RAND CENTER FOR DOMESTIC AND INTERNATIONAL Health Security

Research Highlights

Helping Children Cope with Violence

A School-Based Program That Works

Key findings:

- ***This school-based program successfully reduced symptoms of post-traumatic stress in students exposed to violence.***
- ***School mental health clinicians successfully delivered the program.***
- ***The program produced consistent results.***
- ***The program was well-accepted by students, parents, and teachers.***

Violence is one of our most significant public health issues. Between 20 percent and 50 percent of children in the United States are touched by violence, either as victims or, even more commonly, as witnesses. The emotional impact may be profound. Children exposed to violence develop post-traumatic stress symptoms at alarming rates. Many others develop related disorders such as depression and substance abuse. Children exposed to violence are more likely to have behavioral problems, poorer school performance, and more days of school absence.

Violence affects all racial, ethnic, and economic groups, but its burden falls disproportionately on poor and minority children—the very children whose mental health needs are least likely to be met by the health care system. School officials are often willing to provide help at school. But these professionals face a significant question: What works? There had been no randomized controlled trials of intervention effectiveness with which to answer this question.

To fill this gap, a team of clinician-researchers from several institutions collaborated to develop, implement, and evaluate an intervention designed to help children traumatized by violence. The team included professionals from the RAND Corporation, the University of California at Los Angeles (UCLA), and the Los Angeles Unified School District (LAUSD).

The program works. Students who participated in the program had significantly less post-traumatic stress, less depression, and less psychosocial dysfunction. The program was implemented successfully by school-based mental health clinicians. The participating schools,

This Highlight summarizes RAND research reported in the following publications:

Jaycox L, Cognitive-Behavioral Intervention for Trauma in Schools, Longmont, Colo.: Sopris West Educational Services, forthcoming.

Jaycox L, Stein BD, Kataoka S, Wong M, Fink A, Escudero P, Tu W, Zaragoza C. Violence Exposure, Posttraumatic Stress Disorder, and Depressive Symptoms Among Recent Immigrant Schoolchildren, *Journal of the American Academy of Child and Adolescent Psychiatry*, Vol. 41, No. 9, September 2002, pp. 1104–1110.

Kataoka S, Stein BD, Jaycox LH, Wong M, Escudero P, Tu W, Zaragoza C, Fink A. A School-Based Mental Health Program for Traumatized Latino Immigrant Children, *Journal of the American Academy of Child and Adolescent Psychiatry*, Vol. 42, No. 3, March 2003, pp. 311–318.

Stein BD, Jaycox LH, Kataoka SH, Wong M, Tu W, Elliott MN, Fink A. A Mental Health Intervention for School Children Exposed to Violence, *Journal of the American Medical Association*, Vol. 290, No. 6, August 6, 2003.

located in economically disadvantaged neighborhoods, have a large percentage of Latino students, demonstrating the program's ability to reach poor and minority children. And the program was welcomed by students, teachers, school officials, and parents.

The First Randomized Controlled Study of a Program to Help Children Traumatized by Violence

RAND, UCLA, and LAUSD have collaborated for several years on studies to determine the magnitude of violence exposure and post-traumatic stress symptoms among LAUSD schoolchildren, and to develop effective interventions. The team developed and implemented an earlier program designed specifically for immigrant children, many of whom are subjected to violence in their country of origin, during their immigration to the United States, and/or after their arrival (often to a disadvantaged neighborhood).

Building on the earlier work, the team designed and conducted a randomized controlled study in the 2000–2001 academic year. Students in the study attended one of two Los Angeles public middle schools in largely Latino neighborhoods.

Psychiatric social workers from LAUSD administered a screening questionnaire to all English-speaking sixth-grade students in the two schools. Students were eligible to participate in the program if they (1) had substantial direct exposure to violence, (2) had post-traumatic stress symptoms in the clinical range (a score of 14 or higher on the CPSS, the Child Post-Traumatic Stress Symptom Scale), (3) were willing to discuss their symptoms in a group setting, and (4) were not too disruptive to participate in group therapy. Participants' experience with violence ranged from witnessing serious physical fights to being attacked with a knife or gun.

A total of 159 students were eligible to participate; 126 actually participated (the parents of 28 children did not give consent and five children elected not to participate). All 126 students completed the baseline assessments; 93 percent completed a three-month follow-up; and 90 percent completed both the three-month and the six-month follow-ups.

Students were randomly assigned to two groups. One group (the early-intervention group) started the program promptly; the other (the late-intervention group) was wait-listed for later in the school year.

The intervention program, called the Cognitive Behavioral Intervention for Trauma in Schools (CBITS) was developed at RAND, in close collaboration with mental health clinicians at LAUSD. It consists of 10 sessions of group therapy designed for inner-city schools with a multicultural population. Activities include training children in relaxation, dealing with "bad" thoughts, solving real-life problems, approaching anxiety-provoking situations, and coping with the violence event through talking, drawing pictures, and writing. The program is also designed to build both peer and parental support.

In addition to the group sessions, the program included at least one individual session for each child, four group-parenting meetings, and an educational presentation for teachers. The LAUSD school clinicians who delivered the program received two days of training and weekly supervision from the other members of the research team. To help ensure that the program was standardized, the clinicians followed the CBITS treatment manual (Jaycox, forthcoming).

Participants Experienced Significant Mental Health Improvement

Data from students, parents, and teachers were collected at baseline, three months, and six months. These intervals enabled both early- and late-intervention groups to complete the program and to be tested in the same academic year.

Baseline: The 126 students enrolled in the program had substantial levels of exposure to violence. On average, students reported being a victim of 2.8 violent events and directly witnessing 5.9 violent events in the previous year. The mean CPSS score was 24, indicating moderate to severe post-traumatic stress symptoms. There were no significant differences between the early-intervention and late-intervention groups at the start of the program.

Three months: At three months, students in the early-intervention group had completed the program; students in the late-intervention group had not yet begun.

Figure 1 compares the CPSS scores for the two groups. The early-intervention students showed substantial improvement. The magnitude of the difference between the two groups means that 86 percent of the early-intervention group reported less severe post-traumatic stress symptoms than would have been expected without intervention. Figure 2 shows depression symptom scores; the magnitude of the difference between the two groups means that 67 percent of

Figure 1. Post-Traumatic Stress Symptoms at Baseline, Three Months, and Six Months

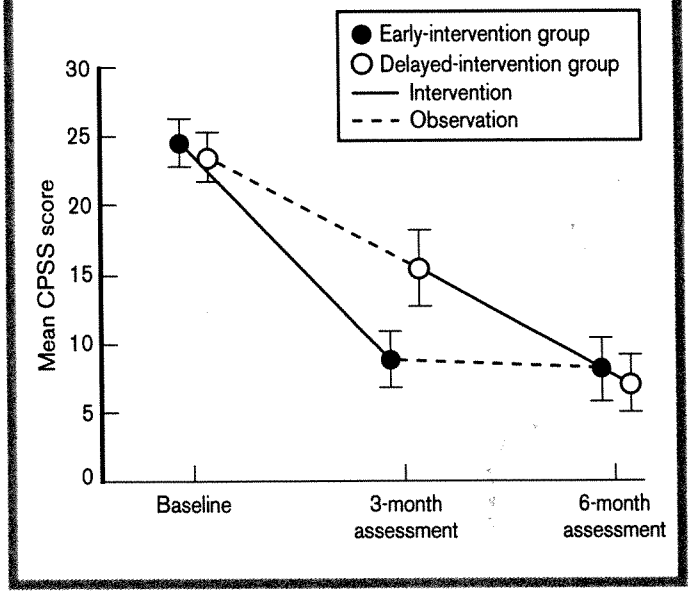
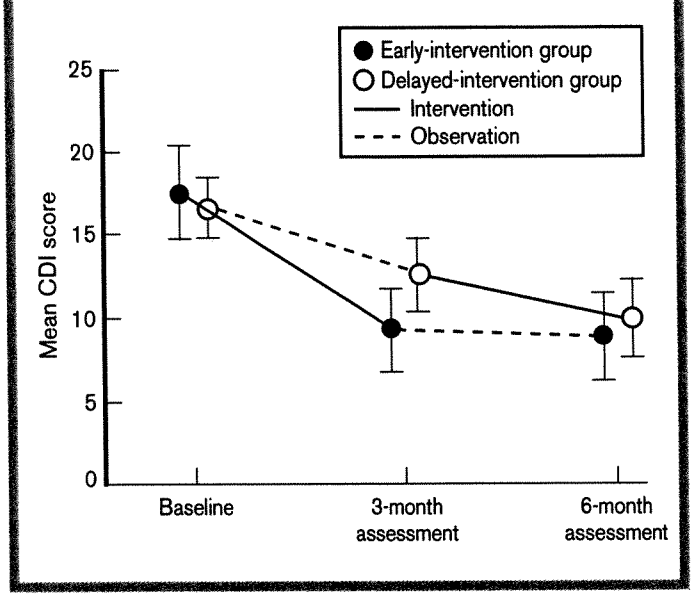


Figure 2. Depressive Symptoms at Baseline, Three Months, and Six Months



the early-intervention group reported less severe symptoms than would have been expected without intervention. In addition, parents of students in the early-intervention group reported that their children displayed significantly less psychosocial dysfunction (sadness, fighting, not eating or sleeping, feeling that life is hopeless).

Six months: At six months, both groups had completed the program. There is no longer any significant difference between the two groups. The early-intervention group maintained, and the late-intervention group achieved, substantial improvement.

Classroom Behavior Stayed About the Same

Teachers assessed each student's shyness/anxiety, learning skills, and acting out behavior in the classroom. An unexpected finding is that teachers observed only slight improvements throughout the study period. Possible explanations include the following: The student's classroom behavior is affected by many factors, not just the child's mental health; or there may be a time lag before improved mental health translates into improved behavior; or teachers may be more attuned to disruptive behavior than to anxiety or depression suffered in silence; or perhaps the program simply does not affect classroom behavior.

Questions for Future Studies

A number of issues require further investigation:

1. What is the program's long-term effectiveness? To date, only short-term effectiveness has been evaluated. In addition, we have no information about exposure to new violence during and after the program. Such information and a longer follow-up period are needed to assess long-term effectiveness.
2. Would "booster sessions" or other follow-up increase the program's effectiveness?
3. Can the program's success be replicated in non-urban and non-Latino populations?
4. What is the reason for the lack of improvement in students' classroom behavior as reported by teachers?
5. Can school staff with lower levels of clinical training implement the program successfully?

Conclusions

The results show that the program significantly helped students cope with the devastating effects of violence. The results also affirm the feasibility of the approach: School-based clinicians delivered the program with integrity and high quality.

The results of this study are short term. The program is designed to build resilience and coping skills, so it is possible that the effect will be lasting. It is encouraging that the children in the early-intervention group maintained improvement at six months. The team hopes that this study will form the basis of future studies designed to provide long-term help to victims of violence.

Talking with Participants

Below are excerpts from interviews with a student, a parent, and a teacher who participated in the program for immigrant children suffering from exposure to violence. These interviews were conducted by LAUSD's Mental Health Services Unit.

A Student

Q. *Can you tell me what happened?*

A. I was walking home from school with my cousin when I heard somebody screaming. We turned to see who it was and I saw a man being hit by four men. The men were wearing ski masks. We started to run. At that moment I heard gunshots. I was very afraid. When I was running, I thought the men were following us. I thought that if they saw us, they could look for us at school and hurt us. After that, I was afraid to go to school. Every day, I tried a different path to go to and from school. I had nightmares.

Q. *How did the group help you?*

A. The group helped me because I don't have nightmares about that any more. I don't think about what happened anymore. Even though I was nervous when I shared this in the group, I felt much better after that.

Q. *What would you change about the group?*

A. I would change the length of the groups. Sometimes, the time spent in the group went too fast. I would like to stay longer.

A Parent

Q. *Did this program help your child with his behavior?*

A. My son's behavior has improved at school and at home. He was very anxious before participating in the groups. Now he appears calmer and less anxious. He doesn't get into fights [with his siblings] as often as he used to.

Q. *What changes have you noticed in your child as a result of the program?*

A. He stops and thinks before he acts. That is something he never did before. And now he has more respect for me and is more obedient. We do not argue as much as we used to.

Q. *Would you recommend this program to other families?*

A. Yes. My son and I learned a lot from this program.

A Teacher

Q. *What would you say are the one or two best things about the program?*

A. I think it gave attention to newcomer students with issues that not all other students have. I think it's very difficult to come to a new country and, in addition, to start a new school. These kids need extra attention.

Q. *What changes do you think should be made to the program?*

A. We need to expand the program to include more students. We have a lot of students who are still facing the same issues that they had when they were newcomer students, but they have been here maybe four or five years. More students and longer term—maybe they could be in it more than a semester. The kids ask me, "Are the clinicians going to come back? When they come back, I want to be in it." So they are actually asking for the services themselves.

Q. *How can we involve more teachers?*

A. I think it would be good to do more staff development, maybe on a pupil-free day. The biggest issue for the faculty is not understanding what the problems are and what issues exist for these kids.

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