

# **Reducing Weapons Victimization Among Elementary School Students: Analyses of the Effects of PeaceBuilders**

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The model employed in this study suggests that early aggression is deeply rooted as an adaptation to a predatory environment. The approach explains the observed developmental, psychopathological, genetic, biological, behavioral, and ecological findings that predict violence and related problems. It represents an inclusive approach to violence prevention: changing the proximal peer environment to signal peace, rather than predatory threat. This adaptation model has support from diverse findings in sociology, anthropology, social psychology, behavioral psychology, and developmental psychology. Embedded in the adaptation model is a comprehensive strategy to alter behavior by supplying multi-age models of peace versus aggression. The resulting process is expected to reduce both aggression and actual injuries from all forms of intentional violence, including weapons.

If, along with increases in protective factors and decreases in risk factors, weapons carrying and use could be decreased during elementary years via a simple, relatively low-cost universal strategy, the public health and safety consequences would be quite large since epidemiological literature shows that such early behaviors are highly predictive of serious problems during adolescence and young adulthood, including the commission of violent crime. This paper asks whether the PeaceBuilders has an impact on victimization by weapons among elementary-school children.

Eight elementary schools (Grades K–5), from two school districts in Pima County, Arizona, were chosen based on two criteria: 1) police crime maps; these maps identified areas with high levels of violent crimes and high neighborhood stress (e.g., domestic violence, transition and mobility, poverty levels); and 2) school histories of behavior problems including expulsions and suspensions. One of the eight schools consisted of a pair of schools in the same neighborhood, a school for Grades K–2 and a school for Grades 3–5 (approximately 1 block apart), and was treated as a single school for pairing, intervention, analysis, and discussion (School 2A). All of the other schools were self-contained Grades K–5 schools. A complete description of the sample and data collection procedures can be found elsewhere in papers posted on this web site.

<http://www.peacebuilders.com/pdfs/research/InitialBehaviorOutcomes.pdf>

The current investigation examines child victimization through secondary data analysis of child self reports by students in grades 3 through 5. Children completed a survey that included measures of pro-social behaviors, aggressive behaviors, **PeaceBuilders** behaviors, and measures of parenting. Based on an examination of the items, the study identified a set of two which measured child reported perceived threat and victimization. These included “Somebody tried to hurt me with a gun or knife” (gun/knife) and “I saw kids doing gang activities at school” (gangs). Questions asked children to think back over the past two weeks and to assess to what extent these statements were true; they were rated as 1 = no, 2 = a little, and 3 = a lot.

General linear modeling (GLM) was used to test for program effects between baseline and initial follow-up. Significant changes were found for perceived threats by a gun or knife. In the second set of analyses on “gangs,” the same analytic approach was employed as far as covariates and independent variables. Findings from this analysis indicated a statistically significant change in gangs from before and after **PeaceBuilders**.

*Sample Description and Response Rates*

	Total		
	<i>N</i>	<i>N</i>	%
Child Self-Report (3-5) with Pretest/Posttest Scores <sup>1, 2</sup>	1,170	2,243	52.2
Males	564	1,170	48.2
Females	606	1,170	51.8
Race/Ethnicity <sup>3</sup>	<i>N</i>	<i>N</i> <sup>4</sup>	%
Hispanic 1,540		3,086	49.9
Caucasian 826		3,086	26.8
Native American	497	3,086	16.1
African American	174	3,086	5.6

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*Note.* <sup>1</sup>Baseline data for all children were collected at time 1. <sup>2</sup>Data at pretest were time 1 data for Wave 1 children and time 3 data for Wave 2 children. Data at posttest were time 2 data for Wave 1 children and time 4 data for Wave 2 children. <sup>3</sup>Ethnicity statistics reported here were obtained from archival school records and is reported for students with baseline data. <sup>4</sup>Ethnicity was available for 3,086 children out of the total 4,679 children eligible with baseline data, 34.0% of the sample was missing data on ethnicity.

Secondary analyses of data from the original **PeaceBuilders** study suggest that **PeaceBuilders** had positive effects on reducing potential weapons and gang victimization. Additionally this flat-line picture suggests that the **PeaceBuilders** experience might have altered the aggression/violence trajectory into the future and should be the subject of future research. The findings from this study make some important contributions to prevention science, both practically and theoretically.

Practically, this appears to be the first study showing reduced weapons and gang behaviors among pre-adolescent, elementary school students, an important predictive factor for reduced antisocial involvement during adolescence and young adulthood. Of special interest to many jurisdictions may be the pronounced beneficial effects on girls in being less exposed to potential weapon and gang victimization. Girls' involvement in violent crime and other serious antisocial behaviors has risen dramatically in the United States, and early exposure to victimization by peers is a key predictor of such trends. Reduced involvement of girls in gang activity over time could reduce over time such public health and safe issues as teen pregnancy, secondary or intergenerational child abuse and neglect, sexually transmitted diseases, and involvement with highly dangerous drugs.

Theoretically, these findings reinforce the generality of the approach underlying **PeaceBuilders**, which was predicted, based on the earlier positive reports on reduced fighting injuries and somatic complaints, improved social competence, reduced aggression and inattention, and differentially positive results on the most at risk children facing an adverse developmental trajectory. Furthermore, the approach is more effective and developmentally appropriate than teaching firearm safety for the reduction of potential peer victimization and group association where weapons pose collective danger, with fewer iatrogenic effects.

Perceived weapons victimization and gang activities are different than confiscations, actual injuries, or arrests for those activities. Such perceptions do, however, reflect the adaptive context of environments where actual reactive or predatory violence are likely to happen. Actual intentional penetrating injuries among elementary school children are rare, of course; but they become much more common among adolescents who were exposed to perceived serious peer victimization as pre-adolescents.

The longitudinal and randomized nature of the original **PeaceBuilders** study, coupled with the multiple positive findings on predictors of reduced risk for serious antisocial

behavior, and the present findings of reduced weapons and gang exposure give further impetus to the planned examination of juvenile justice and adult arrest records of the cohorts of students who are now between 16 and 21 years of age.

A limitation of the present study is reflected in the rather limited methods and measures used in the original evaluation of **PeaceBuilders**. Future research on the effectiveness of **PeaceBuilders** would include the addition of observational methods and measures, studying a variety of school contexts such as playgrounds, lunchrooms, and transitions between classes and activities, and a more extensive analysis of other contexts such as the home, neighborhood, and community surrounding the school. Parental attitudes and beliefs about the use of violence to solve conflict, family gun carrying and use, intra-familial violence and abuse, and inter-parent violence using weapons might be included for an ecological perspective in understanding this serious individual, family, and community health and mental health problem.