

# Teaching Conflict Resolution Skills to Middle and High School Students Through Interactive Drama and Role Play

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**ABSTRACT.** In response to the rising levels of school conflict, the present study investigated a new approach to conflict resolution for middle and high school students using interactive drama and role play called the Win-Win Resolutions program. The standardized curriculum delivered within the school setting includes strategies for self-control and anger coping, self-management of feelings, and interpersonal problem-solving. Participants included 2,440 students using a pre-post survey methodology. Results indicated middle and high school students showing a decrease in their levels of relational aggression, and high school students showing a decrease in their levels of physical aggression. Furthermore, high school students indicated an increase in their levels of effective communication while both middle and high school students

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exhibited an increase in their general knowledge regarding positive conflict resolution strategies. Implications and recommendations for school-based conflict resolution programs are offered. doi:10.1300/J202v06n04\_04 [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <<http://www.HaworthPress.com>> © 2007 by The Haworth Press. All rights reserved.]

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### INTRODUCTION

Students' aggressive and violent behavior at school remains a significant threat to safe and secure learning environments. The National Center for Education Statistics reported that 13% of ninth through twelfth graders had been in a physical fight on school property (DeVoe, Peter, Noonan, Snyder, & Baum, 2005). According to the Youth Risk Behavior Survey, 9% of students nationwide had been threatened or injured with weapons during the previous 12 months (Grunbaum et al., 2004). Statistics such as those exemplify physically aggressive behavior (e.g., pushing, hitting, slapping, biting). Perhaps equally destructive to the learning environment, are the school-based incidents of relational aggression such as gossip, malicious teasing, taunting, and peer rejection, which occur in approximately 14% of our nation's students (DeVoe, Kaffenberger, & Chandler, 2005).

The final manifestation of violence and aggression may vary in form—relational or physical—and in severity, but traced back to its roots lies unsettled conflict (Lockwood, 1997). Schools have embraced strategies to reduce conflict among students, their peers, and teachers (Johnson & Johnson, 1996). Conflict resolution education involves “. . . a set of problem-solving principles, a structured process of problem-solving strategies, and a set of foundational abilities that youth need to resolve conflicts effectively” (Crawford & Bodine, 2001, p. 22). Conflict resolution programs have demonstrated beneficial results across several domains such as academic achievement (Stevahn, Johnson, Johnson, & Real, 1996), classroom fighting (Meek, 1992), disciplinary referrals (Woodworth & Bodine, 2001), and suspensions (McDonald & Moriarty, 1990; Umbreit, 1991).

Crawford and Bodine (1996) outlined four basic approaches of conflict resolution education. First, in process curricula, students receive conflict

resolution instruction through a self-contained course, curriculum, or lesson plan. Second, mediation approaches involve training only selected individuals (students and/or teachers) that will play a neutral third-party role in resolving student conflict. The third approach, known as peaceable classroom, integrates conflict resolution instruction into the very fabric of the classroom curriculum. Conflict resolution education meshes seamlessly with both core subject matter and classroom management techniques. Finally, the peaceable school approach is a whole-school methodology that builds on the peaceable classroom model to establish shared norms and behaviors throughout the entire school.

Less utilized have been approaches to conflict resolution that use interactive drama as the primary pedagogical tool. Although there are a few published dramatic approaches to changing children's behavior, most provide little empirical evidence to support its effectiveness. For example, Fine and Macbeth (1996) have described what they called "psychodrama workshops" designed to change destructive behavior, but specific data are not provided for large groups. Smith, Walsh, and Richardson (1985) created the Clown Club, which is a short-term therapeutic group for latency-age children that uses drama for conflict resolution, but data are presented only for five girls. Clearly, there is limited empirical research examining alternative approaches to conflict resolution such as interactive drama and role play, although theory suggests that this pedagogical tool might be effective.

Role plays have been reported to facilitate change in children's affective and cognitive sets (McClure, Miller, & Russo, 1992; Schmitt, 1981). Therefore, it is likely that role play also might facilitate change in the specific cognitive set of conflict resolution skills. Because cognitive and attitudinal factors contribute to conflict resolution strategies (Cornell & Loper, 1998), it is important to target behavior patterns and provide opportunity to create new skills and attitudes regarding conflict. Critics may argue that role playing typical school conflicts is not the same as "the real thing." That being the case, child development experts such as Schwartzman (1978) point out that role play "creates and contains its own 'reality', which is characterized by *allusion* to, not distortion of, events" (p. 219). It is presumed that once these more positive conflict resolution strategies are externally manifested through role play and creative drama, they can become internalized and adopted by participants. From a social-cognitive perspective, these social experiences (positive role modeling of conflict resolution) shape cognitive processes (information-processing that guides problem-solving), which in turn create behavior patterns that can either be positive or negative (Dodge, 1986). Because

each child learns these skills at different rates, role playing allows the “performers” to move in and out of the script so that they can approach and absorb new skills at a rate that is comfortable for them.

It is a long-held belief among many child development experts that for learning to occur, children must be “actors” and master new skills through real experiences (Froebel, 1912; Wolfgang, 1974). In this sense, children’s play produces skill building through theatrical activity. Compared with paper-based or lecture-based violence reduction programs, role play and theatrical scripts that elicit active (as opposed to passive) engagement of students may increase conflict resolution skills. When conducted in a group setting such as a classroom, not only do the student actors benefit from actively “trying on” new roles to conflict resolution, but observers can critique how well that role might work for them. These dynamics create a social learning experience in which ways to handle conflicts positively are modeled (Bandura, 1977) at an age when identity development is crucial (Erikson, 1950).

Despite these theoretical and intuitive links, there is a dearth of research on how role play and creative drama *change* children’s approaches to conflict resolution. Moreover, in the current climate of evidence-based programming, it is critical that community-based program developers use systematic evaluative approaches to examine the strengths and weaknesses of their work. Thus, the current evaluation utilizes a strong empirical framework across a wide age range to examine a new program called Win-Win Resolutions. This program was developed partly in response to Goal 7 of the National Education Goal Panel report (NEGP, 1997), which urges for a decrease in violence in public schools. Win-Win Resolutions is a nonprofit organization dedicated to crisis prevention by teaching conflict resolution skills to children, adolescents, parents and educators. Win-Win’s teaching methodology utilizes interactive drama and professional counselors to actively engage students in adapting peaceful and positive solutions to conflict. To our knowledge, this type of program has not been implemented in a standardized format. Based upon previous research and theory (e.g., Fine & Macbeth, 1996; McClure et al., 1992), it was hypothesized that after receiving the Win-Win Resolutions program curriculum, (1) there will be an increase in knowledge of key concepts related to effective conflict resolution, (2) there will be a decrease in aggressive attitudes toward conflict resolution, and (3) there will be an increase in effective communication skills.

## **METHODS**

### ***Participants***

The population of interest included 1,022 middle school students and 1,418 high school students currently enrolled at Title I public schools across Guilford County, North Carolina. Thus, a total of 2,440 students participated in the Win-Win Resolutions program. Forty-nine percent (49%) of the sample were girls; 51% were boys. In terms of ethnicity, approximately 63% were African Americans, 14% Caucasians, 7% Asians, 7% Hispanics, and 6% Biracial (3% did not report their ethnicity).

### ***Measures and Instrumentation Development***

A pre-post measure was developed using a participatory evaluation approach (Greenwood, Whyte, & Harkavy, 1993; McTaggart, 1997) and in coordination with the program developer to measure attitudes and knowledge regarding conflict resolution. The measure included 35 Likert scale items that assess attitudes regarding conflict resolution, with responses rated on a 4-point scale from *1 = Almost Never* through *4 = Almost Always*. Additionally, 10 multiple choice questions and 10 true/false questions were added to assess knowledge about conflict resolution. A composite score was created by giving each student one “point” for each question he/she answered correctly. The composite score was compared with pre and post study data to determine whether there was an increase in knowledge after the Win-Win program.

Based on current recommended guidelines (Costello & Osborne, 2005; DeVet, Ader, Terwee, & Pouwer, 2005), an exploratory factor analysis using principal components analysis techniques was computed for the 35 Likert items included in the measure. Using eigenvalues of 2.0 or greater (a more stringent criteria was used rather than the traditional cut-off of 1.0 based on the concept of over-factoring rather than under-factoring; see Fabrigar, Wegener, MacCallum, & Strahan, 1999) and orthogonal varimax rotation as recommended (see Browne, 2001), the factor analysis revealed three discrete factors. The items in Factor 1 related to fighting, and thus, were labeled Physical Aggression. The items in Factor 2 related to positive communication and compromising, and thus, were labeled Effective Communication. The items in Factor 3 related to starting rumors and gossiping about others, and thus, were labeled Relational Aggression. The item-test correlations for each item and the rotated component matrix are included in Appendix A. It should

be noted that five items did not load on any of the factors (Items 2, 20, 23, 28, and 31) and were not used in further analyses. *In sum, the three factors are (1) Physical Aggression, (2) Effective Communication, and (3) Relational Aggression.*

Internal consistency (Cronbach's alpha) analyses were conducted to assess the reliability of the factor structure, with alphas of .70 or above indicating good reliability. For the Physical Aggression factor, the alpha was .78 at T1 and .77 at T2. For the Effective Communication factor, the alpha was .78 at T1 and .80 at T2. For the Relational Aggression factor, the alpha was .70 at T1 and .72 at T2.

### ***Procedures***

Participants in the study were given the pre-test before the program began (i.e., at the beginning of the first session of the program). Students were introduced to the Win-Win staff and the lead counselor explained that the students were going to complete a brief assessment designed to measure their knowledge and attitudes regarding conflict resolution. The students completed a demographic information section and were assured that the information would be kept confidential (they were asked to indicate their initials rather than their full names to help alleviate concerns regarding confidentiality). The students also were assured that nobody would see their responses except an outside researcher who was not affiliated with their school. The counselor read a sample question in the class to make sure that the students understood how to complete the measure. Students completed the measure in approximately 20 minutes.

Staff members consisted of both counselors ( $n = 19$ ) who had a minimum of a masters degree in either counseling or social work, and theatre instructors ( $n = 13$ ) who had a minimum of a bachelors degree. Staff members worked in pairs (one counselor paired with one theatre instructor) to deliver the curriculum, with counselors implementing the skill-building activities and theatre instructors implementing the role-playing activities. Among counselors, there were three male counselors (16 female counselors; 53% Caucasian; 47% African American). Among theatre instructors, there were four males (nine females; 69% Caucasian; 31% African American). Both counselors and theatre instructors received 24 hours of intensive training, which included 6 hours of conflict resolution training, 3 hours of diversity sensitivity training, and 15 hours of curriculum training for program reliability. These training sessions were delivered across 4 days (6 hours per day).<sup>1</sup>

Because the primary emphasis of the Win-Win Resolutions program is on the acquisition of skill-based learning to produce desired behavioral changes, the curriculum included strategies for self-control and anger coping, self-management of feelings, and interpersonal problem-solving. The curriculum incorporated principles from the stoplight model used in the Yale-New Haven Middle School Social Problem-Solving Program (Weissberg, Caplan, & Bennetto, 1998), moral development theory (Kolburg, 1969), and interactive drama. The program was conducted for one time per week (for 60 minutes per week) across 12 weeks, with sessions delivered directly in the classroom. A summary of the specific session content across each week can be found in Appendix B.<sup>2</sup>

To provide a few examples of sessions, let's take sessions four and six. Session four focuses on rumors. Students begin the session by completing an icebreaker exercise to become comfortable with each other and the group leader. Next, the counselor leads a discussion on topics such as rumors, hearsay, making friends/making enemies, and the THINK acronym (Truth, Help or Hurt, Intent, Necessary, Kind). The THINK acronym is a creative way to ask students whether their actions are truthful, helpful, have good intentions, are necessary, and are kind before engaging in a particular behavior. Next, a scripted role play, written to the height of the conflict is delivered by the theatre instructors and students are then put in small groups to identify and role play resolutions to the rumor scripts' conflict. Each group performs their original scene for the class which is videotaped for evaluation purposes and the session ends with a discussion on how students can apply the skills in their own lives.

In session six on self-awareness, students engage in a scripted icebreaker and the counselor leads a discussion on key concepts related to self-awareness (e.g., identity, good self-esteem, confidence, optimism vs. pessimism, and limits and boundaries). Next, the theatre instructor leads a theatre game called "Tourist," which is a self-awareness interactive game. The theatre instructor conducts two interactive activities called Power Shuffle and Split Screen, which provide theatrical examples of the power of positive thinking and the importance of having good self-esteem and personal limits and boundaries.<sup>3</sup> Students discuss how these concepts can be incorporated into their daily lives.

### ***Analytical Plan***

Data analyses was done with attrition analyses, followed by demographic analyses and bivariate correlations. Next, summed up composites

for the pre- and post-test subscales were compared. The statistical package for the social sciences (SPSS, version 11.5, 2004) was used for all data analyses.

## RESULTS

### *Attrition Analyses*

Of the 2,440 students who participated in the program, 865 did not complete the post-test for a variety of reasons (e.g., they either switched classrooms, were absent, or did not want to complete the measure). Thus, these data were not included in the longitudinal program evaluation (35% attrition). Group difference analyses indicated that there were no significant differences between those that remained in the study and those who dropped out in terms of age,  $t(2,438) = .69$ , ns, but there were significant differences in terms of gender and ethnicity. Specifically, boys were more likely to not be present for post-test data collection compared with girls,  $\chi^2(1, N = 2,383) = 5.96$ ,  $p < .05$ , and African American students were more likely to not be present for post-test data collection compared with white students (majority/minority),  $\chi^2(1, N = 2,306) = 10.34$ ,  $p < .001$ . Additionally, there were significant group differences in terms of baseline levels of physical aggression,  $t(2,438) = -5.18$ ,  $p < .001$ , relational aggression,  $t(2,438) = -3.65$ ,  $p < .001$ , and effective communication,  $t(2,438) = -3.90$ ,  $p < .001$ , with those who were not present for post-test data collection having higher levels of all of these constructs. Finally, middle school students were more likely to not complete post-test data collection compared with high school students,  $\chi^2(1, N = 2,389) = 5.19$ ,  $p < .05$ .

### *Descriptive Statistics and Correlational Analyses*

Descriptive statistics regarding knowledge of conflict resolution strategies as well as levels of physical aggression, relational aggression, and effective communication separated by middle school versus high school students are presented in Table 1. Correlation analyses are presented in Table 2.

Initial correlation analyses indicated that among both middle and high school students, males reported higher levels of physically aggressive strategies and lower levels of effective communication compared with females, and students of minority status reported higher levels of

TABLE 1. Change in Attitudes and Knowledge Regarding Conflict Resolution

Variable	Pre-Test		Post-Test		<i>t</i>	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
<i>Middle school (n = 629)</i>						
Physical aggression	2.32	.53	2.30	.51	-1.50	628
Effective communication	2.11	.50	2.09	.49	.56	628
Relational aggression	2.00	.49	1.93	.52	-3.75***	628
General knowledge	11.06	3.13	12.91	3.22	-13.47***	610
<i>High school (n = 940)</i>						
Physical aggression	2.47	.49	2.38	.47	2.74**	939
Effective communication	2.04	.50	2.09	.50	4.09***	939
Relational aggression	2.00	.46	1.94	.49	-3.28***	939
General knowledge	12.47	3.40	13.18	3.76	-6.95***	926

\*\* $p < .01$ , \*\*\* $p < .001$ .

Note: Higher means indicate: Greater physical aggression, greater effective communication, greater physical aggression, and greater knowledge of positive conflict resolution strategies.

physically aggressive strategies and lower levels of effective communication compared with students of majority status. There were no gender or ethnicity correlations with relational aggression. High school students ( $M: 2.47, SD: .49$ ) had higher levels of baseline physical aggression compared with middle school students ( $M: 2.32, SD: .54$ ),  $t(2,387) = -7.10$ ,  $p < .001$ . Levels of relational aggression and effective communication did not differ across middle school and high school students at baseline.

### **Program Outcomes**

To examine changes in knowledge regarding conflict resolution skills, physical aggression, relational aggression, and effective communication after receiving the Win-Win program curriculum, a series of paired samples t-tests was conducted. Specifically, pre-test composite scores were compared with post-test composite scores. Because of significant differences among correlations in terms of baseline levels of constructs across grade level (i.e., middle school vs. high school), analyses were run separately for middle and high schools students. Means data at pre-test and post-test for each construct are reported in Table 1.

TABLE 2. Bivariate Correlations Among Independent and Dependent Variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Gender		.12***	.01	-.18***	-.14***	.16***	.16***	.07*	.10*	.21***	.21***
2. Age	.10***		.12***	-.17***	-.16***	.13***	.10**	.07*	.05	.10***	.05
3. Ethnicity	-.01	-.02		.17***	.21***	-.17***	-.16***	-.05	-.01	-.14***	-.15***
4. Knowledge (T1)	-.14***	-.13***	.30***		.43***	-.21***	-.15***	-.21***	-.13***	-.35***	-.30***
5. Knowledge (T2)	-.16***	-.10**	.30***	.56***		-.24***	-.25***	-.22***	-.19***	-.26***	-.34***
6. Physical aggression (T1)	.13***	.06*	-.22***	-.26***	-.22***		.65***	.57***	.43***	.37***	.37***
7. Physical aggression (T2)	.18***	.03	-.19***	-.26***	-.29***	.62***		.39***	.53***	.29***	.42***
8. Relational aggression (T1)	.13***	.03	.01	-.19***	-.12***	.36***	.28***		.55***	.30***	.37***
9. Relational aggression (T2)	.18***	.05	-.01	-.16***	-.17***	.23***	.37***	.55***		.23***	.36***
10. Effective communication (T1)	.29***	.05	-.14***	-.40***	-.36***	.42***	.36***	.27***	.24***		.59***
11. Effective communication (T2)	.27***	.02	-.12***	-.34***	-.36***	.33***	.39***	.24***	.29***	.63***	

\*\* $p < .01$ , \*\*\* $p < .001$ .

Note: Middle school correlations are above the diagonal and italicized; High school correlations are below the diagonal.

The analysis to examine change in knowledge regarding conflict resolution skills indicated that middle school students significantly increased their knowledge regarding effective strategies for conflict resolution,  $t(610) = 13.47, p < .001$ . Consistent with those findings, high school students also made a significant gain in knowledge regarding conflict resolution skills,  $t(926) = 6.95, p < .001$ .

With regard to physical aggression, high school students showed a significant decline in their levels of physical aggression,  $t(939) = -2.74, p < .01$ . However, levels of physical aggression among middle school students did not significantly decline.

With regard to relational aggression, middle school students showed a significant decrease in their level of relational aggression after receiving the Win-Win program curriculum,  $t(628) = -3.75, p < .001$ . Consistent with those findings, high school students also showed a significant decline in their levels of relational aggression,  $t(939) = -3.28, p < .001$ .

With regard to effective communication, high school students indicated a significant increase in their levels of effective communication strategies to alleviate conflict,  $t(939) = 4.09, p < .001$ . However, middle school students did not show any increase in their levels of effective communication.

Because of these significant associations between baseline levels of physical aggression, effective communication, and relational aggression across demographic variables, an additional analysis was conducted to rule out the possibility that there were significant differences in the effectiveness of the program based on demographic factors. A mean difference score was created for each participant (post-test score–pre-test score), and a group status variable was created (middle or high school BY gender BY majority or minority status), resulting in eight possible demographic groups.

Results of a one-way multivariate analysis of variance (MANOVA) using four change scores (i.e., knowledge, physical aggression, relational aggression, and effective communication) indicated a significant overall  $F$ -value,  $F(7, 1553) = 3.02, p < .01$ . Univariate analyses indicated that there were significant differences of change in physical aggression,  $F(7, 1,553) = 2.91, p < .01$ , and change in knowledge regarding conflict resolution,  $F(7, 1,553) = 6.68, p < .001$ . Post hoc tests using the Bonferroni post hoc criterion for significance indicated that African American high school girls showed decrease in their levels of physical aggression ( $M = -.09, SD = .41$ ) while African American middle school girls showed slightly an increase in their levels of physical aggression ( $M = .03, SD = .42$ ). There were no other differences with

regard to their physical aggression. In regard to change in knowledge, African American high school girls ( $M = .77$ ,  $SD = 3.54$ ) did not show any increase their knowledge of conflict resolution skills as much as African American middle school girls ( $M = 1.68$ ,  $SD = 3.27$ ), Caucasian middle school girls ( $M = 2.38$ ,  $SD = 3.11$ ), or African American middle school boys ( $M = 2.06$ ,  $SD = 3.78$ ). Similar findings occurred with African American high school boys ( $M = .59$ ,  $SD = 3.48$ ) as these boys did not show increase in their knowledge of conflict resolution as much as African American middle school boys ( $M = 2.06$ ,  $SD = 3.78$ ), African American middle school girls ( $M = 1.68$ ,  $SD = 3.27$ ), or Caucasian middle school girls ( $M = 2.38$ ,  $SD = 3.11$ ). There were no differences across demographic groups with regard to the degree of change for relational aggression or effective communication.

## DISCUSSION

The current study investigated program outcomes for a standardized, curriculum-based conflict resolution program called Win-Win Resolutions. This school-based program is a 12-week program that uses a combination of role play and interactive drama to build conflict resolution skills. The program was developed partly in response to Goal 7 of the National Education Goal Panel report (NEGP, 1997), which urges for a decrease in violence in public schools. This evaluation is timely, given that recent estimates have documented an increase in school-related violence (DeVoe et al., 2005; Grunbaum et al., 2004; NEGP, 1997), and a paucity of research on how skill-based approaches using interactive drama create *change* in conflict resolution strategies.

The results of the present study show support for several of the hypotheses. With regard to the first hypothesis, there was an increase in knowledge regarding effective strategies for conflict resolution among both middle and high school students. Responses indicated that students learned to identify and express their feelings as well as the importance of thinking before acting. It may be noted that African American high school boys and girls did not seem to make gains in knowledge compared with other students. This raises the question of whether African American students relate to the program in the same way as Caucasian students. Based on the American Psychological Association's (APA) recently developed guidelines on multi-cultural issues and interventions (APA, 2002), it is possible to substantiate that African American

students are not attaining knowledge at the same rate of other students perhaps because they may not see the modeled conflict as relevant to their lives. Or, given that almost 70% of the theatre instructors were Caucasians in the predominantly African American schools (63%), Bandura's social learning theory (1977) might suggest that perhaps African American students did not see the theatre instructors as representative models for them. According to Bandura, people are more likely to adopt a modeled behavior (i.e., new conflict resolution styles) if the model is similar to them. Although there is no way to know for sure if this explains the difference in acquired knowledge across cultures, it is recommended for all conflict resolution programs that utilize role play and interactive drama that the materials and role plays used, as well as the counselors hired to deliver the program, are relevant and credible to the students and closely represent conflict that is not specific to certain cultures.

There was partial support for the second hypothesis that students would show a decrease in their level of aggression, but that depended upon grade level and the type of aggression exhibited. Specifically, middle school students showed decrease only in their levels of relational aggression (e.g., spreading rumors) while high school students showed a decrease both in their levels of relational aggression and physical aggression (e.g., fighting). There are several possible explanations for these findings. It is possible that significant differences were not observed for middle school students in terms of physical aggression because their levels of physical aggression were low to begin with, especially compared with high school students. Alternatively, perhaps in middle school, the primary mode of aggression is relational rather than more overt aggressive strategies. Some research suggests that this might be the case, with relational aggression being equally as harmful as physical aggression, particularly among girls (Ahmad-Smith, 1994; DeVoe et al., 2005).

Partial support was found for the third hypothesis that students would increase their level of effective communication. Specifically, only high school students showed an increase in their skills while levels among middle school students remained relatively stable. While considering the combination of lower levels of communication, lower levels of physical aggression, and higher levels of relational aggression, it appears that middle school may be a time when conflict increases, but is addressed more covertly. Perhaps when covert tactics no longer work, physical aggression occurs, which may explain the reason for the higher rates of physical aggression among high school students. There is some

burgeoning research suggesting that this might be the case (Dellasega, 2005), suggesting that high school students are more likely to use direct confrontation rather than indirect approaches such as spreading rumors.

The results highlight the need for the school personnel to be aware of the equally threatening presence of relational aggression, particularly among middle schools students, with an understanding that this type of covert aggression can also be harmful as overt aggression in terms of its influence on the personal and academic development of students. With the possibility that relational aggression may be a precursor to physical aggression, early and appropriate assessment and intervention is necessary to curtail the escalation of conflict and the need to avoid negative outcomes.

The findings need to be considered in light of a number of limitations. One limitation of the study is that information about program evaluation outcomes was collected only from the student. In future work, it would be informative to compare school records (e.g., declines in campus-based fights and assaults) directly with students' reported behaviors and attitudes to assess whether there are differences across reporters. Including a qualitative component to a future evaluation design would also be an important addition to document students' and teachers' direct experiences of the program and instances in which they applied the conflict resolution strategies. Furthermore, the pre-post test was a self-reported measure. The use of self-report is a valid form of assessment for research purposes and can yield useful information providing that students understand what they are asked and are motivated to provide accurate information. All self-report measures run the risk of false reporting. Nevertheless, previous research has confirmed the value of self-reports as a reliable indicator of behavior (Hindelang, Hirschi, & Weis, 1981).

Since the evaluation design was a pre-post design, the long-term impact of the program could not be determined. Additionally, the current study did not include a control group for comparison. Future work should identify a control group that does not receive the Win-Win Resolution curriculum and compare this group to an experimental group that does receive the curriculum. Finally, the attrition rate may have negatively impacted the degree to which important evaluation outcomes could be detected. In future work, additional measures should be taken to improve retention such as a longitudinal tracking system and additional staff training on the importance of collecting evaluation data.

Despite the limitations, there are number of strengths to the program, including a closer empirical examination of a school-based,

developmentally appropriate, and standardized, conflict resolution program which is able to target a wide range of students. The hands-on nature of the program allows school personnel to incorporate the post-lesson interactive activities (post study guides are provided to each classroom teacher. Additionally, because teachers are encouraged to participate in the weekly Win-Win led workshops and incorporate the follow-up activities, they can reinforce the skills learned throughout the school day, resulting in greater learning and generalizability of skills.

Over the past 5 years, Win-Win has reached over 30,000 youth and adults in the North Carolina Piedmont triad region. A common response from classroom teachers has been that even the most complacent students have become “engaged” in the interactive activities. It is encouraging to witness the spark in children’s eyes when they receive positive feedback by creating original solutions to common daily issues they face as many of these “at-risk” youth have been exposed to negative influences and a lack of positive role models in their lives. Win-Win instructors are in the role of “facilitators” of the process and help validate the students’ choices and reinforce a Win-Win mantra, “The only thing we can control is how we ‘react’ to conflicts.” The process is further heightened when the school classroom teachers become engaged and actually incorporate the follow-up lessons. As Win-Win programs are very often implemented in our most challenging schools with the highest rate of suspensions and other student code infractions, a common challenge in encouraging the classroom teacher to be engaged since many may see this time as an opportunity to work on classroom planning. Additionally, Win-Win has experienced some mild opposition in terms of some classroom teachers relinquishing control of their classes to the Win-Win staff. Securing funding for initial training and implementation of the Win-Win curriculum can also present a challenge in many public school systems across the nation as there is a lack of adequate funds to be appropriated for school safety and student violence prevention programs.

Although the findings suggest that the Win-Win Resolution Program helps students develop effective alternatives when dealing with conflict, additional long-term evaluation is necessary to determine whether the program has a sustained, long-term effect in reducing fighting and improving relationships among student participants. Furthermore, conflict resolution programs must strive toward incorporating an emphasis on cultural diversity into the curriculum as recommended by current best practice guidelines (APA, 2002), including both the personnel delivering the curriculum as well as the content of the curriculum.

Perhaps with increased attention and refinement to the perennial problem of school conflict, teachers, administrators, guidance counselors, and students can work toward the nationwide goal of reducing violence in America's public schools.

### NOTES

1. For additional information regarding the Win-Win Resolutions Program or curriculum contents, contact Debra Vigliano, Executive Director of Win-Win Resolutions, at (336) 230-1232, or visit [www.winwinresolutions.org](http://www.winwinresolutions.org).

2. *Ibid.*

3. *Ibid.*

### REFERENCES

- American Psychological Association. (2002). *Guidelines on multicultural education, training, research, practice, and organizational change for psychologists*. Washington, DC: Author.
- Bandura, A. (1977). *Social learning theory*. New York: General Learning Press.
- Browne, M. W. (2001). An overview of analytic rotation in exploratory factor analysis. *Multivariate Behavioral Research, 36*, 111-150.
- Cornell, D. G. & Loper, A. B. (1998). Assessment of violence and other high-risk behaviors with a school survey. *School Psychology Review, 27*, 317-332.
- Costello, A. B. & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation, 10*, 1-9.
- Crawford, D. K. & Bodine, R. J. (1996). *Conflict resolution education: A guide to implementing programs in schools, youth-serving organizations, and community and juvenile justice settings*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, and U.S. Department of Education, Office of Elementary and Secondary Education, Safe and Drug-Free Schools Program.
- Crawford, D. K. & Bodine, R. J. (2001). Conflict resolution education: Preparing youth for the future. *Juvenile Justice Journal, 8*(1), 21-29.
- Dellasega, C. & Adamshick, P. (2005). Evaluation of a program designed to reduce relational aggression in middle school girls. *Journal of School Violence, 4*, 63-76.
- DeVet, H. C. W., Ader, H. J., Terwee, C. B., & Pouter, F. (2005). Are factor analytical techniques used appropriately in the validation of health status questionnaires? A systematic review on the quality of factor analysis of the SF-36. *Quality of Life Research, 14*, 1203-1218.
- DeVoe, J. F., Kaffenberger, K., & Chandler, K. (2005). *Results from the 2005 school crime supplement to the national crime victimization survey*. (NCES 2005-310/NCJ

- 210697). U.S. Departments of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- DeVoe, J. F., Peter, K., Noonan, M., Snyder, T. D., & Baum, K. (2005). *Indicators of school crime and safety: 2005*. (NCES 2006-001/NCJ 210697). U.S. Departments of Education and Justice. Washington, DC: U.S. Government Printing Office.
- Dodge, K. A. (1986). A social information processing model of social competence in children. In M. Perlmutter (Ed.), *Cognitive perspectives on children's social and behavioral development*. Hillsdale, NJ: Erlbaum.
- Erikson, E. (1950). *Childhood and society*. New York: Norton.
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods, 3*, 272-299.
- Fine, N. & Macbeth, F. (1996). Playing with fire: The creative use of conflict. In M. Liebmann (Ed.), *Arts approaches to conflict* (pp. 36-67). Philadelphia: Jessica Kingsley Publishers.
- Froebel, F. (1912). *Froebels chiefs writings on education*. London: Arnold.
- Greenwood, D., Whyte, W. F., & Harkavy, I. (1993). Participatory action research as a process and as a goal, *Human Relations, 46*, 175-192.
- Grunbaum, J., Kann, L., Kinchen, S., Ross, J., Hawkins, J., Lowry, R., Harris, W. A., McManus, T., Chyen, D., & Collins, J. (2004). Youth risk behavior surveillance—United States, 2003. In *Surveillance Summaries*, May 21, 2004. *MMWR, 53*, SS-2, 1-96.
- Hindelang, M. J., Hirschi, T., & Weis, J. G. (1981). *Measuring delinquency*. Beverly Hills: Sage.
- Johnson, D. & Johnson, R. (1996). Conflict resolution and peer mediation programs in elementary and secondary schools: A review of the research. *Review of Educational Research, 66*, 459-506.
- Kolberg, L. (1969). Stage and sequence: The cognitive-developmental approach. In D. A. Goslin (Ed.), *Handbook of socialization theory and research*. Chicago: Rand McNally.
- Lockwood, D. (1997). *Violence among middle school and high school students: Analysis and implications for prevention*. Research in Brief. Washington, DC: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.
- McClure, B. A., Miller, G. A., & Russo, T. J. (1992). Conflict within a children's group: Suggestions for facilitating its expression and resolution strategies. *School Counselor, 39*, 268-272.
- McDonald, S. & Moriarty, A. (1990). The Rich East High School mediation project. *School Social Work Journal, 14*, 25-32.
- McTaggart, R. (1997). *Participatory action research: International contexts and consequences*. Albany, NY: State University of New York Press.
- Meeck, M. (1992). The peacekeepers. *Teaching Tolerance, 46-52*.
- National Education Goals Panel. (1997). *The national education goals report: Building a nation of learners, 1996*. Washington, DC: U.S. GPO.
- Schmitt, S. (1981). Theatre and children's pretend play. *Theatre Journal, 33*, 213-230.
- Schwartzman, H. (1978). *Transformations: The anthropology of children's play*. New York: Plenum.

- Smith, J. D., Walsh, R. T., & Richardson, M. A. (1985). The Clown Club: A structured fantasy approach to group therapy with the latency-age child. *International Journal of Group Psychotherapy*, 35, 49-64.
- Stevahn, L., Johnson, D. W., Johnson, R. T., & Real, D. (1996). The impact of a cooperative or individualistic context on the effectiveness of conflict resolution training. *American Education Research Journal*, 33, 801-823.
- Umbreit, M. (1991). Mediation of youth conflict: A multi-system perspective. *Child and Adolescent Social Work*, 8, 141-153.
- Weissberg, R. P., Caplan, M. Z., & Bennetto, L. (1988). *The Yale-New Haven Social Problem-Solving (SPS) Program for young adolescents*. New Haven, CT: Yale University.
- Wolfgang, C. H. (1974). From play to work. *Theory into Practice*, 13, 278-286.
- Woodworth, K. & Bodine, R. J. (2001). Peaceable schools Tennessee: A case example. *Juvenile Justice Journal*, 8(1), 26-27.

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APPENDIX A

Factor Analysis and Scale Reliability-Rotated Component Matrix

Item	Item Text	Factor 1 Physical Aggression	Factor 2 Effective Communication	Factor 3 Relational Aggression
1	When I hear a rumor about someone I know, I often pass it on before I "stop and think" about how that person might feel.	.030	-.045	.361
2	Whenever someone is being rude to me, I think it is better for me to be quiet than to say something about it or make a scene.	-.479	-.169	.102
3	When I am having a hard time with a person, it usually ends up in a fight.	.645	.122	.272
4-R	When I meet someone different from me, I try to find something we have in common.	.111	.563	.045
5-R	When I am mad, I try to hide it.	.375	.184	-.072
6-R	When I have an issue with a friend, I ask others for advice.	.238	.420	-.149
7-R	I would rather avoid sticking up for myself, even if I feel bad.	.302	-.008	-.261
8	When another person picks a fight with me, I fight back.	.754	.041	.158
9-R	I prefer to get away and stay out of trouble whenever someone is bothering me.	.471	.393	-.018
10	I get into fights a little more often than other kids.	.496	.163	.320
11-R	I admire people who can walk away from a fight or an argument.	.311	<b>.556</b>	.070
12-R	No matter what, I will not hit someone.	<b>.556</b>	.176	-.013

APPENDIX A (Continued)

Item	Item Text	Factor 1 Physical Aggression	Factor 2 Effective Communication	Factor 3 Relational Aggression
13-R	I am willing to compromise in order to find a solution to a problem.	.306	.550	.012
14	If I don't like someone, I try to get my friend to not like them either.	-.045	.122	.563
15	When I see two people talking and laughing, I think they are talking about me.	-.116	.013	.508
16	If my friends were making fun of someone for what they wear, I would make fun of them, too.	.312	.167	.436
17	Once someone makes me mad, I lose my temper easily.	.579	-.080	.305
18-R	When someone disagrees with me, I try to see it from their point of view rather than always wanting things my way.	.077	.550	.128
19-R	When other people are talking, I usually let them finish what they are saying before cutting in.	.094	.526	.230
20	Before I get to know someone, I can tell what kind of person they are going to be.	.127	-.171	.209
21	I tell jokes about those who are different from me.	.222	.194	.499
22	I often get angry all of a sudden and do something foolish without thinking first.	.407	-.001	.500
23	I often look for reasons why things won't work out for me.	-.033	-.310	.302
24-R	I talk to people that are very different from me.	.072	.462	.011
25-R	I do kind things for people for no special reason.	.188	.552	.077
26	When I see a fight, I cheer on the fighters.	.547	.212	.330
27	I start rumors about other people.	.018	.208	.596

28	I can control my emotions.	.124	.242	.240
29	It is okay to fight someone if they started it.	.694	.074	.152
30	I often say things before I even think about what I say.	.237	-.037	.368
31	If I had the choice of getting one dollar now or two dollars later, I would wait until later.	.067	-.348	-.071
32-R	When there is a disagreement, I often try to find ways to agree in order to make things work out.	.245	.568	.072
33-R	When I am not sure what someone is thinking or feeling, I feel comfortable asking them to tell me so that I can understand.	-.014	.533	-.042
34-R	If I want something, I feel that I am able to ask for it in a nice way.	-.011	.565	.202
35	Sometimes I spread rumors to get back at someone for making me mad.	.135	.199	.611

R = Recoded Item.

APPENDIX B  
Win-Win Resolutions Summary of Curriculum Content

Session	Description of Content
1–Introduction	Students are introduced to the skills within the program, including respect, Win-Win, and getting along. Students also spend time describing their prior experiences with conflicts in their lives. Students also complete the pre-test.
2–Fighting and bullying	Students describe their past experiences with fighting, bullying, and “fronting,” discuss choices of behavior, and practice applying alternative skills learned through role-plays and demonstrations.
3–Emotional hijacking	Students describe their own “triggers” and how these influence their choices of behavior. Student also associate the concept of emotional hijacking with their past feelings and interactions, and role play how to avoid being triggered and emotionally hijacked.
4–Rumors	Students tell their past experiences with rumors, sharing the effects rumors have on others. Student then describe their feelings when they are involved in the spreading of hearsay and apply the T.H.I.N.K. acronym to their interactions with peers who gossip.
5–Empathy	Students define <i>empathy</i> and describe how they can use it to avoid conflict. Students demonstrate and discuss how to use empathy with their friends, family and teachers.
6–Self-awareness	Students examine their own attitudes and feelings about the ways they approach conflicts, and contrast how they feel about themselves from either an optimistic or pessimistic perspective. Then, students distinguish between positive ways to interact with others and negative ways of interacting.
7–Diversity	Students define their concepts of how others differ from them and how this impacts their lives. Students demonstrate through role play that they understand the concepts of tolerance and acceptance of others.
8–Communication	Students identify their good communication patterns and work on building on the positive abilities as well as distinguish between poor communication or a lack of communication and good skills. Through role play, students experiment with new positive ways of communicating their thoughts and feelings.

9–Assertiveness training	Students describe their current ways to get what they need and want from others and apply new assertive skills learned through role-plays.
10–Making better choices	Students identify when and how to Stop, Think, and Choose better behavior by describing the most frequent situations in which they will be faced with the need to choose. Student use role play to demonstrate how to use the different options given by the Win-Win program to solve problems.
11–Displaying positive behaviors	Students identify calm behaviors that promote successful resolutions to conflicts instead of fighting as well as discuss how they can apply the concepts learned in the program to their relationships.
12–Wrapping up and review	Students show/illustrate the concepts they have learned in a class project/artwork display and role playing. Students also complete the post-test.