable about the Peace Pal program, a notable finding in the qualitative analysis is the changes associated with the mastery of language. The post- and retention measure responses revealed that the Peace Pals were beginning to use the language of conflict resolution and mediation presented in training (i.e., conflict, resolve conflict, peace talk, peace in the school, understand feelings) moreover the pre measure responses (i.e., fight, argue, tease, bully, solve problems).

Table 7

Peace Pal Perceptions of Peer Mediation Program Value

Perception Item (<i>n</i> = 15)	Pre		Post		Retention	
	Yes	No	Yes	No	Yes	No
	%	%	%	%	%	%
Program Value to Self	100%		100%		100%	
Program Value to Others	100%		100%		100%	

CHAPTER IV

DISCUSSION

Although peer mediation programs are increasingly implemented in elementary schools across the nation, evaluations of such programs are just beginning to develop. Therefore, there is little research on the effectiveness of such programs. Among the studies that are available, few are of an applied nature and most lack methodological rigor investigating programs under optimal conditions.

This evaluative study offers meaningful and substantial support for peer mediation programs and adds to the extremely limited body of research, particularly at the elementary school level. This applied study evaluates the effectiveness of an existing elementary school peer mediation program using quantitative and qualitative methods and an outcome-oriented quasi-experimental approach. Strengths of this study include the use of triangulation, multiple dependent variables, longitudinal data for schoolwide measures, repeated measures for assessment of knowledge development with statistical analysis for generalization, and a real world setting for increased external validity and practical application.

The results of this evaluative study indicates that the Peace Pal peer mediation program is successful on several domains unique to its current environment with implications for generalizing the findings to similar elementary school settings. Each set of data yielded consistent results with one set of data converging to support the findings of the other (i.e., triangulation). Such support serves to aid in ruling out alternative explanations outside of the effects of the independent variable. These outcomes are

consistent with previous evaluative studies of its kind, thereby offering further support for the effectiveness of peer mediation programs at the elementary level and in similar elementary public school settings.

Program effectiveness was measured on five domains: a) frequency of out-of-school suspensions, b) knowledge pertaining to conflict, conflict resolution, and mediation, c) successful conflict resolve in peer mediation sessions, d) participant perceptions of mediation session value, and e) mediator perceptions of program value. These domains directly reflect the program's goal and objectives and the desire to have additional data on Peace Pal and participant program perceptions in order to improve upon the program.

Schoolwide Violence

The out-of-school suspensions reductions from pre- to post program years would indicate that the Peace Pal program was effective in reducing school wide violence. These findings are similar to other studies that found reductions in violence schoolwide (Bell et al., 2000; Hanson, 1994; Powell et al., 1996).

Like this study, Bell et al. examined schoolwide longitudinal data. However, the longitudinal data was for pre program years with only one post program measure, which was taken during the intervention year. Measures taken at these intervals may not have allowed sufficient time for the program to become established and demonstrate results, as noted by Cameron and Dupuis (1991), which may account for only a 20% decline in school suspensions during the first year of the program. The Maryland study conducted by Powell et al. noted a 75% decline in disciplinary referrals during the first and second

years of program operation.

Results of the longitudinal data analyzed for this study on out-of-school suspensions supports the inferences of schoolwide violence reductions reported by Powell et al. This study also complements the pre program longitudinal measures of Bell et al. with 3 years of post program longitudinal measures indicative of a reduction in schoolwide violence.

Bell et al. suggested that future studies examine the impact of peer mediation on verbal versus physical conflict, speculating that peer mediation may be more effective on less severe conflicts (i.e., arguments versus physical fighting). The suspension data of this study from pre program year and all 3 years of post program data indicated decreases in both the verbal and physical conflict categories. These results do not support the suppositions of Bell et al. in that peer mediation may be more effective on less severe conflicts. It would appear that peer mediation is effective for both physical and verbal conflict.

It is interesting, however, that violence reductions were noted in this study for each post program year in all categories except for the category of defiance, which depicted an increase for 2002-2003 and 2003-2004 and physical conflict, which depicted an increase for the 2004-2005 post program measure. There may be a correlation between the categories of defiance and physical violence. For example, post program defiance category increases were accompanied by post program physical conflict decreases by about half and vice versa for the 3 post program years.

Hanson (1994) noted the possibility that declines in student disruptive behaviors

might be attributed to teachers and administrators using student mediation rather than disciplinary actions to handle disruptive behaviors. This was not be a concern for the present study since the data collected rules out such a possibility with only 5% of the mediation requests generated teachers and administrators.

Total reductions in out-of-school suspensions would indicate that the Peace Pal program initiatives permeate the culture of the school. Hence, in addition to peace talks and the daily spontaneous conflict resolution and problem solving by Peace Pals throughout the school, participants in peer mediation may absorb and model problem-solving and negotiating skills in daily interactions, as indicative of the small number of repeaters to the peace talk table. Also, of the few that do repeat, it is not for conflict with the same student.

Peer Mediation

Results indicate that Peace Pal peer mediation was successful in resolving conflict in 100% of the mediation sessions. These findings are consistent with the studies of Bell et al. (2000), Hanson (1994), Humphries (1999), Johnson et al. (1996), Johnson and Johnson (2001), and Powell et al. (1996), which also reported high rates of conflict resolution (i.e., 71-100%) for mediation session outcomes.

These findings support the developmental appropriateness of peer mediation at the elementary school level. Like other elementary school peer mediators, Peace Pals effectively applied conflict resolution and mediation knowledge that resulted in peaceful problem resolution between peers.

Peace Pals demonstrated the ability to interact in emotional situations with other

students in a socially acceptable manner and to transfer and apply learning to actual mediation situations. Based on the findings of this study, it can be anticipated that virtually all conflicts that are brought to mediation will be resolved.

Knowledge Development

Significant score increases on the pre- and post training questionnaires indicate that Peace Pals experienced gains in conflict resolution and mediation knowledge. Few studies have assessed peer mediator knowledge development, however, of those that conducted such assessments (i.e., Bell et al., 2000, Johnson et al., 1994; Powell et al., 1996), with and without control groups, reported gains in knowledge/skills. Like this study, Bell et al. revealed knowledge gains in 100% of the mediators who participated in the training program.

Retention data indicated that Peace Pals maintained knowledge acquired as a result of training over a 3-month time period. Of the three studies that assessed knowledge gains, two used a measure for retention to determine the lasting effects of the knowledge gains. Bell et al. (2000) conducted a retention measure 6 weeks after completion of training, while Johnson et al. (1994) conducted a retention measure 4 months after training. Like this study, Bell et al. and Johnson et al. reported that students maintained improvements in knowledge.

The increase in knowledge as a result of Peace Pal peer mediation training depicts the developmental appropriateness of conflict resolution and mediation training at the elementary school level, which was also supported by data that depicted the ability of Peace Pals to effectively apply the knowledge obtained in mediation sessions.

Perceptions of Program Value

Solicitation of individual participant perceptions and Peace Pal perceptions revealed that both view the Peace Pal peer mediation program as valuable. Student participants unanimously expressed satisfaction with mediation sessions, viewing peer mediation as effective in resolving conflict, and noting that they would use it again and would recommend it to a friend. It is encouraging that the program is perceived as successful among students who have participated in mediation sessions.

Peace Pals, too, unanimously perceived the program as valuable to students in the school and the training as helpful in resolving daily conflict. Indirectly, responses appear to indicate a shared ownership and pride in membership in the Peace Pal program.

Suggestions for Program Development

The successive increase in suspensions from the third post program year to the fifth post program year could indicate that suspensions are on the rise, which may, in turn, indicate that the Peace Pal program is losing momentum. In addition, 34 mediation sessions over one academic year for a school of approximately 720 students depicts an underutilization of formal peer mediation sessions. This author believes that continued effectiveness and development of the Peace Pals program depends upon ongoing vigorous promotion throughout the school with posters and announcements.

Peace Pal assemblies with mock mediation sessions demonstrating the peace talk process would serve to increase program awareness and Peace Talk referrals. Continuously encouraging Peace Pals to spread the word about what they do and how non-Peace Pal students can refer fellow students will likely result in increased

participation in peer mediation. It might be beneficial to make Request for Peace Talk forms more readily available by designating distribution boxes in classrooms, the main office, and clinic, in addition to the current boxes located in the guidance office, main hallway, library, and cafeteria.

Principals can encourage faculty and staff to refer students for mediation at the first sign of conflict. Principals can include peer mediation as a mandatory step in the progression toward a conduct notice and/or referral to the office.

In an effort to increase program awareness and encourage schoolwide participation, Peace Pals might sponsor special events (i.e., dances, picnics), programs (i.e., fund raisers for donation), and awards (i.e., recognizing student throughout the school for peaceful behaviors). Identifying and tapping into resources such as partners in education and local businesses offer partnerships for developing special programming and promotional activities. Grants are another source of funding for program and promotional materials and manpower. Parents, too, may be willing to be trained and serve as a coordinator of mediation sessions.

Consideration might be given to training faculty and staff in the Peace Pal program Peace Talk process and in conflict resolution and mediation. Keeping faculty and staff abreast of the program's progress may encourage ownership in the program. A collaborative working relationship will serve to strengthen communication, reinforce the program goal and objectives, and aid in smooth program operation.

Additionally, thought might be given to implementing the conflict resolution and mediation training curriculum schoolwide. This would allow all students the opportunity

to gain social skills for problem solving and improved interpersonal relations as well as promote, on a larger scale, a more accepting, caring, and peace-reinforcing environment for children.

Limitations

There were several limitations impacting this evaluative study. Limitations were identified and addressed in accordance with the text *Counseling and Educational Research, Evaluation and Application* (Houser, 1998) in order to reduce their impact on evaluation outcome.

The examination of one elementary school and the primary use of descriptive statistics make it difficult to generalize findings. Therefore, this study includes a detailed description of the program, population, and evaluation procedures for reliability of replication, which will serve to increase ecological external validity. In addition, the study uses inferential statistics to analyze the data assessing knowledge gains, which can be used to make generalizations.

The emphasis on quantitative outcome analysis did not allow for detailed examination of the Peace Pal program. A larger qualitative component would allow for the examination and identification of what contributes to the program success or what may be hindering the program's effectiveness and growth with regard to the dependent variables studied.

Testing effects were possible due to pre- and post measure sensitivity. This study lengthened the time between post- and retention measures in order to control for the instrumentation effects.

Instrumentation effects exist in this study as well. Formal statistical tests for reliability (i.e., internal consistency, inter-rater, equivalent forms, and test/retest) and validity (i.e., criterion and construct) were not conducted on the questionnaire used to assess knowledge development. This limitation was addressed by using focus groups and a pilot study for questionnaire design. In addition, calibration in administration (i.e., standardized conditions for each observation) of the questionnaire served to avoid or reduce instrumentation threats. Inter-rater reliability is not an issue, as the same rater was used for each measurement.

This study is not a true experimental design. This study is considered to be a quasi-experimental design, which offers a moderate control over internal validity versus the high control over validity offered by true experimental designs, thus the ability to establish cause and effect are not as powerful as that of a true experimental design.

There are threats to internal validity inherent in this quasi-experimental study that would not be a threat for a true experimental design due to random assignment. These threats included history, maturation, and attrition.

History effects were a threat to this study, namely the longitudinal data collected to assess knowledge development and out-of-school suspensions. For example, in September 2003, the school community experienced a hurricane that resulted in 8 days out of school due to inclement weather. Theoretically, however, because the event was systematically distributed throughout the population, thereby affecting all students in the study, this particular event was not a threat to the internal validity of the study. Additionally, the study was extended beyond the anticipated impact of the uncontrolled

event, hence, it is unlikely that history effect would have endured over time. The theory is supported by this study's data, which did not appear to be affected when the data collected from the year of the hurricane was compared to pre- and post hurricane years.

Maturation was another threat to internal validity in this study. Maturation is of particular concern when the study involved children who are maturing more rapidly than adults. This threat is countered by the relatively brief period of time for the pre- and post measures of knowledge development. In addition, maturation is an anticipated aspect of this study's real world setting.

Attrition was a limitation of this study as well. Over the 5 year period in which the out-of-school suspension data was recorded, there were three changes in Assistant Principals and one change in Principal. The Principal changed from pre program year (i.e., 1999-2000) to the 3-year post program measure (i.e., 2002-2003). The Principal remained the same for all 3 years of post program out-of-school suspension data collection.

The Assistant Principal was different for the pre program data collection (i.e., 1999-2000), the 3-year post program data collection (i.e., 2002-2003), and for the 4-year post program measure (i.e., 2003-2004). The Assistant Principal did not change for the 2003-2004 and 2004-2005 out-of-school suspension data collection.

While guidelines for out-of-school suspensions are consistent across schools within the same division, individual perceptions, beliefs, values, and experiences will impact, to a degree, the application of policy. Therefore, this is a limitation to this study that needs to be considered.

The effective use of time and careful planning and scheduling were necessary in order to compensate for time constraints, manpower limitations, and space availability for conducting mediation sessions. The effective use of communication strategies to include classroom guidance, formal faculty and staff meetings, and written documentation were used to ensure program understanding, support, and use. Flexibility was also vital in order to counter the effects of the unpredictable school environment (e.g., fieldtrips, rehearsals, special events, gifted education schedule).

While there are limitations to this study, the use of multiple dependent variables aid in strengthening the confidence in observed changes to include the small sample (i.e., N = 15) used for pre- and post training measures. The multiple sources of data provided by triangulation converge to support rejection of the null hypotheses. Furthermore, this study has a high external validity due to the real-life setting, yielding results with broader applicability than that of a laboratory setting.

Recommendations for Future Research

The outcome of this study and its practical and theoretical significance to the Peace Pal program will be presented to the Superintendent, school personnel, students, and parents. Program modifications will be made based on stakeholder feedback and evaluation findings.

It is recommended that systematic and flexible (i.e., working with the inconsistencies of a real world school setting) evaluation remains an ongoing and vital part of the Peace Pal program to ensure its continued existence and growth. Future Peace Pal program evaluations may wish to focus on qualitative data collection. A more

formative evaluation will allow for the collection of data specific to the Peace Pal program, providing information for targeted areas of program improvement. For example, program evaluator's might consider broadening evaluations to include school personnel and parent perceptions of the program, its strengths and weaknesses, and suggestions for improvement.

Future evaluations might examine the frequency of student participation in mediation sessions. Returning for subsequent mediations between the same two students may indicate that conflicts were not sufficiently resolved during the first session. Returning for subsequent mediations by one of the participants with a different student or issue may be an indicator of the success of peer mediation

Future studies may wish to examine gender and ethnicity differences and the nature of conflict (i.e., physical versus verbal). Additionally, gender and ethnicity and mediation success rate might be examined to offer a better understanding of this peaceful approach to problem solving.

Future studies may wish to continue to categorize the conflict for more detailed analysis. For example, it might be beneficial to examine the nature of the conflict and possible correlations and interaction affects between the differing categories.

Researchers may also find it advantageous to examine the impact of peer mediation training on the mediator's individual behavior with family and friends. That is, does knowledge gained from conflict resolution and mediation training carry over, or generalize, to effective individual peer mediator behaviors with others?

Taping training sessions for the purpose of study replication may be a

consideration for future research in this area. Tapings would also serve to identify key concepts and elements of training for program improvement.

Future studies may wish to implement and evaluate the Peace Pal program at the middle and high school levels. Also, implementing and evaluating the program in several elementary schools would provide comparison data.

Conclusion

The Peace Pal training program exemplifies the cognitive behavioral approach to learning. Peace Pals learned through education, rehearsal, and application, to mediate conflict between student participants. Since only a small group (i.e., N=15) of students participated in the peer mediation training program, reductions in suspensions and positive participant perceptions of mediation session value would indicate that the Peace Pal program permeates the culture of the school. It appears that students internalize the knowledge and skills of negotiation by either taking part in mediations or by observing Peace Pals who model conflict resolution in day-to-day interactions.

This modeling and internalization of positive social behaviors supports social learning theory that contends students will learn to accept the standards and values of the community to which they are exposed. This behavior further indicates that students are self-regulating, exhibiting socially acceptable behaviors in the absence of authority.

It is important to note, however, that while the program evaluation outcome indicates the success of the Peace Pal program in reducing schoolwide violence, it did not do so in isolation. Zero tolerance policies and other programs and interventions are in place in the school for the purpose of fostering a safe and peaceful learning environment

(i.e., Just Say No Club, character education, Student Council Association, and Safety Patrols). Future studies aimed at capturing the essence of actual practice should consider these other programs and policies that are working together with the Peace Pal program in order to reduce schoolwide violence.

Peer mediation programs offer both prevention and intervention to students who are displaying aggressive behavior toward others as well as victims of the aggression. Conflict resolution and peer mediation is a recurring theme in the treatment of aggressive children and adults. While this method of intervention has been found to be effective for managing aggressive behavior and conflict, if mastered at an early age, it may serve to prevent the development of aggressive behavior through proactive programs as well.

Counseling programs in conflict resolution and peer mediation teach children to resolve conflict through negotiation, communication, and problem-solving, inadvertently enhancing social skills. Hence, counselors are recognizing the need for schoolwide and community-based programs that are focused on both prevention and intervention with research supporting those programs that are grounded in social learning theory with an emphasis on cognitive behavioral approaches (Bell et al., 2000; Graham & Pulvino, 2000; Humphries, 1999; Johnson et al., 1994).

Prevention may include classroom guidance lessons with role plays demonstrating conflict resolution techniques, as all children participate in this type of guidance counseling program. Special programs such as peer mediation that promote the peaceful resolve of conflict schoolwide may inoculate the leaders whom other students emulate. Of course, small groups and individual counseling should remain in place for intervention.

Prevention and intervention programs should include educating parents about the developmental and psychological impact of social learning on their children. This cannot be taken for granted. Cognitive behavioral prevention programs should be implemented for educators and parents in conflict resolution, problem-solving, communication, and avoiding power struggles. These programs should reiterate the importance of active listening and regular classroom and family meetings in fostering childrens' trust, cooperation, and social learning (Lewis & Lewis, 1989).

Family counselors may wish to teach conflict resolution strategies to family members with the goal of reducing the aggressive behavior that is often modeled in the home and observed and internalized by children. As with other mediation situations, the counselor may wish to serve as mediator, assisting each party in obtaining a clearer understanding of each other's position, which would also demonstrate the process for the family members.

This study further supports the abundance of empirical research that encourages the implementation of prevention and intervention programs for reducing school violence, namely peer mediation programs. In addition to establishing a need for peer mediation programs in elementary schools, evaluation of the Peace Pal program depicts the program's effectiveness in its current environment; contributes to the severe lack of empirically sound outcome evaluative studies on peer mediation programs at the elementary school level; demonstrates the value of the practitioner-researcher approach to internal program evaluation; bridges the gap between theory and practice using applied internal program evaluation in a real world school setting; supports the developmental

appropriateness of peer mediation in the primary grades; provides rarely used longitudinal data and triangulation to illustrate a reduction in schoolwide violence; fulfills professional accountability standards and offers a model for implementation and study replication supporting the professional practice of peer mediation; provides practical information for program improvement through mediator and participant program value perceptions; supports future decisions regarding the program and its continuous evaluation; and offers inferential data that can be generalized to similar elementary schools within and outside of the district.

Although the evidence for the impact of this Peace Pal program is significant, it is not yet enough to conclude absolute positive affects on school climate. Nonetheless, this research provides empirical evidence to support the postulation that the Peace Pal peer mediation program is a promising approach for reducing school violence, increasing peer mediator knowledge pertaining to conflict, mediation, and conflict resolution, and is a program that is positively viewed and valued by both Peace Pals and participants of mediation.

Peace Pals promotes peaceable schools, offering a means by which students help students to help themselves. Conflict is inevitable, however, peer mediation, a peaceful means of resolving conflict, can reduce or eliminate the counter productive interactions that serve as precursors to violence in our schools and communities.

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APPENDIX A

MEASURES

Report of Out-of-School Suspensions Record
Peace Treaty
Pre- and Post Training Questionnaires
Verbatim Instructions for Questionnaire

Report of Out-of-School Suspensions Record

Pre-Peace Pals (1999-2000)

Total out-of-school suspensions reported by the Assistant Principal: _____
Behavioral Category:
Defiance: _____
Disruption: _____
Physical conflict: _____
Verbal conflict: _____

Three years post-Peace Pals (2002-2003)

Total out-of-school suspensions reported by the Assistant Principal: _____
Behavioral Category:
Defiance: _____
Disruption: _____
Physical conflict: _____
Verbal conflict: _____

Four years post-Peace Pals (2003-2004)

Total out-of-school suspensions reported by the Assistant Principal: _____
Behavioral Category:
Defiance: _____
Disruption: _____
Physical conflict: _____
Verbal conflict: _____

Five years post-Peace Pals (2004-2005)

Total out-of-school suspensions reported by the Assistant Principal: _____
Behavioral Category:
Defiance: _____
Disruption: _____
Physical conflict: _____
Verbal conflict: _____

Peace Treaty

Date: _____ Conflict Resolution Time: _____

Place of Conflict: _____

Peace Pals: _____ & _____

Student #1: _____ Grade: _____

Student #2: _____ Grade: _____

What was the disagreement? ___ argument ___ rumor ___ teasing, name-calling

Referred by:
___ Teacher/Staff/Administrator ___ Parent ___ Student

Brief description of conflict:

Student #1 shared:

Student #2 shared:

Was the conflict resolved? ___ Yes ___ No

Both students have agreed/disagreed to the following:

Do you both agree that the problem has been resolved? Y/N
Are you completely satisfied with how the session went? Y/N
Would you use peer mediation again? Y/N
Will you recommend Peace Pal mediation to your friends? Y/N

Signature of Student #1 _____ Signature of Student #2 _____

Pre-Training Peace Pal Questionnaire

1. The best way to handle conflict is to:
 - a. ignore the problem.
 - b. tell a friend.
 - c. get others to take your side.
 - d. talk about it with the other person.

2. Conflict resolution is:
 - a. an argument between two or more people.
 - b. asking the teacher to solve the problem.
 - c. solving problems with communication and compromise.
 - d. a bad behavior.

3. Mediation is:
 - a. being in the middle of an argument.
 - b. an argument between friends.
 - c. used to get your way.
 - d. when people who are not involved in the problem help to solve the problem.

4. Which one of these should happen in mediation:
 - a. take sides
 - b. bring in witnesses
 - c. blame others
 - d. share sides

5. How should you sit during mediation?
 - a. sit in a circle
 - b. sit on the floor
 - c. sit in a t-shape
 - d. sit on pillows

6. Exploring the conflict means to:
- go to the place where the argument occurred.
 - call for witnesses who may have seen the argument.
 - ask students who are in conflict to share their story and feelings.
 - listen and then tell the students how to solve the problem.
7. Which one of these is a Rule for Resolve for the students who attend mediation:
- do not be honest
 - no interrupting
 - do not use each other's names
 - call each other names
8. Circle three of the skills listed below that are used in mediation:
- interrupting
 - paraphrasing
 - active listening
 - reflecting feelings
 - threats
 - using one question
9. Do you think the Peace Pal training will be helpful to you?
_____ Yes _____ No
- How or why?
10. Do you think the Peace Pal program is helpful to students in this school? _____ Yes _____ No
- How or why?

Post-Training Peace Pal Questionnaire
____ Post ____ Retention

1. The best way to handle conflict is to:
 - a. ignore the problem.
 - b. tell a friend.
 - c. get others to take your side.
 - d. talk about it with the other person.

2. Conflict resolution is:
 - a. an argument between two or more people.
 - b. asking the teacher to solve the problem.
 - c. solving problems with communication and compromise.
 - d. a bad behavior.

3. Mediation is:
 - a. being in the middle of an argument.
 - b. an argument between friends.
 - c. used to get your way.
 - d. when people who are not involved in the problem help to solve the problem.

4. Which one of these should happen in mediation:
 - a. take sides
 - b. bring in witnesses
 - c. blame others
 - d. share sides

5. How should you sit during mediation?
 - a. sit in a circle
 - b. sit on the floor
 - c. sit in a t-shape
 - d. sit on pillows

6. Exploring the conflict means to:
- go to the place where the argument occurred.
 - call in witnesses who may have seen the argument.
 - ask students who are in conflict to share their story and feelings.
 - listen and then tell the students how to solve the problem.
7. Which one of these is a Rule for Resolve for students who attend mediation:
- do not be honest
 - no interrupting
 - do not use each other's names
 - call each other names
8. Circle three of the skills listed below that are used in mediation:
- interrupting
 - paraphrasing
 - active listening
 - reflecting feelings
 - threats
 - using one question

9. Was the Peace Pal training helpful? Yes No

How or why?

10. Do you think the Peace Pal program is helpful to students in this school? Yes No

How or why?

Verbatim Instructions for Questionnaire

Verbatim instructions for the administration of the pre-post questionnaire:

Do not put your name on the paper. I have dated the paper for you. This is a questionnaire to determine how much you know about conflict resolution and mediation. This is not a test and will not be graded. It is being used to measure any change in your knowledge of conflict resolution and mediation as a result of Peace Pal training. I will read each question aloud two times. When I have read all the questions, I will give you as much time as you need to go back over your answers and to answer the last two questions which are your own thoughts. When you have finished, place the paper face down on the desk in the middle of the room. Do you understand? Please circle the best answer.

APPENDIX B

PEACE PAL PROGRAM

Peace Pal Program Description
Peace Pal Program Training Curriculum and Activities
Peace Talk Script
Request for Peace Talk Form

Peace Pal Program Description

The program was designed to offer prevention by training student leaders and offering mediation services for the entire student body, and intervention, by identifying and treating students who are at risk and currently engaging in acts of violence.

The goal of the Peace Pal program is to reduce schoolwide violence. The following objectives support the program's goal:

1. To enhance students' levels of understanding regarding anger and conflict.
2. To enhance students' knowledge pertaining to conflict, conflict resolution, and mediation.
3. To resolve peer disagreements peacefully through peer mediation.

At the start of each academic year, the school counselor announces the program, Peace Pal selection needs and procedures, and the process for requesting peace talks to teachers and students via classroom visits, demonstrating the process of peer mediation. During the program's inauguration, Peace Pals are selected, two per classroom from grades three, four, and five, by their classroom peers and teachers based on leadership qualities, good academic standing, positive attitude, and exceptional character (i.e., cooperativeness, helpfulness, respectfulness, compassion).

Students selected as Peace Pals will continue as Peace Pals while students at Northern Shores. New Peace Pals are required to attend six hours of training (i.e., two one-hour sessions each week for three weeks); training participation is optional for returning Peace Pals, but, encouraged as needed. The progressive nature of the Peace Pal program, allows students to develop and hone their knowledge and skills, over the years. Peace Pals are solicited only as needed in academic years succeeding the program's implementation, depending upon attrition and advancements to middle school.

Peace Talks are held during the school day and supervised by the school counselor. Students mediate in pairs assigned randomly with no permanent teams permitted. Peace Pals use Peace Pal Scripts while at the Peace Talk table, to aid in consistent application of the four-step method of conflict resolution.

In addition to Peace Talks, Peace Pals engage their communication and problem-solving skills in spontaneous conflict situations that occur in the classroom, lunchroom, hallways, and on the playground and bus ramps. One-hour monthly meetings are held for the purpose of motivation, maintaining program momentum, skill improvement, and the sharing and debriefing of daily schoolwide conflict resolution activities.

Peace Pal Training Curriculum Outline

Session 1

Define and discuss conflict, conflict resolution, and mediation
Discuss thoughts, feelings, and actions
Discuss and practice reflecting feelings
Discuss and practice paraphrasing and summarizing
Discuss and practice active listening
Discussed open and closed questions

Session 2

Discuss confidentiality and its limits
Discuss the importance of seating in mediation: "t-seating"
Discuss Rules for Resolve, "R-n-R"
Discuss and practice skills from session 1

Sessions 3-6

Introduce the four-steps to conflict resolve: mediation.

- Step 1: Introduction and Laws
- Step 2: Exploring the Battle
- Step 3: Peace Talk
- Step 4: Peace Treaty

Practice the four-step mediation process for remaining sessions.

Peace Pal Training Curriculum Activities

Session 1

What is conflict?

Is conflict good or bad?

What is mediation?

Sharing sides

Allowing disputants to resolve the conflict

Not blaming

No witnesses

What isn't mediation?

Taking sides

Resolving the conflict for disputants

Blaming

Bringing in witnesses

Thoughts, Feelings and Actions

When another student teases you or calls you a name:

How do you feel?

What do you feel like doing?

When another student cuts in the line:

How do you feel?

What do you feel like doing?

When another student takes something that belongs to you:

How do you feel?

What do you feel like doing?

Reflecting Feelings

Disputant: I was so angry when she stepped on my back pack!

Peace Pal: So you felt angry.

Peace Pal Curriculum Activities (cont.)

Paraphrasing and Summarizing

Disputant: Tom and Mary were on the playground whispering and looking over at me. I was getting very angry and feeling very sad at the same time.

Peace Pal: When Tom and Mary were whispering on the playground you felt sad and mad.

Active Listening

Eye-contact (without staring), leaning forward, head nods, questioning for clarification, paraphrasing and summarizing for understanding.

Open vs. Closed Questions

Are you eating lunch today?
What are you having for lunch today?

Session 2

Understanding Confidentiality as Privacy

Peace Pals do NOT repeat what they see and hear outside of mediation sessions.

Seating

T-formation seating: Peace Pals across from each other and disputants across from each other.

“R-n-R”: Rules for Resolve

Try to resolve the conflict (focus on the conflict, not the person).
Be honest.
No interrupting.
Use names and do not call names.

Discuss and practice skills from session #1.

Peace Pal Curriculum Activities (cont.)

Session 3

Explore the 4-step Method for Conflict Resolution: Mediation

One Peace Pal takes notes while the other conducts the session.

Step 1: Introductions

Peace Pals introduce themselves and the disputants, explain confidentiality and its limits, and go over R-n-R.

Step 2: Explore the Conflict

Disputant 1 tells what happened; shares feelings then and now.
Disputant 2 tells what happened; shares feelings then and now.

Step 3: Peace Talk

Disputant 1 suggests what can be done to end the conflict.
Disputant 2 agrees or disagrees with Disputant 1's suggestions.

If agreement is secured, Peace Pals move on to Step 4, if not, this process is repeated until a resolve is secured.

Step 4: Peace Treaty

Peace Pal summarizes the agreement, as discussed and written on the treaty, secures confirmation from disputants, secures signatures of disputants, and debriefs disputants on the helpfulness of the mediation process.

Sessions 3-6 devoted to practicing the mediation process using "real life" or Peace Pal suggested scenarios and the 4-steps to conflict resolve.

Peace Pal Curriculum Activities (cont.)

Peace Pal Training Role Plays (or students can use their own)

Tom and Jerry are in the same classroom. Jerry reported to the teacher that Tom is constantly hitting the back of his chair which is very annoying. Jerry said he asked Tom to stop but Tom will not stop, so the teacher referred them to Peace Pals.

Donna was walking down the hallway and bumps into Sally. Sally yells at Donna and accuses her of doing it on purpose. The hall monitor, who did not see the incident, refers the students to Peace Pals.

Kyle and Jada were playing a game at recess. Jada accused Kyle of not taking turns. Kyle said it was Jada who was not taking turns. Jada and Kyle's friend Samuel referred them to Peace Pals.

Tammy and Megan are best friends. Megan told Tammy a secret. When Megan found out that another student knew what she had only told Tammy, she became very angry. Megan will not speak to Tammy, so Tammy referred herself and Megan to Peace Pals.

Wesley and Daniel are constantly teasing each other. Today it got completely out of control and they were nose to nose, yelling and calling each other names, with red faces. The teacher referred the students to Peace Pals.

Jason reported to the bus driver that Alfredo keeps teasing him about the way he wears his hat, calling him names. The bus driver reports the behavior to the assistant principal who refers the students to Peace Pals.

Christopher told Antonio to stop cutting in line. Antonio said he wasn't cutting in line that another student let him in front of her. The teacher assistant in the lunchroom referred the students to Peace Pals.

Sabrina brought her science project to school and placed a do not touch sign on it because it was fragile. A classmate touched her project and it broke. Sabrina is very sad and angry because the science fair is in two days. A Peace Pal in the classroom referred the students to Peace Pals.

Debbie and Darlene are friends. Debbie has just started getting to know another student in the classroom and wants her to hang out with she and Darlene. Darlene is mad and doesn't want the new girl to hang around with them. Another student saw them arguing about this on the playground and referred the students to Peace Pals.

Beth asked Norma if she could borrow her calculator. Beth dropped the calculator and it broke. Beth said she was sorry, but Norma is still mad and will not speak to her. Their teacher referred them to Peace Pals.

Jeannette told the art teacher that Julie is always copying her work. Julie said that she just likes the way Jeannette draws and wants to become an artist one day. The art teacher refers the students to Peace Pals.

Tom reported to the teacher that Austin knocked his books out of his hand. Austin said it was an accident. The teacher referred the students to Peace Pals.

Suzanne told Alan who told Oscar who told Travis that she thought he was ugly. Travis' feelings were hurt. When Suzanne sat beside Travis at the lunch table Travis began calling her names. Suzanne started to cry. Suzanne's best friend Jamika referred the students to Peace Pals.

Yesterday George shared his cupcake with Anthony. Today Anthony has a piece of cake in his lunch that his mother had made. When George asked Anthony to share the cake, Anthony said no. George got mad and knocked Anthony's lunchbox on the floor. The teacher referred the students to Peace Pals.

Tonya told Claudia that she would call her and give her the homework assignment she forgot to copy off of the board in the classroom. Tonya did not call. The next day, Claudia began yelling at Tonya and blaming her for not having her homework when the teacher was collecting it. The teacher sent the students to Peace Pals.

Elizabeth sold Barbara, a classmate, a hair ribbon; her mother makes them. Barbara said she would pay her on Monday, but she didn't. Elizabeth took the money out of Barbara's desk on Tuesday. Barbara reported her money missing to the teacher. Another student who knew the story, told the teacher. The teacher referred the students to Peace Pals.

Jen and Robert were assigned to work on a class project together. Neither can agree upon a topic and things are really starting to heat up. The teacher refers them to Peace Pals.

Olivia told Ricky that she did not like Jason. At recess Ricky saw Jason talking to Olivia, so he walked over and told Jason to stay away from Olivia. Jason said no because he and Olivia are friends. The Peace Pal noticed the two of them becoming very angry and arguing back and forth, so she talked to the teacher and they decided to refer Ricky and Jason to Peace Pals.

Ernie and Eric are friends but they play on different little league teams. Eric's team lost the game last night and he did not speak to Ernie as he walked off the field. Today Eric is still not speaking to Ernie. The Peace Pal suggested that Ernie and Eric go to Peace Pals.

Kianna has lots of friends. Her mother said she could only invite four friends to her slumber party. Taja was one of the friends that did not get invited. Taja is very mad and is threatening to ruin Kianna's birthday party. Kianna is sad because she couldn't invite Taja, but she is also afraid that Taja might do something mean to her. Taja told the teacher about it and the teacher suggested Peace Pals.

Suddenly the hall monitor hears yelling around the corner. Two students were arguing and a plate and cupcakes were lying on the floor. Both students were accusing each other of bumping into one another. The hall monitor helped to clean up the cup cakes and asked another student to get the principal who referred the students to Peace Pals.

Shemar and Derek sit at the same table during class. The community crayons and books are kept in the center of the table. Shemar and Derek are constantly arguing accusing each other of pushing the crayons and books on their side of the table leaving them with less space to work. Today the two became so disruptive that another student at their table began to cry. The teacher referred the students to Peace Pals.

Katrina and Alfreda are classmates. Katrina reported to the teacher that Alfreda is always getting in her personal space. The teacher refers the students to Peace Pals.

Quanisha told the teacher that Jordan continues to take things off of her desk and play with them or use them without asking for her permission. The teacher has talked to Jordan about this and he only does it with Quanisha. The teacher referred the students to Peace Pals.

Peace Talk Script

First: Introductions

Hello, I am _____ and this is _____. We are Peace Pals. We mediate, or help students to solve their conflicts peacefully. What are your names?

We do not take sides, judge you, or tell you what to do. Everything you say is confidential. This means it is private and we will not tell other students what you talk about here today. We also encourage you to do the same. If the conflict involves weapons, drugs, harming your self or anyone else, or threats, we will need to report this to the school counselor. Do you understand?

There are four peace talk rules you must agree to:

Try to resolve the conflict.
Be honest.
No interrupting.
Use names and do not call names.

Do you agree to these rules?

Second: Explore the Conflict

One of us will take notes while the other takes you through the process. You will get to see the notes and make any changes you feel needed, at the end of the session.

Disputant #1 (use name)..can you tell us what happened?
How did you feel? How do you feel now?

Disputant #2 (use name)..can you tell us what happened?
How did you feel? How do you feel now?

(Paraphrase)

Third: Peace Talk

Disputant #1 (use name)..what do you suggest to resolve the conflict?
Disputant #2 (use name)..do you agree with this?
(Go back and forth until agreement is secured)

Fourth: Peace Treaty

Now, we will summarize the treaty. Do both of you agree the conflict has been resolved? Please sign. Congratulations, you have just resolved your conflict peacefully. We would like to ask you a few questions about the mediation experience. Thank you for coming to the Peace Talk table.

Request for Peace Talk

Date: _____

Place of conflict: _____

Who is at war?

Student: _____ Teacher: _____

Student: _____ Teacher: _____

What type of disagreement?

argument rumor teasing, name-calling other

What was this battle about?

Who is completing this form?

Student Parent Teacher/Staff/Administrator

Name of person completing form: _____

(your name will be kept private/confidential)

APPENDIX C

CONSENT FORM

Signed Consent for Peace Pal Pre- and Post-Training Questionnaire

Signed Consent for Peace Pal Pre- and Post-Training Questionnaire

Dear Parent/Guardian:

Each year, new Peace Pals are selected from grades 3-5 by their teacher and classmates based on leadership abilities and good character to replace those Peace Pals who are no longer at the school. Your child has been selected to be a Peace Pal for Northern Shores Elementary School. A Peace Pal helps other students to resolve their conflict peacefully. Peace Pals engage in six hours of training in mediation (one hour twice a week for three weeks). Training, mediations, and monthly meetings take place during the school day and teachers allow Peace Pals to make up any work missed. Enclosed is a brief description of the Peace Pal program.

Peer Mediation programs exist in schools across the country, offering children the opportunity to talk over their problems and feelings in a neutral setting and work together to find their own solutions. Sharing common concerns and speaking the same language, children understand and trust other children, helping to make mediation by peers effective.

New students to the Peace Pal program will be asked to complete a questionnaire prior to the first training session, upon completion of training, and three months following training. The questionnaire is voluntary and students may withdraw from the assessment at any time without consequence. It consists of eight multiple choice questions which assess knowledge and skills with regard to conflict, conflict resolution, and mediation. The questionnaire is completely confidential and anonymous. The data will be used to aid in determining the effectiveness of the Peace Pal program and for program improvement. The data may become a part of doctoral dissertation research with possible publication at a later time, again, maintaining student confidentiality and ensuring that students are unidentified. Program evaluation outcomes will be made available upon completion.

Please complete the section below and return the entire form to Rita Schellenberg, at your earliest convenience. Two copies are enclosed so that you may retain one for your records. Your child's verbal consent will be secured as well. If you have any questions, please do not hesitate to contact me at 925-5566. Thank you.

Sincerely,
Rita Schellenberg, School Counselor

Student Name: _____ Teacher _____

_____ Yes, my child may be a Northern Shores Peace Pal and may participate in the pre- and post-training questionnaire that may become a part of a doctoral dissertation.

_____ I do not want my child to be a Peace Pal.

Parent Signature: _____ Student Signature: _____ Date: _____