PeaceBuilders: A Theoretically Driven, School-based Model for Early Violence Prevention

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PeaceBuilders® is a schoolwide violence-prevention program for elementary schools (K–5). A coalition of the Pima County Community Services Department, University of Arizona, and Hear springs, Inc. (a Tucson-based company) are conducting a formal evaluation. Children who grow up to commit acts of violence show cognitive, social, and imitative differences from their peers. These characteristics can be ameliorated, most successfully through interventions that begin at an early age and involve multiple segments of the child's social experiences and interactions. PeaceBuilders activities are built into the school environment and the daily interactions among students, teachers, and administrative staff, all of whom are taught a common language and provided models of positive behavior, environmental cues to signal such behavior, opportunities to rehearse positive behavior, and rewards for practicing it. Four schools, one from each of four matched pairs, were randomly assigned to begin PeaceBuilders in Year 1. The remaining four schools begin in Year 2. Outcome assessments include student self-reports, standardized teacher reports, playground observations, and school and law enforcement records. Process assessments include school observations and surveys of teacher practices and satisfaction. Surveys were completed by 2,736 children. The sample is about 55% Hispanic, 26% Anglo, 14% Native American, and 4% African American. Among children in grades 3–5, during the past week 15% had been sent to the office for disciplinary problems, 13% tried to start a fight, 27% hit someone, and 12% reported being threatened with a gun or knife. Violent behaviors and experiences are common among the studied children. A valid evaluation is underway of PeaceBuilders. Medical Subject Headings (MeSH): violence, intervention studies, primary prevention, program evaluation, child (age 6–12), aggression, education (early intervention). [Am J Prev Med 1996;12(Suppl 2):91–100]

PeaceBuilders is a schoolwide violence-prevention program for elementary schools (K–5). The program incorporates a strategy to change the school climate implemented by staff and students and is designed to promote prosocial behavior among students and adults. Children learn five simple principles: (1) praise people, (2) avoid put-downs, (3) seek wise people as advisors and friends, (4) notice and correct hurts we cause, and (5) right wrongs. Adults reinforce and model the behaviors at school, at home, and in public places.

The underlying theory is that youth violence can be reduced by initiating prevention early in childhood, increasing children's resilience, and reinforcing positive behaviors. Further, aggressive behavior can be reduced by altering the school environment to emphasize rewards and praise for prosocial behavior. The PeaceBuilders model emerged from work on pediatric injury control, development of self-help materials promoting behavior change, and tests of intervention ideas for reducing effects of childhood exposure to violence.

Early PeaceBuilders trials were conducted in Tucson, Arizona, where a coalition developed the current project. Hear springs, Inc., developed and administers PeaceBuilders, the University of Arizona Family Studies Department collects and evaluates the data, and the Pima County Community Services Department manages the overall evaluation project. The evaluation study is being conducted in 10 schools in the Tucson Unified and Sunnyside School Districts.

Theory

Children at risk for violent behavior are cognitively, socially, and imitatively different from their nonviolent peers. Cognitively, such children tend to be suspicious of others, have difficulty reading nonverbal cues, and often misinterpret ambiguous events as hostile. Socially, children at risk for violence insult their peers, disrupt classroom activities, and engage in higher rates of physi-
eral and verbal aggression than socially competent children. Imita-
ively, such children are more easily attracted to and influenced
by aggressive acts, and thus consume larger “diets” of antisocial
behavioral models. At-risk children appear to be at risk for both
victimization and perpetration of violence. Early interven-
tion and prevention can alter these differences” and may produce
substantial social benefits.

School is a logical setting for changing the cognitive, social,
and imitative characteristics of children at risk for violence. For
example, when 13 Los Angeles-area schools altered school cli-
mate and discipline practices, various measures of risk for vio-
ence decreased across the schools. Research findings from
from criminology and social support the idea that these changes
would reduce subsequent youth violence.

PeaceBuilders seeks to expand on such promising reports by
linking findings from longitudinal and developmental literatures
with research on the efficacy of early intervention. Specifically,
PeaceBuilders attempts to change characteristics of the setting
(antecedents) that trigger aggressive, hostile behavior. PeaceBuild-
ners increases the daily frequency and salience of live and sym-
bolic prosocial models, enhances social competence, decreases
the frequency and intensity of aggressive behaviors, rewards pros-
social behaviors, and provides strategies to avoid the differential
or accidental reinforcement of negative behaviors and conflict.

A program is unlikely to reduce youth violence unless the
effects maintain and transfer across people, places, and time. Accord-
gaingly, schoolwide implementation of PeaceBuilders by all
staff ensures that a child who enters kindergarten learns how to
be a PeaceBuilder and continues to improve his or her prosocial
skills throughout the elementary years. PeaceBuilders is pur-
purposely woven into the school’s everyday routine to make it a
“way of life,” not just a time- or subject-limited curriculum. A
“way of life” means that the intervention will have daily antec-
dents (setting events), behaviors by students and adults, and
rewards (consequences) for positive actions. PeaceBuilders
includes (1) daily rituals related to its language and principles to
foster a sense of belonging; (2) cues and symbols that which can
be applied to diverse community settings; (3) specific prompts to
“transfer” across places, people, behaviors, and time; and (4)
new materials or strategies introduced for times and circum-
stances when behavior might otherwise decay. These procedures
emerge from the research and theory on generalization or
transfer.

The development of violent behavior exists within a broad
social context of risk or protective factors such as neighborhood,
community, and media. PeaceBuilders, therefore, includes
four components:

1. **parent education** through solution-focused tools such as reci-

2. **marketing to families** through children, most noticeably

3. **collateral training** for community volunteers who are tar-

4. **mass media tie-ins** for the basic principles and recognition

PeaceBuilders makes the proverb “it takes a whole village
to raise a child” real through common language, common tools,
and common behavior roles for people close to a child’s life. In

The **principal and assistant principal** promote PeaceBuilders
throughout the day by reading the PeaceBuilder nominations on
the public address system. Children who bring in a Principal's Preferral (from the same class as a discipline referral that day), call home, or write a postcard for PeaceBuilding. The principal begins staff meetings by noticing individual child, classroom, and schoolwide PeaceBuilding successes. Solutions for common challenges are discussed. The principal takes a leadership role by praising, labeling, and encouraging PeaceBuilding activities or actions throughout the school. The principal asks parents new to the school to sign the Book of Wisdom for Wise People and helps recruit parent volunteers for PeaceBuilder activities.

Support staff also coach PeaceBuilding in many ways each day. A bus driver may give a PeaceBuilders nomination to the office for the whole bus, to be read on the morning announcements, since bus rides are a major source of behavior problems. The janitor may help the children put down "Peace Feet" in the hallway showing where and what direction to walk, thereby reducing pushing, shoving, and attention to inappropriate behavior. Counselors may help set up the intensive PeaceBuilding procedures for more seriously troubled children. Community volunteers all help to make PeaceBuilders a way of life at the school.

In sum, the PeaceBuilders way of life is summarized by five principal imperatives: (1) PeaceBuilders praise people; (2) PeaceBuilders avoid put-downs; (3) PeaceBuilders seek wise people, (4) PeaceBuilders notice hurts they have caused; and (5) PeaceBuilders right wrongs. Our previous description is an "ideal" version of PeaceBuilders, and schools tend to vary in the expression of this ideal.

Printed PeaceBuilders materials. The following materials guide PeaceBuilders participants. Figure 1 provides details of intervention tools used in PeaceBuilders.

1. "I Help Build Peace" is a story/workbook for students and their families, in which the child and the significant adults in his or her life are heroes (a self-modeling paradigm) using PeaceBuilding tools.

2. An action guide and planner for teachers explains why, how, and when the procedures work, along with the initial tools to create the basic language, common purpose in the school or classroom, and basic strategies.

3. Reproducible binders for teachers, staff, and community volunteers provide research-proven tools to change specific target behaviors of the children and the adults in the classroom, on the playground, and at home.

4. Principal's and staff guides help make the behavioral shift across all the adults in the building who interact with the children. These materials promote schoolwide, consistent procedures for de-escalation, threat reduction, and recognition and coaching of PeaceBuilding behaviors and activities. The intensive guide helps a classroom with higher-risk children master PeaceBuilding, especially through response-cost procedures for disruptive behavior, self-monitoring, peer monitoring, group rewards, and generalization procedures.

5. Parent education events and tools teach specific family-management tactics such as de-escalation, threat reduction, and praise for PeaceBuilding. Tactics are promoted through plays in which families learn the language and tools of PeaceBuilding from the children.

6. Symbolic incentives (e.g., special pencils, stickers, erasers, and T-shirts) are used as rewards for and prompts for PeaceBuilding by students and adults.

7. Mass media components offer repetition and recognition of specific tactics used in the school, which appear as a newsprint feature in the area children's newspaper or weekly news stories on a local television network affiliate.

Intervention training. The training for PeaceBuilders in the study had six phases:

- A preintervention orientation. Faculty at each study site received an hour of orientation about the intervention, study, data collection, and schedule. A videotape was shown with testimonials from teachers, students, counselors, and others. Questions were answered and benefits highlighted such as more time for teaching, reduced vandalism expenses, and community involvement.

- Training workshop. Staff at each study site received 3-4 hours of training on the basic PeaceBuilders model. This workshop covered the expectations for success, theory, and practice of the PeaceBuilders model and ideas for immediate action. Staff were instructed to have a planning session by grade level or school within two weeks of the event. Classroom materials were distributed at the workshop.

- Site coaching. During the first 8-12 weeks, each study site received at least two hours per week of coaching. Coaches provided introductory training in implementation and made follow-up visits. A log was kept of the visits and the nature of the contacts, which varied by school needs.

Figure 1. Sample PeaceBuilders interventions.
Table 1. Demographic characteristics of project schools (in percentages of students)

<table>
<thead>
<tr>
<th>School</th>
<th>African American</th>
<th>Caucasian</th>
<th>Hispanic</th>
<th>Native American</th>
<th>Asian</th>
<th>&quot;Free lunch&quot;</th>
<th>ESL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>14.6</td>
<td>62.5</td>
<td>18.5</td>
<td>1.9</td>
<td>2.5</td>
<td>58.0</td>
<td>8.0</td>
</tr>
<tr>
<td>1b</td>
<td>9.7</td>
<td>63.3</td>
<td>22.7</td>
<td>0.6</td>
<td>3.7</td>
<td>55.0</td>
<td>13.0</td>
</tr>
<tr>
<td>2a</td>
<td>0.2</td>
<td>11.5</td>
<td>33.6</td>
<td>54.6</td>
<td>0.3</td>
<td>94.0</td>
<td>56.0</td>
</tr>
<tr>
<td>2b</td>
<td>5.2</td>
<td>29.5</td>
<td>62.2</td>
<td>1.7</td>
<td>1.4</td>
<td>60.0</td>
<td>29.0</td>
</tr>
<tr>
<td>3a</td>
<td>0.8</td>
<td>4.8</td>
<td>91.8</td>
<td>2.5</td>
<td>0.3</td>
<td>94.0</td>
<td>68.0</td>
</tr>
<tr>
<td>3b</td>
<td>2.8</td>
<td>8.8</td>
<td>74.4</td>
<td>13.4</td>
<td>0.6</td>
<td>80.0</td>
<td>20.0</td>
</tr>
<tr>
<td>4a</td>
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<td>28.0</td>
<td>65.9</td>
<td>2.1</td>
<td>1.3</td>
<td>89.0</td>
<td>28.0</td>
</tr>
<tr>
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<td>36.0</td>
<td>58.5</td>
<td>1.0</td>
<td>1.0</td>
<td>73.0</td>
<td>21.0</td>
</tr>
</tbody>
</table>

Data provided by school districts.
**"Free lunch"** = percentage of students eligible for federally funded lunch program.
**ESL** = percentage of students whose primary language is not English.

- **Study sessions.** Study sessions (30–60 minutes) were offered for specific issues identified by the schools, for example, use of Peacebuilding techniques with Attention Deficit Hyperactivity Disorder, cafeteria behaviors, integration of geography studies with PeaceBuilders, and management of "difficult" classrooms.
- **Periodic forums.** Schools were offered two-hour group sessions to review and discuss successes and challenges. The forums enabled staff to see some successes of their peers and solutions for common problems.
- **Institutes.** Occasional one-day institutes were offered. Institutes focused on applying and creating new materials and interventions. Attendance was voluntary.

**Evaluation Design**

**Study sites.** The evaluation is based on a randomized nonequivalent control-group design with repeated measures. Nine schools from two local districts with high rates of juvenile arrests and histories of suspensions and expulsions were identified. The nine schools were then grouped into four matched pairs (Table 1). One grades K–2 school and one grades 3–5 school in the same geographic area were combined to form a single grades K–5 school unit of analysis. All other schools in the study were self-contained K–5 schools. Within the four matched pairs, schools were randomly assigned as intervention or wait-list control schools. One of the original control schools dropped out of the study before baseline because of a midyear change in administration; the school was replaced with another after initial baseline collection. Both the dropout and replacement schools were composed primarily of Caucasian students. All schools characterized themselves as having high need to reduce problem behaviors.

**Data collection.** Periodic surveys have been conducted or are scheduled for fall 1994, spring 1995, fall 1995, and spring 1996 (Figure 2). Originally, baseline data collection was to begin in spring 1994. However, an additional unanticipated review by the Institutional Review Board delayed baseline data collection and program implementation until fall 1994. As a result, faculty at the four schools that received the intervention in 1994–1995 (Wave 1) were trained just after or concurrent with (because of staff release days) the baseline survey in 1994. Faculty at the Wave 2 schools were trained after data collection in spring 1995 or just before data collection in fall 1995. Consequently, a few PeaceBuilder activities in Wave 1 schools took place before baseline data collection, and a few activities at Wave 2 schools took place before data collection in fall 1995. We are attempting to follow as many students as possible over the two years of data collection.

**Outcome data.** The outcome evaluation assesses aggressive and delinquent behavior, social competence at home and school,
parent-child relationships, school discipline, and PeaceBuilding behaviors. Outcome data are gathered at all data collection points and consist of child self-report, parent reports, and teacher reports on child behavior. All surveys are prenumbered with identification codes to link student, parent, and teacher responses concerning a specific student and to track individual students over the two years of data collection. Systematic observations of playground behaviors and frequency counts of students referred to principals for discipline problems did not begin until after PeaceBuilding activities were initiated. The schools and law enforcement agencies will provide archival data (e.g., grades, discipline contacts) beginning in fall 1994.

Students' self-reports. For students in grades K–2, data were collected through individual 20-item, one-to-one interviews. Items were generated specifically for use with this project to assess prosocial, aggressive, and PeaceBuilding behaviors. Using class lists, we selected approximately 50% of students (a priority) to be interviewed. We selected as our goal to complete interviews for 30% of available students because the time for individual interviews (about 10 students per class) was limited to the time it took to administer the grades 3–5 surveys. Children were asked to respond to such questions as, "Do you share things with other kids?" by choosing from "yes," "sometimes," and "no, not really." The 20 items were pilot-tested with same-age children; individual interviews took about 3–8 minutes to complete.

We collected data for children in grades 3–5 through classroom group surveys of 20–25 students per session. At least two research assistants were present to provide instruction and answer questions. Surveys included 100 items and took about 30–40 minutes to complete.

All students received small incentives such as stickers for completing the surveys or interviews. Only a handful of children refused to complete a survey or interview.

In addition to basic demographic items, students completed items on relationship conflict with peers and teachers adapted from the Conflict Behavior Questionnaire (CBQ);21 the acceptance/rejection and firm/lax control subscales of the short form of the Child Report of Parental Behavior Inventory;22–24 items from the delinquency and aggressive behavior subscales of the Youth Self-Report;25 items assessing child report of parental monitoring originally developed by Patterson and Dishion26 and modified for use with elementary school children by Flannery et al.;27 and items developed specifically to assess PeaceBuilder concepts and behaviors at home and at school.

Observational data of students and staff. Observations of playground behavior were conducted one or two times each school semester on random days of the week until all grades were observed at each school. Observers were trained to rate aggressive behavior of children and positive and negative behaviors of playground supervisors. Aggressive behavior was defined as biting, hitting, kicking, etc. Positive behaviors of supervisors were defined as verbal praise, giving rewards or reinforcement for positive behavior, and physical attention (e.g., touching, patting, hugging); negative behaviors of supervisors included reprimanding, shouting, yelling, or threatening. Behaviors were coded as frequency counts during 10 one-minute intervals. Two separate raters observed and coded the same playground interactions. We calculated final frequency counts as an average of the two raters' scores.

Parents' self-reports. At each outcome data-collection period with students, we mailed home surveys for parents to complete and return via postage-paid envelopes. Baseline surveys contained 105 items, and parents were asked to respond using pre-printed bubble sheets. Both English and Spanish versions of the surveys were mailed home. Because the initial survey return rate from parents was low, the responses from baseline were factor-analyzed and reduced to a 46-item survey used in subsequent data collection waves.

In addition to identification and demographic items, parents completed a 15-item report of child prosocial behavior at home,28 the 20-item CBQ,21 the aggressive and delinquent behavior as well as the social and attention problems subscales from the Child Behavior Checklist,29 and 12 items developed to assess the PeaceBuilders intervention generalization to the home.

Teachers' reports and ratings. Teachers received outcome data-collection packets at the time of the student survey data collection. Twice each year teachers and school staff completed the 37-item Discipline Survey for their classroom and school and a 45-item questionnaire assessing the PeaceBuilders intervention in their school and classroom.20 For each child in their classroom, teachers also completed the 19-item Walker-McConnell Scale of Social Competence-SF30,31 and the aggressive behavior subscale of the Teacher Report Form,32,33 which has extensive validity and reliability including long-term score stability (no intervention) ranging from .84 to .87 for aggression over one to two years. Teachers received $20 per classroom for completing surveys for individual children. To maximize overall response rate, particularly among control schools, we instigated a schoolwide incentive. Schools that achieved a 90% return rate received $300 and those that achieved 100% received $500 for their general education fund. As a result, our teacher response rates in Year 2 improved from 68% to 88%. At baseline the teacher measures demonstrated high reliability (alphas at least .93).

Monitoring the implementation. All of the process data-collection instruments were developed specifically for use in this project. Ratings of teacher satisfaction with training (10 items), walk-throughs of the schools to count materials created (e.g., PeaceBuilders signs) as part of the intervention, and frequency counts of the number of postintervention "coaching" visits by project staff were counted as process data. Walk-throughs are conducted at 1, 3, 6, 9, 12, 15, and 18 months postintervention.

Baseline Data

The final number of student surveys collected at baseline was 2,736 (1,631 in Wave 1 and 1,105 in Wave 2 schools). This represents an 85% participation rate for children in grades 3–5 and a 72% participation rate for those K–2 students invited to participate in individual interviews. Teachers returned a total of 2,885 (63%) surveys for all individual students; 77% of teachers returned surveys. At baseline, parents completed 658 surveys (14%). Figure 3 presents the percentage of the total sample of students participating by grade.

The number of boys and girls in the sample is nearly equal (Figure 4). We elected not to ask young children about their race or ethnicity, and too few parents returned the surveys to provide an adequate estimate of the racial and ethnic composition of the sample. Racial and ethnic estimates are based on make-up of the entire school: 55% of the students are Hispanic, 26% are Caucasian, 4% are African American, 14% are Native American, and 1% are other or unknown (Figure 4). Hispanic children are overrepresented in the baseline sample because one predominantly Caucasian school was not added to the cohort until after base-
Among children in grades K–2, more boys reported getting into trouble with teachers—\( \chi^2(1,837) = 19.7, P < .001 \)—and getting into fights than did girls—\( \chi^2(1,837) = 14.6, P < .001 \). There were no other statistically significant gender differences for K–2 aggressive behaviors (Figure 5).

Across grades, “getting into trouble with teachers” and “getting mad at school” increased from kindergarten to second grade (Figure 6). The percentage of children “calling kids names” decreased from kindergarten to first grade—\( \chi^2(2,837) = 20.6, P < .001 \)—but increased again in the second grade—\( \chi^2(2,837) = 18.4, P < .001 \). The percentage of children “getting into fights” was about the same from kindergarten to first grade, but increased from first to second grade (not significant).

Children in grades 3–5 also reported high rates of violence-
related experiences and behaviors. Overall, 12% said that during the past week someone had tried to hurt them with a gun or knife, 42% reported seeing gang activities at school, 27% hit someone else, 13% tried to start a fight, and 15% had been sent to the principal's office for disciplinary problems. All of these activities were reported significantly more often by boys than girls ($\chi^2$ Ps < .001), with the exception of seeing gang activity (no difference; Figure 7).

When compared with children in fourth and fifth grades, children in third grade reported the highest frequency of being threatened with a weapon in the past week (17%)—$\chi^2(4,1881) = 31.5, P < .001$—and of seeing gang activity at school in the past week (42%)—$\chi^2(4,1867) = 38.4, P < .001$ (Figure 8). Conversely, 33% of fifth graders reported trying to hit someone in the past week—$\chi^2(4,1893) = 16.2, P < .005$. 

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Figure 7. Prevalence of self-reported violence-related experiences and behaviors among children in grades 3–5 during past week by gender.

Figure 8. Prevalence of self-reported violence-related experiences and behaviors among children in grades 3–5 during past week by grade level.
LESSONS LEARNED

Building Support and Developing Relationships
- Colleagues are good sources of information about how to deal with problems.

Improving Intervention and Evaluation
- Textbooks provide little information about conducting large-scale, applied (versus descriptive) research.
- Everything costs more than planners anticipate.
- Conducting an evaluation across developmental stages (e.g., primary school, middle school) complicates assessment, because each stage requires different measurement instruments.
- Collect and graph data frequently to track program implementation and progress.
- Data from parents and families are difficult to obtain.

Underlying Principles
- If the problem is perceived by the community as large or serious, more people than can be accommodated will want to be in the study.
- Changing the behavior of one child may involve changing the behavior of 10 or more other people.
- The better the prevention program works, the more those who benefit will ask for solutions to more intense problems.

CONCLUSIONS

The path toward violence begins in childhood's early years. PeaceBuilders aims to teach elementary school children, their peers, adults at schools, and adults at home specific ways to reduce aggression and hostility and to increase skills that predict more desirable developmental outcomes. Although PeaceBuilders does have "lessons," it is characterized by teachers and school staff who use it as a way of life that reflects the educational, psychological, and criminology research on which it is based2-14 rather than as a time-limited curriculum. This way of life is designed so that it can be echoed and reinforced at home, in the community, and in the mass media.5 Baseline data collected in this study confirm the fears and worries of staff and community: 12% of children in grades 3-5 reported that during the past week at school they had been threatened with a gun or knife and 42% reported seeing gang activity.

Conducting this project has taught us many lessons, some of which appear in the Lessons Learned box. Among the more important is a greater recognition of the community's need and desire to reduce violence among youths. This underscores the need for more evaluations of violence-prevention efforts so that resources, including the goodwill and energy of communities, are not wasted.

This study of PeaceBuilders among four pairs of elementary schools sets in motion an evaluation of the near-term effects on social skills and aggression and the protocols for measuring the long-term effects on juvenile violence as measured by law enforcement records. Regardless of long-term outcome, this study shows the possibility of constructing a theoretically derived prevention program, gaining wide-spread community support for it, and undertaking a comprehensive evaluation of it. Prior studies show that PeaceBuilders-type techniques can be used quickly and with positive effect.8,12-14 The techniques have external validity and histories of systematic replication with diverse children and settings5-7,15 and can be implemented effectively by aides and others in a school setting without extensive use of mental health professionals.16-18 This study will offer a good insight into the possibility of "packaging" scientific research for useful, large-scale implementation. The implementation and progress with this study has been encouraging; the program has spread to 55 other schools in the community, largely based on word-of-mouth support from teachers and families. If careful attention is paid to refining and pruning the strategies used in PeaceBuilders, there is promise for reducing violence—a finding consistent with prior real-world research that led to the creation of the model.8,12

One final lesson transcends science and warms human spirit: Children want to be PeaceBuilders—especially when we, as adults, encourage them to do so.

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