

## **Teacher Training and Perceptions of Self Efficacy in Violence Prevention Approaches**

Kristie Jo Redfering and Alexia Georgakopoulos

### **Abstract**

This research project explored teachers' beliefs of violence prevention approaches and self-efficacy. Relevant research indicates the value of violence prevention and conflict resolution education as well as the importance of teacher support of such programs. Theories of decision-making and self-efficacy provide the foundation for the variables that were examined through use of a survey instrument developed by Dr. K. King and Dr. T. Kandakai. Participants were sampled from two Florida school districts. Independent variables included teacher background and experience indicators including demographics and teaching/training experience. Dependent variables were comprised of multiple indicators of outcome value, efficacy expectation, and outcome expectation. MANOVAs and ANOVAs were utilized to identify relationships between the independent and dependent variables. Among the statistically significant findings a theme emerged: training history including variety of training, specific topics, and the interaction effects of combinations of training impacted perceptions of self-efficacy and outcome expectation more significantly than other demographic and background characteristics. The results suggest that the provision of a variety of training for teachers may benefit violence prevention practice by increasing perceptions of

efficacy which may lead to an increase in consistent and effective utilization of various conflict resolution education programs and strategies.

Conflict is an inevitable part of life and how we respond to it can either be constructive or destructive (Deutch, 1973). Educators have worked to instill the values of peace and the skills for constructive conflict resolution for hundreds of years. Peace education is often conceptualized as human rights, disarmament, development, multicultural, and violence prevention educations. Each of these related approaches takes a slightly different swing at the same target: educating for equity, responsibility, and the elimination of violence.

Violence prevention in schools in the United States often seeks to reduce violence through specific programming. The issue of violence and aggression in schools has become prominent in the last two decades following school shootings in numerous states. In response to data regarding violence in schools many school districts are implementing conflict resolution education (CRE) programs for use with traditional approaches such as parental contact, detention, and referring students to administrators or school counselors. CRE involves teaching and modeling of skills and methods of resolving a variety of conflicts. Communication and problem solving are key components of CRE that when maximized should empower participants in more effectively maintaining relationships and managing conflict. CRE programs may vary but most include the development of critical thinking skills, problem solving procedures, social and emotional skills, and an understanding of the nature of conflict (Jones, 2003, p. 20). For this discussion CRE refers to peer mediation, bullying prevention, conflict resolutions skills (i.e. problem solving, nature of conflict, nonthreatening communication), and social/emotional skills (i.e. anger management). Violence prevention refers to CRE and traditional approaches (i.e. crisis intervention, student suspension and/or detention, parent contact, referrals to administrators and/or counselors).

Many CRE programs require significant time and financial commitments due to the broad scope of their application. These programs are dependent upon school staff to remain effective and enduring. Rational choice theory and self-efficacy theories suggest that educators regularly assess the value of educational material, curricula, and/or programming. This evaluation often determines the likelihood and/or style of use. While administrators may make the ultimate decision about the use violence prevention approaches in their schools and guidance counselors may supervise and manage programs, teachers very often implement lessons and refer students to peer mediators or other participants. Teachers are at the frontline of the endeavor to reduce violence and promote constructive conflict behaviors in schools. Without teacher commitment to such programs, lessons may not be appropriately delivered (or delivered at all) and opportunities to practice conflict resolution (CR) skills may go unaddressed. Thus program fidelity and viability is largely the responsibility of teachers. Because the choice of what

program to use—even whether to use one at all—is often left to individual schools, and because the sustainability of such programs can be tenuous, it is crucial to understand how these programs are perceived by those who would implement them.

## Literature review

There are a number of different types of education that are often cited in discussions of peace education. These include global, human rights, disarmament, and environmental or development education. Looking at peace education in terms of interpersonal conflict skill acquisition it may include conflict resolution programs, violence prevention programs, and nonviolence education. There is another facet of peace education as well—the context and method of delivery of content. This includes the incorporation of multicultural methods and strategies, a context of cooperative learning, and the use of constructive controversy in the classroom. These practices seek to address peace education by establishing a climate conducive to peace it and to impart the *skills* that students need to resolve conflicts constructively.

While there are a number of inquiries concerning peace education (Bar-Tal & Rosen, 2009; Bettencourt & Farrell, 2013; Biton & Salomon, 2006; Bradshaw, Waasdorp, & O’Brennan, 2013; Gallagher, 2007; Hussesi, 2009; Rosen, 2008), characteristics of youth conflict and victimization (Goksoy & Argon, 2016; Johnson & Johnson, 1979; Nickerson & Martens, 2008; Vera, Shin, Montgomery, Mildner, & Speight, 2004), and violence prevention generally (Dogan, 2016; Lubelska, 2012; Park-Higgerson, Perumean-Chaney, Bartolucci, Crimley, & Singh, 2008; Volungis, 2016; Welsh, 2000) there is also a great deal in the literature specific to method or strategy. Thus far, many studies indicate that the effects of particular conflict resolution programs are promising (Bell, Raczynski, & Horne, 2010; Edmondson & Hoover, 2008; Johnson & Johnson, 1996; Schellenberg, Parks-Savage, & Rehfuss, 2007; Simon et al., 2009; Stevahn, Johnson, Johnson, & Schultz, 2002). There is not absolute agreement in the literature about the necessary components or effectiveness of violence prevention strategies in schools there is a great deal of variation in how strategies are employed, in what combinations they are utilized, target populations, and with what level of program fidelity. Some focused on safety (Homer et al., 2009) while others on behavioral outcomes (Park-Higgerson, Perumean-Chaney, Bartolucci, Crimley, & Singh, 2008). These methods of violence prevention include bullying prevention, conflict resolution, peer mediation, nonviolent response to conflict, and crisis intervention. Anger management and crisis intervention differ from strategies such as bullying prevention, conflict resolution, and peer mediation in their praxis. While bullying prevention, conflict resolution, and peer mediation focus on attitudes such as tolerance and the skills and knowledge to solve problems, anger management and crisis intervention seek to intervene when emotions prevent or inhibit the use of these skills. These areas seek to address violence both preventatively by imparting

the knowledge to foster attitudinal development such as tolerance and empathy, and responsibly by teaching the skills to manage conflict and crisis without the use of violence. Campbell (2003), Daunic, Miller, Robinson, & Smith (2000), Johnson & Johnson (2005), Konak & Erdem (2015), Lantieri (1995), and Smith, Cousins, & Stewart (2005) provide insight into components of violence prevention programs including, but not limited to, instruction in negotiation strategies, community involvement, peer mediation, common goal setting, and bullying prevention. Examinations of general and specific programming explore characteristics and outcomes using a variety of methods. Researchers have used nursing logs, suspension rates, and victimization to assess program outcomes (Breunlin, Cimmarusti, Bryant-Edwards, & Hetherington, 2002; Brener, Krug, Dahlberg, & Powell, 1997; Multisite Violence Prevention Project, 2009). Others (Turnuklu, Kacmaz, Gurler, Sevkin, & Burcak, 2010; and Turnuklu, Kacmaz, Gurler, Turk, & Kalender, 2010) have examined others factors such as family dynamics and social-cognitive elements in relation to outcomes of CRE. Much of the research shows promise in the ability of various programming to affect perceptions, attitudes, and behavior in youth but more research is needed to understand the interaction between elements of programming, context, as well as the attitudes and behaviors of interventionists.

## **Framework**

In order to achieve the goals of violence prevention education we will rely heavily on teachers to explicitly educate as well as to create climates that support the learning and use of CR skills, nonviolent responses to conflict, and attitudes of tolerance. Therefore we must understand what impacts teacher practice through the investigation of decision-making processes, theories of self-efficacy, research in CRE, program fidelity, and teacher perceptions and beliefs. The two primary theories that provided the framework from which this project developed are rational choice (RCT) and self-efficacy. These theories provided the lens through which one might understand why teacher perceptions and beliefs are important in improving the field of conflict resolution in education.

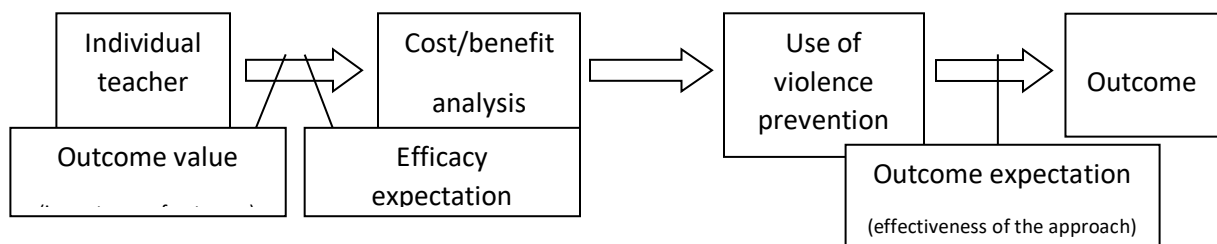
Rational choice theory—as modified by the concept of bounded rationality—and theories of hypothetical thinking provide the framework for understanding how implicit and explicit thinking systems interact in analysis and “rational” decision-making. It clarifies how perceptions and beliefs of external factors influence an individual’s choice making behavior. In this case it suggests that teachers will opt to adopt CRE programming when benefits are perceived to outweigh costs. Costs may include competing objectives (Simon, 1982) and a tendency to resort to the “tried and true” Friedrichs and Opp (2002, p. 410).

Bandura’s theory of self-efficacy further clarifies choice-making behavior by addressing internal factors that affect choices—specifically the level of

confidence that an individual possesses in taking successful action in a given situation (Bandura, 1977). An individual develops a sense of self-efficacy through information derived from personal performance accomplishments, vicarious experience, verbal persuasion, and physiological states. Beliefs of self-efficacy impact choice of what goals to work toward, the level of effort and perseverance put forward in their attainment, and how much stress one experiences as a result of the consideration of particular actions or behaviors associated with the goals (Bandura, 1986, 1989). Those who feel confident in their abilities to manage specific situations, or in successfully engaging in activities toward a desired outcome will be more likely to set successively more challenging goals, put more effort forward in reaching them, be more resilient to setbacks in these efforts, and experience less emotional distress in the process. Concepts of self-efficacy are important in that teachers must have confidence in their abilities in using and teaching violence prevention approaches if they are expected to put forward great effort and persistence.

Self-efficacy is not the only factor involved in decision making, however. Incentives to execute an action are also at play. For example, one may believe that they possess the ability to successfully take action but they may not value the outcome sufficiently or perceive the action to be effective or valid. That the outcome is valuable and the action valid is incentive to take action. The value of outcome, outcome expectation, and the certainty of success work side by side (Figure 1).

Taken together, the RCT and theory of self-efficacy essentially suggest that a teacher will weigh the costs and value of expected outcomes of utilizing a CRE program. If that teacher believes that the program is valuable (outweighing the costs of implementation), the action to be valid, and believes that he or she can successfully implement it, then the likelihood of use of the program is increased.



*Figure 1.* Connection between efficacy and outcome expectations. Adapted from Bandura, 1977, p. 193.

Examination of violence prevention literature to determine its potential value, studies in the role of program adherence (sometimes referred to as treatment

integrity or fidelity), and research focused on the impact of the educator illuminates the importance of teacher beliefs. Some research suggests that treatment integrity is closely related to positive outcomes (Biggs, Vernberg, Twemlow, Fonagy, & Dill, 2008; DiGennaro, Martens, & Kleinmann, 2007; Hirschstein, Van Schoiack Edstrom, Frey, Snell, & MacKenzie, 2007; Wilder, Atwell, & Wine, 2006). Other studies have revealed an association between teacher beliefs and treatment integrity. The manner of treatment delivery has been found to be associated with beliefs of effectiveness or outcome value as well as competing objectives (Melde, Esbensen, & Tusinski, 2006; and Ringwalt et al., 2003;). Further, teacher training appears to be a key factor in teacher perceptions of programs (Dang, 2009; Maughan, 2009; McCaleb, Andersen, & Hueston, 2008; and Sterling-Turner, Watson, Wilmon, Watkins, & Little, 2001).

While past research indicates that factors such as training and social validity impact program fidelity and that perception of costs, benefits, and practicality may be obstacles to implementing new programs in schools, there seems to be a gap in the literature. The literature indicates that teacher perceptions and beliefs are important but there is currently no connection made to understand if and how perceptions and beliefs of violence prevention approaches are related to variables such as training, experience, and self-efficacy. Exploration of how teachers perceive various violence prevention approaches and their abilities to utilize them effectively provides the opportunity to improve teacher training and the conditions under which CRE and other violence prevention approaches may flourish.

### **Research Questions**

According to the literature, violence prevention approaches are a valuable tool in teaching students interpersonal problem-solving skills and social responsibility. We have learned that specific programs can result in specific outcomes. Data indicate that the implementation of one or more approaches holds promise toward achievement of the goals of peace educators. Given that these programs have such potential the next step is to examine how teacher practice impacts the success of any effort. Further guiding our inquiry, research suggests that teacher practice is influenced by perceptions.

*RQ1a: In what ways are teachers' outcome expectations of violence prevention approaches related to demographic variables?*

*RQ1b: In what ways are teachers' outcome expectations of violence prevention approaches related to background variables (i.e. training and teaching history)?*

*RQ2a: In what ways are teachers' outcome expectations of CRE related to demographic variables?*

*RQ2b: In what ways are teachers' outcome expectations of CRE related to background variables (i.e. training and teaching history)?*

*RQ3: In what ways are teachers' beliefs of self-efficacy in using violence prevention measures related to demographic variables?*

*RQ4: In what ways are teachers' beliefs of self-efficacy in using violence prevention measures related to background variables?*

*RQ5: In what ways is the outcome value teachers place on violence prevention related to demographic variables?*

*RQ6: In what ways is the outcome value teachers place on violence prevention related to background variables?*

## **Methodology**

This research project was a quantitative design utilizing a survey developed and tested by previous research (Kandakai & King 2002a; Kandakai & King 2002b). This design was selected due to its ability to collect data from a large sample for the purpose of exploring teacher perceptions. The goals of the research were to identify potential relationships between independent and dependent variables that may impact teachers' choice behavior as related to violence prevention approaches and curriculum.

**Participants.** Kindergarten through grade 12 teachers of two school districts in central Florida were sampled for the purpose of obtaining a variety of experiences with violence prevention approaches and training, and differentiating how these experiences may relate to perceptions of violence prevention approaches. District A and B were selected due to their size and policies regarding CRE and other prevention programs. District A employed over 25,000 faculty, staff, and administrators in order to serve more than 180,000 kindergarten through grade 12 students with 139 elementary, 43 middle, and 25 high schools. All schools in District A had peer mediation programs. District B served almost 104,000 Kindergarten through grade 12 students. There were over 17,000 full time faculty, staff, and administrators employed in the district. District B offered training in violence prevention, peer mediation, character development, and bullying prevention. As with many other districts in Florida these programs were not mandated by the district but may have been selected for use by schools. Access to these populations was obtained from the research and assessment departments of both districts through the submission and acceptance of research proposal applications.



The sample size was determined by population size, confidence level, precision—or confidence interval—and variability. For the purposes of this project the variability was set at 0.05—high variability—as a conservative estimate. There were a total of 15,938 teachers employed in both districts. With a confidence interval of 5%, a confidence level of 95% (95% certainty that the true percentages fall within  $\pm 5\%$  of results), 399 responses were required. The total sample number was 409 with 194 from District A and 214 from District B.

**Process.** This exploratory research project was quantitative whereby a correlational survey with Likert-type responses was utilized to address the research questions. The data required to answer the research questions were derived from the following variables: (a) demographic items; (b) background items, including teaching and training experience; and (c) teacher beliefs including those regarding the value of the outcomes of violence prevention approaches, the effectiveness of violence prevention approaches, and confidence in utilizing them. The variables were broken down into indicators about which survey items were composed. This design allowed for the analysis of ordinal and nominal values of the independent variables against ordinal values of the dependent variables. All independent variables were compared to all dependent variables.

### **Instrumentation and Variables**

Data were collected via a survey instrument (see appendix) developed by Drs. Keith A. King and Tina L. Kandakai of University of Cincinnati and Kent State University respectively (2002b) and an additional item from a related survey authored by the same researchers (2002a). The survey was developed using Bandura's model of self-efficacy (1977). The survey utilized here was essentially comprised of five subscales: demographics, teacher background, outcome value, efficacy expectation, and outcome expectation (Table 1) utilizing Likert-type responses to various items within the subscales. Outcome value, efficacy expectation, and outcome expectation subscales were tested for use in the Kandakai & King studies (2002a, 2002b). Independent variables include demographic and background information. Demographic factors such as age, gender, level of education, race, and occupation have been identified as significant in prediction of choice behavior (Hadley & Scheingold, 1993; Jaber & Moore, 1999; Prasad, 2010; and Wozney, Venkatesh, & Abrami, 2006). There were seven demographic items which include age, school district, highest degree earned, sex, race/ethnicity, Title I status of school, and teaching certification. Background factors suggest the level and type of experience of a teacher. The background items identified here numbered four and included years teaching, exposure to violence at school, training type, and training amount.



Table 1  
*Variable, Subscale, and Item Identification*

Independent variables	Dependent variables and factors	
<p><b>I. <u>Demographics</u></b></p> <p>a. Age  b. Sex  c. Race/ethnicity</p>	<p><b>III. <u>Outcome value</u></b></p> <p>a. Importance of preventing violence  b. Value of teaching skills</p>	<p><b>V. <u>Outcome expectation</u></b></p> <p><i>Student skills</i></p> <p>a. Respect for differences  b. Social discrimination  c. Seeking assistance in conflict  d. Use of nonthreatening language  e. Remaining calm in conflict  f. Use of CR skills  g. Nonviolent responses to conflict  h. Use of peer mediation</p> <p><i>Preventative measures</i></p> <p>a. Teacher training  b. CRE</p> <p><i>Punitive responses</i></p> <p>a. Detention  b. Suspension</p>
<p><b>II. <u>Background</u></b></p> <p>a. Degree  b. Years teaching  c. District  d. Title I status  e. Position  f. Exposure to violence at school  g. Training type  h. Training amount</p>	<p><b>IV. <u>Efficacy expectation</u></b></p> <p>a. Respect for differences  b. Social discrimination  c. Seeking assistance in conflict  d. Use of nonthreatening language  e. Remaining calm in conflict  f. Use of CR skills  g. Nonviolent responses to conflict  h. Use of peer mediation</p>	

**Validity, reliability, and analysis procedures.** Demographic and background queries as well as subscales for efficacy expectation, outcome expectation, and outcome value were developed and tested for validity and reliability by the survey's authors based on a single study. To establish stability reliability the instruments were subjected to test-retest procedure whereby they were completed by a convenience sample of 25 teachers, then again one week later. Coefficients for efficacy expectation, outcome expectation, outcome value, and strategy effectiveness were 0.73, 0.67, 0.75, and 0.79 respectively. Internal reliability was calculated using the Cronbach's alpha and were 0.84, 0.96, 0.45, and 0.87 respectively. The relatively low coefficient for outcome value may be a result of the low number of items addressing this variable.

Validity measures included those for face, content, and construct validity. Face validity was established for the common approaches section of the outcome expectation subscale (subscale V, item 4) by submitting the instrument to two experts in the field of health education. Revisions based on the recommendations of these individuals were made as necessary. Content validity for this subscale was established via a thorough review of the literature. A principal components analysis was conducted to establish construct validity of subscales III, IV, and V (item 3) which indicated the three clusters of items. These were consistent with the Bandura model undergirding the survey. Criterion loadings for efficacy-outcome items, outcome expectation items (item 3), and outcome value items were at minimum 0.69, 0.82, and 0.86 respectively.

Quantitative analysis involved examination of the independent variables against the dependent variables utilizing descriptive and inferential statistics. Responses to items in subscales III, IV, and V used a Likert-type scale with five option choices (“*strongly agree-strongly disagree*” and “*extremely effective-extremely ineffective*”) making these variables ordinal. Independent ordinal variables were demographic and background items including age (20-29, 30-39, 40-49, 50-59, 60+ years), highest degree completed (*bachelor, master, specialist, doctoral degrees*) years teaching (0-3, 4-9, 10-14, 15-19, 20+ years) exposure to violence (*never, rarely, monthly, weekly, daily*), and amount of training (1-3, 4-6, 7+ hours). Other independent variables were nominal including sex, Title I status, certification, and training type.

Examination of differences between groups was conducted to reveal variance through multivariate analysis of variance (MANOVA). The groups were disaggregated by the independent variables and variance of the dependent variables was analyzed. MANOVA analyses performed include the eleven independent variables (age, school district, highest degree, sex, race/ethnicity, Title I status, teacher certification, years teaching, exposure to violence, training type, and training amount) separately against four groups of dependent variable indicators. The first and second groups contain the indicators of efficacy expectation and outcome expectation specific to violence prevention skills respectively: (a) respect for differences, (b) social discrimination, (c) seeking assistance in conflict, (d) use of nonthreatening language, (e) remaining calm in conflict, (f) use of CR skills, (g) nonviolent responses to conflict, and (h) use of peer mediation (Table 2). Indicators of outcome expectation of preventative methods of responding for violence made up the third group: teacher training and teaching students specific violence prevention skills. The fourth group was comprised of outcome expectation of punitive responses: detention and suspension. Those MANOVAs that suggested significant differences in the dependent variables based on the independent variables were further examined utilizing ANOVA to separate the categories of the independent variables for examination against specific indicators of each dependent variable.

Table 2  
*Dependent variables—Efficacy Expectation*

	I believe that I can effectively teach students to
<b>EffExp.0</b>	Respect others who are of different national origin or ethnicity
<b>EffExp.1</b>	Not discriminate against others based on social differences
<b>EffExp.2</b>	Seek help from school staff when they encounter conflict with others
<b>EffExp.3</b>	Use nonthreatening language when speaking to others
<b>EffExp.4</b>	Remain calm when they encounter conflict with others
<b>EffExp.5</b>	Use conflict resolution skills
<b>EffExp.6</b>	Refrain from fighting when they encounter conflict with others
<b>EffExp.7</b>	Use peer mediators when they encounter difficult situations with others

## Data analysis and discussion

**Descriptive data.** The majority of respondents were female (80%), white (80%), and had been teaching for at least four years (84%) (Table 3). Participants ranged in age with more than half reportedly in their 40s or 50s and about 25% in the youngest and oldest categories (20s and 60+ respectively). Respondents worked in two school districts: District A (47%) and District B (52%). More than 52% worked in Title I funded schools. Current teaching position was a multiple response set (i.e. respondents were able to select more than one response). Almost 40% identified themselves as elementary teachers and nearly 45% as secondary teachers. About 20% reported teaching exceptional student education (ESE) and about 7% were reportedly specialists (art, music, or physical education).

Higher frequencies of exposure to violence were reported in District B, Title I funded schools, and among ESE and secondary teachers. Overall, 75% of respondents reported encountering violence no more than a few times per year. About 12% of respondents in District A reported encountering violence daily or weekly whereas 15% of those in District B reported this level of exposure. 19% of those teaching in Title I funded schools reported encountering violence daily or weekly whereas only 7% of respondents in non-Title I schools reported this level of violence. Approximately 17% of ESE and 16% secondary teachers reported encountering violence at this level as compared to 11% of elementary teachers.

Bullying prevention was the most common type of training received by respondents (73%) followed by crisis intervention (64%). Almost half (47%) of respondents received training in conflict resolution whereas peer mediation was received by less than one third (30%) of participating teachers. Anger management was received by only about one in five (21%) respondents.

Overall more ESE teachers reported having had at least three types of training (53%) followed by elementary (46%), specialists (45%), then secondary (43%). A greater percentage of respondents from District B had three or more types of training (49%) compared to District A (41%). More respondents in District A had been trained in peer mediation (32%) than in District B (29%). However, in all other included areas more District B teachers had received training.

**Table 3. Descriptive Data**

Item	N	%
<b>Age (years)</b>		
20-29	59	14.4
30-39	86	21
40-49	101	24.7
50-59	109	26.7
60+	51	12.5
<b>Race/ethnicity</b>		

Black	38	9.3
White	328	80.2
Asian	2	0.5
Hispanic	23	5.6
Multiracial	6	1.5
Other	11	2.7
<b>Gender</b>		
Female	326	79.7
Male	81	19.8
<b>Education level</b>		
Bachelor's	214	52.3
Master's	173	42.3
Specialist	11	2.7
Doctorate	8	2.0
<b>Years teaching</b>		
0-3	64	15.6
4-9	122	29.8
10-14	65	15.9
15-19	45	11
20+	113	27.6
<b>District</b>		
A	194	47.4
B	214	52.3
<b>Title I school</b>		
Yes	213	52.1
No	192	46.9
<b>Current position</b>		
Elementary	162	39.6
Secondary	183	44.7
ESE	82	20
Specialist	29	7.1
<b>Exposure to violence</b>		
Never/almost never	156	38.1
A few times per year	149	36.4
Monthly	48	11.7
Weekly	38	9.3
Daily	18	4.4
<b>Training received</b>		
Bullying prevention	299	73.1
Peer mediation	123	30.1
Conflict resolution	194	47.4
Anger management	84	20.5
Crisis intervention	260	63.9

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**N= 409 teachers surveyed**

**Outcome Expectation.** There were no significant differences discovered in the outcome expectation of the specific student skills between those exposed to violence more or less frequently or based on teaching experience and background. However, discrepancies were noted in the percentages of respondents who had positive outcome expectations for specific violence prevention skills and those who had actually received the training related to the same skills. For example almost

92% reported that teaching students to use conflict resolution skills would prevent violence but only about 47% had been trained in conflict resolution. Similarly about 92% perceived remaining calm and refraining from fighting—skills associated with anger management—positively, while only about 21% had been trained in this area. Further examination of relevant factors may be warranted to explain why this is so.

Relative to outcome expectation of preventative methods (i.e., training teachers in violence prevention and teaching students to solve problems with words) females and those with peer mediation training had higher mean scores for teaching students to use words than males or those without peer mediation training. Whether individuals value this as a result of peer mediation training or perhaps pursued this training because of this value is not clear.

**Efficacy expectation.** Perceptions were analyzed against numerous factors including variety and type of training in violence prevention, amount and type of teaching experience, and school and personal demographic data. The self-efficacy model suggests that more opportunities to practice a behavior—in this case teaching students skills to resolve conflict—would result in a stronger sense of confidence in one’s ability to effectively do so. It would be expected that more experienced teachers and those more frequently exposed to violence in schools would have had substantial opportunities for practicing skills and therefore building confidence. However, this study did not find significant differences in perceptions of self-efficacy based on age, years of teaching experience, exposure to violence, teaching position, or the Title I status of the respondent’s school. While this seems contrary to self-efficacy theory, it might be explained by other intervening factors related to specific job-related dynamics including the leadership style, expectations at the school and district level, an individual’s values, worldview, evaluation of experiences, and teaching style/philosophy.

**Outcome value.** The vast majority of participants valued violence prevention: 96% believing preventing violence is important and 90% believing that teaching students violence prevention skills is important. The discrepancy between the percentages may be attributed to the belief that preventing violence is associated less with student skill than some other variable. Investigating how law enforcement, community and family, school administrators, and other relevant entities are perceived in terms of preventing school violence, in conjunction with teaching students skills, might provide information that would connect efforts across contexts.

### **MANOVA/ANOVA analysis**

Among the statistically significant findings a theme emerged: training history including variety of training, specific topics, and the interaction effects of

combinations of training impacted perceptions of self-efficacy and outcome expectation more significantly than other demographic and background characteristics. Greater variety in training yielded higher efficacy expectation scores in 75% of efficacy expectation variables. MANOVA examined differences between efficacy expectation variables and the level of variety in training received,  $F(40, 1980) = 1.809, p = .002$ , Pillai's Trace = .176, partial eta squared = .035. When considered separately, six of the dependent variables reached statistical significance using a Bonferroni adjusted alpha of .006.

Teaching students not to discriminate against others based on social differences (EffExp 1), to use nonthreatening language (EffExp. 3), to remain calm in conflict (EffExp. 4), to use conflict resolution skills (EffExp. 5), to refrain from fighting (EffExp. 6), and to use peer mediators (EffExp. 7) reached statistical significance. The mean scores indicated that respondents who received no training or one training differed significantly in their reported levels of efficacy in these variables from those who received three, four, or five types of training who reported incrementally higher efficacy scores. Higher efficacy scores were associated with more variety of training. In almost all cases efficacy expectation mean scores increased incrementally based on the number of trainings received. Having covered all five training topics had a consistently positive effect on perceptions of self-efficacy. Having three or four had an only slightly less significant impact. This result suggests that the provision of a variety of training for teachers may benefit violence prevention practice by increasing perceptions of efficacy which may lead to an increase in consistent and effective utilization of various conflict resolution education programs and strategies.

Different trainings yielded different efficacy expectation results across efficacy variables. Some training courses affected many variables while others only a few. Conflict resolution had positive effects on all of the eight variables' means. Bullying prevention saw similar results with the efficacy scores of seven variables effected. Peer mediation had statistically significant results with six while crisis intervention impacted three of the variables (Tables 4-7).

Table 4  
*Peer Mediation Training and Efficacy Expectation*

	EffExp.1	EffExp.3	EffExp.4	EffExp.5	EffExp.6	EffExp.7
<b>F (1, 402) =</b>	11.982	8.818	17.158	25.172	14.635	31.404
<b>p =</b>	.001	.003	.000	.000	.000	.000
<b>Partial eta squared =</b>	.029	.021	.041	.059	.035	.072
<b>PM training</b>	M = 4.48 SD = .660	M = 4.47 SD = .709	M = 4.37 SD = .709	M = 4.43 SD = .603	M = 4.35 SD = .692	M = 4.26 SD = .761
<b>No PM training</b>	M = 4.22 SD = .706	M = 4.25 SD = .718	M = 4.01 SD = .840	M = 4.03 SD = .778	M = 4.02 SD = .821	M = 3.75 SD = .873

Note. Significant at the  $p = <.006$  level.

Table 5  
*Conflict Resolution Training and Efficacy Expectation*

	EffExp.0	EffExp.1	EffExp.2	EffExp.3	EffExp.4	EffExp.5	EffExp.6	EffExp.7
<b>F (1, 402) =</b>	8.590	11.003	10.460	12.229	23.396	25.751	17.376	12.410
<b>p =</b>	.004	.001	.001	.001	.000	.000	.000	.000
<b>Partial eta squared =</b>	.021	.027	.025	.030	.055	.060	.041	.030
<b>CR training</b>	M = 4.42 SD = .667	M = 4.41 SD = .682	M = 4.48 SD = .597	M = 4.44 SD = .612	M = 4.32 SD = .709	M = 4.35 SD = .621	M = 4.29 SD = .722	M = 4.06 SD = .856
<b>No CR training</b>	M = 4.22 SD = .689	M = 4.18 SD = .737	M = 4.28 SD = .641	M = 4.20 SD = .741	M = 3.93 SD = .872	M = 3.98 SD = .815	M = 3.96 SD = .835	M = 3.76 SD = .865

Note. Significant at the  $p = <.006$  level.

Table 6  
*Bullying Prevention Training and Efficacy Expectation*

	EffExp.0	EffExp.1	EffExp.3	EffExp.4	EffExp.5	EffExp.6	EffExp.7
<b>F (1, 402) =</b>	8.554	15.992	15.384	15.978	12.200	12.110	7.956
<b>p =</b>	.004	.000	.000	.000	.001	.001	.005
<b>Partial eta squared =</b>	.021	.038	.037	.038	.030	.029	.020
<b>BP training</b>	M = 4.38 SD = .647	M = 4.38 SD = .663	M = 4.39 SD = .618	M = 4.21 SD = .768	M = 4.23 SD = .709	M = 4.20 SD = .762	M = 3.98 SD = .863
<b>No BP training</b>	M = 4.16 SD = .689	M = 4.07 SD = .756	M = 4.09 SD = .819	M = 3.85 SD = .899	M = 3.95 SD = .827	M = 3.89 SD = .850	M = 3.70 SD = .871

Note. Significant at the  $p = <.006$  level.

Table 7  
*Crisis Intervention Training and Efficacy Expectation*

	EffExp.3	EffExp.4	EffExp.5
<b>F (1, 401) =</b>	8.179	13.030	13.086
<b>p =</b>	.004	.000	.000
<b>Partial eta squared =</b>	.020	.031	.032
<b>CI training</b>	M = 4.39 SD = .647	M = 4.23 SD = .733	M = 4.25 SD = .680
<b>No CI training</b>	M = 4.18 SD = .750	M = 3.93 SD = .922	M = 3.97 SD = .835

Note. Significant at the  $p = <.006$  level.



Other ways to examine the impact of specific trainings on efficacy is to look at the differences in mean scores between those who received the training and those who did not using independent-samples t-tests and to review the partial eta squared statistic. Examination of these statistics can give an indication of the strength of the training to impact efficacy in teaching specific skills. Partial eta squared suggests the effect size or “magnitude of differences between the means” by identifying how much of the variance is explained by the training (Pallant, 2010, p. 210). According to Pallant one can utilize guidelines established by Cohen (1988) for evaluating eta squared: small effect size, .01 (1%); moderate effect size, .06 (6%); and large effect size, .138 (14%). Examination of means and partial eta squared statistics allows some tentative conclusions to be drawn about strengths of particular trainings (Table 8). Peer mediation had the greatest effect on teaching students to use peer mediators, (eta squared = .075); use conflict resolution skills, (eta squared = .055); remain calm in conflict, (eta squared = .039); and refrain from fighting, (eta squared = .033). Conflict resolution training had the greatest effect on teaching students to use conflict resolution skills, (eta squared = .057); remain

		EffExp. 0	EffExp. 1	EffExp. 2	EffExp. 3	EffExp. 4	EffExp. 5	EffExp. 6	EffExp. 7
<b>PM</b>	Mean diff	.18	.25	.17	.20	.35	.38	.32	.51
	Effect size	.016	.028	.015	.017	.039	.055	.033	.075
<b>CR</b>	Mean diff	.19	.23	.20	.22	.37	.36	.32	.30
	Effect size	.020	.026	.025	.026	.051	.057	.039	.029
<b>BP</b>	Mean diff	.21	.31	.15	.29	.35	.29	.30	.27
	Effect size	.020	.037	.012	.033	.036	.028	.028	.019
<b>CI</b>	Mean diff	--	.18	.14	.19	.29	.27	.19	--
	Effect size	--	.006	.005	.007	.029	.031	.013	--
<b>AM</b>	Mean diff	.21	.18	.17	.21	.34	.31	.30	.26
	Effect size	.015	.010	.012	.015	.028	.028	.023	.015

Table 8

*Efficacy Means Differences and Eta Squared Statistic*

Note. PM = peer mediation; CR= conflict resolution; BP = bullying prevention; CI= crisis intervention; AM= anger management

calm in conflict, (eta squared = .051); and refrain from fighting, (eta squared = .039). Bullying prevention training had the greatest effect on teaching students to not discriminate based on social differences, (eta squared = .037); remain calm in conflict, (eta squared = .036); and use nonthreatening language when speaking to others, (eta squared = .033). Crisis intervention training had the largest effect on

teaching students to use conflict resolution skills, (eta squared = .031); and remain calm in conflict, (eta squared = .029). While there is some overlap with these results it suggests that particular topics have an effect on specific skills. This supports the indication that the greater the level of variety in training the greater the perception of efficacy.

## Discussion

**Implications.** A possible implication of these data is that these school districts might work to include a greater variety of training for their teachers. According to the survey, less than a quarter (22%) of respondents received peer mediation training through their school district (Table 9). Less than one third (33%) of respondents received district conflict resolution training, while more than one half had the benefit of district training in bullying prevention and crisis intervention (56% and 51% respectively). Whether this was due to the failure of the districts to offer all of these topics or a result of teachers simply not taking advantage of the opportunities is unclear. Further investigation of the reasons that more teachers are not more broadly trained would be a topic worth pursuing in an effort to increase teacher perceptions of self-efficacy in teaching violence prevention skills to students.

Respondents with more variety in their training history tended to perceive themselves as more effective in teaching violence prevention skills to students while certain combinations of trainings resulted in lower self-efficacy scores in teaching some skills to students. Interaction between pairs of training courses on efficacy expectations suggested that some combinations may depress perceptions of efficacy. For example, having had training in conflict resolution did not yield higher means in teaching conflict resolution skills to students than having bullying prevention training. Nor did it yield higher means in three of the efficacy variables than having neither training. It is unclear as to why conflict resolution training has this weaker effect on perceptions of efficacy when not combined with bullying prevention. Conflict resolution training tends to focus on how actors in conflict can use problem solving processes and improve communication skills while bullying prevention programs often look more closely at developing student tolerance and on bystander skills. Perhaps it is when conflict is addressed from the perceptions of all involved—actors and bystanders—that teachers see themselves as better able to effectively teach students to remain calm, use conflict resolution skills, and refrain from fighting. Through a more thorough examination of the content and objectives of each course, the manner in which bullying prevention and conflict resolution together seem to boost self-efficacy might be better understood.

Crisis intervention training resulted in lower efficacy means than peer mediation in three of the variables when analyzed for interaction. This may be due to the difference in intensity of conflict that each area addressed. Peer mediation is

used for lower level conflicts where parties are typically rational and able to use problem-solving strategies whereas crisis intervention is utilized for managing serious and emotionally volatile situations. Not surprisingly those with peer mediation training felt more confident in their abilities to teach students to stay calm in conflict than those with crisis intervention training. This may be a result of the differing levels of intensity associated with the issues addressed by the two strategies. Having both trainings had a positive effect on efficacy scores suggesting that learning the skills to assist students at both ends of the conflict spectrum is beneficial. As with the combination of bullying prevention and conflict resolution, addressing conflict and violence prevention from multiple angles may give teachers an increased sense of empowerment and confidence.

Further, a majority of participants valued violence prevention: 96% believing preventing violence is important and 90% believing that teaching students violence prevention skills is important. The discrepancy between the percentages may be attributed to the belief that preventing violence is associated less with student skill than some other variable. Investigating how law enforcement, community and family, school administrators, and other relevant entities are perceived in terms of preventing school violence, in conjunction with teaching students skills, might provide information that would connect efforts across contexts.

**Future Research.** Future research may be warranted in light of the results of this research in the areas already discussed and in the broader context. First, a more thorough examination of specific trainings may provide a clearer understanding of how content impacts the various areas of efficacy expectation in teaching violence prevention. While the data from this project indicated that certain trainings yielded significant differences between individuals with and without training in specific areas of efficacy, it is not clear how this connects to the content of that training. By comparing the content with perceptions of efficacy in these skills, districts may better evaluate the objectives of trainings. Also in terms of a school/teacher focus, qualitative examination of perceptions of obstacles and drivers to teacher choice behavior, CRE, and student skills may have the ability to contribute a richness of experience that was beyond the scope of this exploratory project. Questions that remain include those surrounding the lived experiences of teachers—perceived successes and failures, beliefs about violence and conflict among students and in the community, competing resources that may limit teacher practice, and the dynamics of school-based cultures.

Second, a greater understanding of the context of violence may inform the development of innovative violence prevention strategies in schools. Research suggests that socioeconomic status, exposure to violence in the home and community, race/ethnicity, family cohesion, and other social conditions are correlated to youth violence (Demosthenous, Bourhours, & Denosthenous, 2002;

Ennett, Flewelling, & Pashall, 1998; Pearlman, Zierler, Gjelsvik, & Verhoek-Oftedahl, 2003; Riner & Saywell, 2002; St. George & Thomas, 1997; Singh & Ghandour, 2012; Sullivan, Klingbeil, & Van Norman, 2013) therefore addressing only one element of the equation may be insufficient. Further, there is a substantial body of research that indicates that African American youth are disproportionately subjected to exclusionary disciplinary practices (Balfanz, Byrnes, & Fox, 2013; The Center for Civil Rights Remedies, 2013; Frank, Hawken, Tobin, & Vincent, 2012; Vincent, Sprague, & Tobin, 2012). Looking at issues of race, sociodemographic factors, and psychosocial factors in the system in which schools are couched may result in greater success in reduction of violence. One such innovative program is in place in Broward County, Florida. The PROMISE program is an initiative designed to intervene in student behavior incidents that might be handled by juvenile justice or those related to bullying or harassment, including drug/alcohol infractions, assault/threats, fighting, theft, and vandalism. The program utilizes a system of care approach that involves academic assistance, counseling, social skills/CR training, prevention activities, restorative justice, parental involvement, and support from other community agencies. Such programs address the problem of youth violence systemically rather than symptomatically.

Third, to more fully understand choice behavior in this context, more research would be required. One area concerns how teachers perceive the costs of implementation. Bounded rationality, as described by Simon (1982), asserts that people make rational decisions only to the extent that they are cognitively able to process the relevant information. Simon states that “the bounds are the bounds on knowledge, bounds on calculation, multiple objectives, or competing objectives” (Simon in an interview with Augier, 2001, p. 272). Without knowledge, one cannot fully consider options. This supports the notion that teachers must be adequately trained and oriented to violence prevention approaches. However, teachers are often overwhelmed by demands on instructional time and academic accountability. Many CRE programs require extensive training and they may be perceived by educators as just one more “objective.” Furthermore, CRE may be viewed as an objective that is in competition with other academic responsibilities. As a result, an educator’s ability to consider the benefits of CRE may be limited by the costs associated with multiple demands. A more thorough understanding of how teachers perceive these cost is warranted.

**Conclusion.** It is not uncommon for efforts to reduce violence at the school level to include strategies such as metal detectors, locked campuses, and the presence of law enforcement. These methods attempt to control violence externally through suppression. But there are a number of methods that seek to teach students the skills to resolve conflicts, express emotions, and learn to communicate more effectively. These peace education methods are not aimed at suppression but constructive conflict resolution. Harris & Morrison (2003) suggest that peace education addresses violence on three levels: peacekeeping, peace-building, and

peacemaking. Peacekeeping is viewed as the creation of an “orderly learning climate” in schools (Harris & Morrison, 2003, p. 11). This relates to stable and well-functioning schools. The primary charge of peace-building is to affect the underlying desire in students for a non-violent, socially just future. Peacemaking is manifested in various conflict resolution (CR) and management strategies including bullying prevention, peer mediation, development of negotiation and problem solving skills, anger management, and crisis intervention.

CR in schools is essentially a microcosm of the field of CR such that strong, comprehensive programs in schools are borne of the goals, contributions, and foci of the field. CR addresses issues such as (a) methods of resolving conflict, (b) establishing socially just environments, and (c) developing/institutionalizing systems for managing conflict. In schools comprehensive CR programs (a) teach students skills for resolving conflict, (b) teach about social justice, and (c) establish systems for managing conflict in the school setting. Disciplines that contribute to the field include international and labor relations; professions such as law, business, or public administration; social justice movements; and peace studies. School CR programs draw from contributions of social justice movements and peace studies. Types of conflict addressed by CR range from interpersonal to international. Interpersonal and intergroup conflicts are the primary foci in school-based CR programs, but strong programs will infuse CR foci throughout academic content.

While we can make programs available to schools and classrooms, teachers must utilize them with fidelity to see the desired results. Self-efficacy theory suggests that an individual is more likely to employ strategies when he or she feels as though they will be successful. Training is one step in the process of building the required perceptions of self-efficacy in teachers that may be required to fully and viably implement conflict resolution education programs. Self-efficacy, which often begins with training, might involve establishing coaching programs so that teachers can then feel success through performance accomplishments. The results of this study suggest that teachers with training in multiple domains of violence prevention perceive the greatest sense of self-efficacy in teaching students the skills necessary to prevent violence. The policies that drive the training of new and veteran teachers might benefit from a broadening of requirements such that recipients are expected to obtain a more comprehensive set of skills and knowledge. While this might look different from state to state and district to district, a set of standards can be created similar to the Common Core Standards for academics that would provide the necessary range of training to strengthen perceptions of self-efficacy. Through systematic examination of training and teacher perceptions, school districts may target and hone training programs, modify training requirements, and work toward systems to maintain teacher self-efficacy. With the goal of embedding teacher-centered skills, knowledge, and beliefs in the larger context of violence prevention in the community we might better create conflict

resolution programs with the necessary longevity to be successful in preventing violence in school and building pro-social skills for society's future adults.

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## Appendix: Survey instrument

Age \_\_\_\_\_ Years teaching \_\_\_\_\_ District \_\_\_\_\_

---

Highest degree completed Bachelor Master Specialist Doctorate

---

Sex Male Female

---

Race/ethnicity White Black Asian Hispanic Other

---

Do you teach at a **Title I** school? Yes No

---

**Certification** (please circle those that reflect your current teaching position)

Elementary (K-5) Secondary (6-12) ESE Pre-K Specialist (PE, art, music)

---

**About how often do you encounter situations that result in either violence or staff intervention to prevent violence?**

Never/almost never A few times per year Monthly Weekly Daily

---

**Please indicate your participation in the following trainings.**

Bullying prevention Yes No \_\_\_\_\_hours

Peer mediation Yes No \_\_\_\_\_hours

Conflict resolution Yes No \_\_\_\_\_hours

Anger management Yes No \_\_\_\_\_hours

Crisis intervention/prevention Yes No \_\_\_\_\_hours

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1. Please use a five point scale in which **1 is strongly disagree and 5 is strongly agree** to rate the following statements:

\_\_\_I believe preventing school violence is important.

\_\_\_I value teaching violence prevention skills to students.

2. Please use a five point scale in which **1 is strongly disagree and 5 is strongly agree** to complete the following statement:

***I believe I can effectively teach students to \_\_\_\_\_.***

- respect others who are of a different national origin or ethnicity
  - not discriminate against others based on social differences (i.e. gender, class, physical disability)
  - seek help from school staff when they encounter conflict with others
  - use nonthreatening language when speaking to others
  - remain calm when they encounter conflict
  - conflict resolution skills
  - refrain from fighting when they encounter conflict with others
  - use peer mediators when they encounter difficult situations with others
- 

3. Please use a five point scale in which **1 is strongly disagree** and **5 is strongly agree** to complete the following statement:

***If I effectively teach students to \_\_\_\_\_ it will prevent school violence.***

- respect others who are of a different national origin or ethnicity
  - not discriminate against others based on social differences (i.e. gender, class, physical disability)
  - seek help from school staff when they encounter conflict with others
  - use nonthreatening language when speaking to others
  - remain calm when they encounter conflict
  - conflict resolution skills
  - refrain from fighting when they encounter conflict with others
  - use peer mediators when they encounter difficult situations with others
- 

4. Please use a five point scale in which **1 is extremely ineffective** and **5 is extremely effective** to answer the following question.

***How effective do you believe each of the following is to reduce school violence?***

- Training teachers and school staff in violence prevention
  - Teaching children to resolve problems with words
  - Requesting parent/teacher meeting at school for those involved
  - Referring students to the school counselor
  - Referring students to the principal
  - Keeping students after school
  - Suspending students from school
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