



HEALTH and INFRASTRUCTURE, SAFETY, AND ENVIRONMENT

CHILDREN AND FAMILIES
EDUCATION AND THE ARTS
ENERGY AND ENVIRONMENT
HEALTH AND HEALTH CARE
INFRASTRUCTURE AND
TRANSPORTATION
INTERNATIONAL AFFAIRS
LAW AND BUSINESS
NATIONAL SECURITY
POPULATION AND AGING
PUBLIC SAFETY
SCIENCE AND TECHNOLOGY
TERRORISM AND
HOMELAND SECURITY

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis.

This electronic document was made available from www.rand.org as a public service of the RAND Corporation.

Skip all front matter: [Jump to Page 1](#) ▼

Support RAND

[Browse Reports & Bookstore](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore [RAND Health](#)

[RAND Infrastructure, Safety, and Environment](#)

View [document details](#)

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND electronic documents to a non-RAND website is prohibited. RAND electronic documents are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).

This product is part of the RAND Corporation technical report series. Reports may include research findings on a specific topic that is limited in scope; present discussions of the methodology employed in research; provide literature reviews, survey instruments, modeling exercises, guidelines for practitioners and research professionals, and supporting documentation; or deliver preliminary findings. All RAND reports undergo rigorous peer review to ensure that they meet high standards for research quality and objectivity.

TECHNICAL REPORT

National Evaluation of Safe Start Promising Approaches

Results Appendix D: Dallas County, Texas

In Jaycox, L. H., L. J. Hickman, D. Schultz, D. Barnes-Proby, C. M. Setodji, A. Kofner, R. Harris, J. D. Acosta, and T. Francois, *National Evaluation of Safe Start Promising Approaches: Assessing Program Outcomes*, Santa Monica, Calif.: RAND Corporation, TR-991-1-DOJ, 2011

Sponsored by the U.S. Department of Justice's Office of Juvenile Justice and Delinquency Prevention



HEALTH and
INFRASTRUCTURE, SAFETY, AND ENVIRONMENT

This research was sponsored by the U.S. Department of Justice's Office of Juvenile Justice and Delinquency Prevention and was conducted under the auspices of the Safety and Justice Program within RAND Infrastructure, Safety, and Environment and under RAND Health's Health Promotion and Disease Prevention Program.

Library of Congress Control Number: 2011935596

ISBN: 978-0-8330-5822-5

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2011 RAND Corporation

Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Copies may not be duplicated for commercial purposes. Unauthorized posting of RAND documents to a non-RAND website is prohibited. RAND documents are protected under copyright law. For information on reprint and linking permissions, please visit the RAND permissions page (<http://www.rand.org/publications/permissions.html>).

Published 2011 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665
RAND URL: <http://www.rand.org>
To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Fax: (310) 451-6915; Email: order@rand.org

DALLAS COUNTY, TEXAS, SAFE START OUTCOMES REPORT

ABSTRACT

The Dallas County Safe Start program implemented a family-centered intervention intended to improve outcomes for children (ages 3–9) exposed to violence. The program consisted of an integrated case management and skills-based parenting intervention. A full description of the interventions can be found in *National Evaluation of Safe Start Promising Approaches: Assessing Program Implementation* (Schultz et al., 2010). Dallas program staff enrolled 85 families in the study, with 56 percent of them retained for the six-month assessment. Retention, however, was not equal across the two groups: 67 percent of the control group was retained, whereas 43 percent of the intervention group remained in the study. At baseline, caregivers reported that children had been exposed to an average of 5 types of violence in their lives. Forty-eight percent of enrolled children had reported baseline child posttraumatic stress disorder (PTSD) symptoms that fell in the “significant” range, and 71 percent of enrolled mothers’ levels of parental stress fell in the “clinical” range. Of the 16 families that were retained in the intervention group at the six-month assessment point, 13 (81 percent) received at least one session with a Project Support therapist, with an average of 14 total sessions. Given the number of participants in the study, we had an 80-percent chance to detect only a large intervention effect of size 0.947 at six months. In the domains of violence exposure and caregiver_victimization, some significant improvements within the intervention group were observed over time, but they did not differ from changes observed in the control group. Results of the study showed only two statistically meaningful difference between the intervention and control groups at any assessment point in the intent-to-treat analysis. In one case, control group caregivers reported larger decreases in traumatic experiences at the six-month follow-up as compared with the intervention group. This difference was not sustained over time and therefore may not represent a meaningful difference between the groups. At the 12-month mark, intervention group caregivers reported experiencing significantly less parental distress compared with caregivers in the control group. However, the sample size did not allow for analyses controlling for multiple demographics. Still, an exploratory analysis conducted controlling for only child gender shows

that the difference was no longer significant once gender was controlled. The lack of significant difference between groups over time could reflect a sample size limitation and thus a lack of power to observe a medium to large intervention effect; intervention effects in the enhanced usual care, consisting of contact and case management for the control group; selection bias related to low retention overall, and particularly in the intervention group; increased recognition of symptoms as a function of the intervention; insufficient time to observe intervention effects; or a lack of a meaningful difference between the intervention and the control groups on the particular outcomes measured. The Dallas Safe Start program implemented an intervention for a population facing multiple challenges, particularly parenting in a time of transition from domestic violence housing. Further testing is needed with an adequate sample in order to statistically assess the potential impacts of the intervention.

INTRODUCTION

The Dallas Safe Start program is located in Dallas County, Texas. In 2004, the year that the Dallas Safe Start program was proposed, there were 182,087 incidents of family violence in Texas. In Dallas County, approximately 1,500 adults and 1,200 children were provided residential domestic violence shelter in 2003 (Southern Methodist University, 2004). The Dallas Safe Start project was initiated with the goal of helping to fill a gap in mental health services for children exposed to domestic violence. For two key reasons, the project partners focused on providing these services specifically to children exiting domestic violence shelters with their mothers. First, this is a population at high risk for mental health problems related to domestic violence (e.g., Jouriles et al., 2001). Second, existing mental health services were limited and difficult to access for families exiting domestic violence shelters in the Dallas area.

The development of the Dallas Safe Start program built on an existing research partnership between Southern Methodist University (SMU) researchers and two local domestic violence shelters, The Family Place and Genesis Women's Shelter. Their prior research collaboration focused on externalizing problems among children exposed to domestic violence who had resided in a domestic violence shelter. The Safe Start program offered the opportunity for the partners to expand their activities to involve other domestic violence shelters and to test the effectiveness of an intervention for these children.

The intervention, Project Support, was originally developed and evaluated by the SMU partners in shelters in Houston. The intervention was developed to address conduct problems among children exposed to severe domestic violence. Indications from early evaluations of Project Support showed promise for improving conduct problems among children ages 4 to 9 whose mothers were exiting domestic violence shelters in the Houston, Texas, area to establish a home independently of an abusive partner (Jouriles et al., 2001; McDonald, Jouriles, and Skopp, 2006). The Safe Start intervention tests Project Support in a different city; expands the age range to include somewhat younger children; and includes children with externalizing problems, internalizing problems, or both. In addition, the Safe Start intervention tests a slightly briefer version of Project Support (six months as opposed to eight months) and does not restrict the intervention to families in which the woman is establishing a residence independent of her violent partner.

The outcomes evaluation detailed here presents data relevant to the question of whether the Dallas Safe Start program, as implemented within this project, improves outcomes for children exposed to domestic violence.

DALLAS SAFE START

- **Intervention type:** Project Support intervention, including therapy, case management, and child mentorship
- **Intervention length:** Six months
- **Intervention setting:** In-home
- **Target population:** Children exposed to domestic violence and experiencing elevated levels of mental health problems exiting domestic violence shelters with their mothers
- **Age range:** 3–9
- **Primary referral source:** Three domestic violence shelters

INTERVENTION

Project Support is a home-based intervention involving a two-person team: a therapist and a child mentor. The therapist provided case management and therapeutic services, while the child mentor was responsible for working with any children present in the home while their mother was engaged in a

session (when the children were not in the session themselves). The intervention was intended to begin as soon as feasible after the shelter stay and consisted of 24 weekly sessions provided over a maximum of six months. The program elements are described briefly below. For a full description of the Dallas intervention as it was delivered, see Schultz et al. (2010).

The intervention combined intensive case management (referred to in the model as “social and instrumental support”) and training for mothers in nurturing and child behavior management skills. Both of these components were provided by a single therapist within the context of weekly treatment sessions of 60 to 90 minutes in length. Case management involved therapists working with clients to ensure that the family’s basic needs were being met by making referrals or assisting clients with accessing services.

The parent-training component of Project Support involved therapists teaching and modeling parenting skills, engaging in role plays with the parent to facilitate skill application, and coaching parents during observed parent-child interaction. Targeted skills were introduced progressively, and work on each skill continued until mothers demonstrated its mastery. The specific areas of emphasis for the nurturing and child behavior management skills were based on formal assessment of the child’s adjustment and functioning coupled with an assessment of the mother’s baseline knowledge and level of parenting skills.

The child mentors accompanied the therapists to each home-based session for the purpose of entertaining and working with any children while their mother participated in the sessions with the therapist. This served the function of reducing the sources of parental distraction that can be problematic within a home-based setting. The child mentor component was not expected to produce its own outcomes (such as reduced child conduct problems). Instead, it was intended to help constructively entertain children to allow mothers to fully engage with the therapy sessions, to provide the children with a positive relationship with a caring adult, and to model effective and positive child management skills for the mother.

Efforts to monitor the quality of the program included considerable therapist training and oversight. At the onset of the project, therapist competence was formally assessed through participation in six videotaped role-play situations that therapists were likely to encounter. The model developers and community partners also provided training on delivery of the model, domestic violence, and safety issues. For clinical supervision and to assess model fidelity,

sessions were videotaped, and the model developer sampled sessions to observe and assess for fidelity. Detailed case notes were also kept on the amount of time spent in sessions on case management versus parenting, on which parenting skills were covered, and how thoroughly they were covered. Case review, discussion, and ongoing training and updates for the therapists also took place in weekly group meetings. Peer-to-peer training occurred with newer therapists working in a team with more experienced therapists, under the supervision of the model developer.

METHOD

Design Overview

The design of this study was a block randomized controlled trial, with randomization occurring at the family level within age groups (3–6 years and 7–9 years) and eligible children recruited after families were referred to the program. Families assigned to the treatment condition received Project Support for up to six months. Families assigned to the control group received enhanced usual care, including extra support and referrals. Specifically, families in the control group could access nonresidential services offered by area domestic violence shelters and other available community services but did not receive Project Support services. The control group also received monthly contacts from SMU research staff offering case management services. Child outcomes and contextual information were assessed at baseline, six, 12, 18, and 24 months. The study reported here took place between August 2006 and July 2010. A previous version of this report covering the period of July 2006 through October 2009 was completed earlier. This report updates the earlier report by adding data collected during the nine-month extension.

Evaluation Eligibility Criteria

The eligibility criteria for the Dallas Safe Start program specified English-speaking mothers who were residing in one of three participating domestic violence shelters and who had reported at least one incident of physical violence by an intimate partner during the previous six months; moved within 25 miles from the participating shelter on shelter exit; had at least one child living with them between the ages of 3 and 9 who had been exposed to domestic violence, had been determined to be experiencing elevated levels of mental health

problems (defined as a score of 60 or higher on the internalizing or externalizing scale of the Child Behavior Checklist [CBCL; Achenbach, 1991]), and was not identified as having a pervasive developmental disorder or mental retardation; and were not actively psychotic or experiencing severe drug or alcohol problems. When more than one child was potentially eligible for the program by virtue of exposure to violence, the child whose birth date was closest to the date of enrollment was selected as the target child.

Randomization Procedures

On enrollment into the study, the children were randomized into intervention or control groups using a block randomization procedure that allowed for approximately the same number of children in the intervention and control groups (see Chapter Four of the main document [http://www.rand.org/pubs/technical_reports/TR991-1.html]). Because of the possibility that the impact of the intervention could differ by child age, the sample was stratified into two groups. One group consisted of children ages 3 to 6 and the second group consisted of children between 7 and 9 years old.

Measures

The measures used in this study are described fully in Chapter Two of the main document (see http://www.rand.org/pubs/technical_reports/TR991-1.html). The measures were uniform across the national evaluation but prioritized within each site as to the relevance to the intervention under study. Given the nature of the Dallas Safe Start intervention, the outcomes were prioritized as shown in Table 1.

Table 1
Prioritized Outcome Measures for Dallas Safe Start

Primary Outcome Measures			
<i>Domain</i>	<i>Source/Measure</i>	<i>Age of Child</i>	<i>Respondent</i>
Behavior/Conduct Problems	Behavior Problem Index (Externalizing)	All	Caregiver
Caregiver-Child Relationship	Parenting Stress Index	All	Caregiver
Secondary Outcome Measures			
<i>Domain</i>	<i>Measure</i>	<i>Age of Child</i>	<i>Respondent</i>
PTSD Symptoms	Trauma Symptom Checklist for Young Children	All	Caregiver
PTSD Symptoms	Trauma Symptom Checklist for Children	8–9 years	Child
Depressive Symptoms	Children’s Depression Inventory	8–9 years	Child
Behavior/Conduct Problems	Behavior Problem Index (Internalizing)	All	Caregiver
Social-Emotional Competence	BERS-2 (School Functioning, Affective Strengths)	6–9 years	Caregiver
Social-Emotional Competence	BITSEA and SSRS (Assertion and Self-Control)	All	Caregiver
Social-Emotional Competence	SSRS (Cooperation)	All	Caregiver
Caregiver-Child Relationship	BERS-2 (Family Involvement)	6–9 years	Caregiver
School Readiness/Performance	Woodcock-Johnson III	All	Child
Violence Exposure	Juvenile Victimization Questionnaire	All	Caregiver
Violence Exposure	Caregiver Victimization Questionnaire	All	Caregiver
Tertiary Outcome Measures			
<i>Domain</i>	<i>Measure</i>	<i>Age of Child</i>	<i>Respondent</i>
Background and Contextual Factors	Everyday Stressors Index	All	Caregiver

NOTE: ASQ = Ages and Stages Questionnaire, BERS-2 = Behavior and Emotional Rating Scales—2, BITSEA = Brief Infant-Toddler Social and Emotional Assessment, SSRS = Social Skills Rating System.

Enrollment and Retention

Dallas’ Safe Start program participants were recruited from area domestic violence shelter populations. On shelter exit, eligible families were offered the opportunity to participate in the Safe Start program. Enrollment did not occur until after families had consented to participate and had completed the baseline research assessment. After the assessment was completed, the program manager

implemented the random assignment procedures and informed the family. According to data submitted by the site on its Quarterly Activity Report through the fall of 2009, 97 percent of the families that consented to participate and scheduled an appointment for a baseline assessment were ultimately enrolled. No data were available on the number of families that declined to be screened for eligibility or did not choose to participate after screening.

In Table 2, we present the number and percentage of all enrollees who were eligible for participation at each data collection time point. At a minimum, a completed caregiver packet is necessary for a family to be included in the outcome analyses. As Table 2 shows, there was considerable differential attrition in the intervention group between baseline and the six-month assessment. The resulting six-month analysis sample consists of 32 families in the control group (67-percent retention) and 16 families in the intervention group (43-percent retention). Retention remained higher in the control group relative to the treatment group at the 12-month mark. By 24 months, the overall sample size was reduced to 26 families, with 12 in the intervention group and 14 in the control.

This retention at the six-month follow up assessment increases the potential for biased results, since there is differential retention in the intervention and the control groups. Since attrition may be related to treatment factors that lead to selection bias, it can be particularly problematic when it differs across the two groups. For example, if families in more distress are more likely to leave the study overall or to drop out of one group at a higher rate than another, the results can be misleading.

Because of the sizable attrition in the intervention group, we conducted some comparisons of the baseline and retained six-month intervention sample. These comparisons revealed no apparent systematic differences on background characteristics. We cannot rule out the presence of systematic differences on other, unmeasured characteristics, however. Thus, we cannot rule out that the low retention rate in the intervention group impacted the results reported here at least to some degree.

Table 2
Retention of Enrollees Eligible to Participate in Assessments at Each Time Point

	Caregiver Assessment				Child Assessment			
	Six Months	12 Months	18 Months	24 Months	Six Months	12 Months	18 Months	24 Months
Intervention								
Received	16	16	14	12	16	16	14	11
Expected*	37	32	27	22	36	32	27	22
Retention Rate	43%	50%	52%	55%	44%	50%	52%	50%
Control								
Received	32	26	18	14	31	24	17	14
Expected*	48	36	32	28	48	36	32	28
Retention Rate	67%	72%	56%	50%	65%	67%	53%	50%
Overall								
Retention Rate	56%	62%	54%	52%	56%	59%	53%	50%

* The number of expected assessments for longer-term assessments differs from the number who entered the study because the field period for collecting data in this study ended before all families entered the window of time for assessments at 12, 18, or 24 months.

Special Issues

Despite the SMU researchers' prior experience with implementing Project Support in a research-based context, the pace of recruitment of families into the Dallas Safe Start project was much slower than expected. To help address this challenge, three months after implementation the Dallas Safe Start project obtained permission from the U.S. Department of Justice's Office of Juvenile Justice and Delinquency Prevention to expand its target age range from 3 to 6 years old to 3 to 9 years old. About 17 months after implementation, recruitment was further expanded to include families utilizing the nonresidential services (such as support groups and legal assistance services) of The Family Place, a domestic violence organization. Yet, recruitment continued to lag behind projections. For a more in-depth discussion of these issues, see Schultz et al. (2010).

Analysis Plan and Power Calculations

First, we conducted descriptive analyses to summarize the sample baseline characteristics: age, gender, race or ethnicity, the family income level as a percentage of the poverty level, the child's violence exposure at baseline, and the outcome variables. Because this was a randomized experimental design, we did not expect any meaningful differences between the two groups at baseline.

However, to be certain, we tested for differences in child and caregiver characteristics between intervention and control group children using t-tests and chi-square tests.

To assess the effect of the Safe Start intervention, we primarily examined differences between children in the intervention and control groups at six months. It is important to consider the power this study has for such an analysis. One way to describe power is by using the effect size difference between the two groups being compared. The effect size is a standardized measure of the strength of association between an intervention and an outcome and is defined as the average difference in an outcome between the intervention and control groups divided by the common standard error. The effect size measure is commonly classified as small if it is about 0.2, medium if it is about 0.5, and large if it is about 0.8 (Cohen, 1988).

The Dallas Safe Start program enrolled 85 children at baseline (37 in the intervention and 48 in the control group), only 48 families were retained at the six-month follow-up, and 42 total families were retained at 12 months. These sample sizes are small and impact our ability to detect an effect of the intervention on the participants' outcomes. There is only limited information from which to estimate the anticipated intervention effect size, but a previous study conducted by the model developers identified a large effect. At six months, we will only have a 9.8-percent chance to detect a small effect (0.2), and we will have an 80-percent chance (the nominal 0.05 significance level) to detect only a large intervention effect of size 0.876. Statistical power was dampened by several factors other than overall sample size. The range of children's ages meant that the full data were not available for some measures because not all children were in the age range eligible to complete that measure. Further, the corrections for the multiple statistical tests being conducted also reduced power. The low statistical power in this study must be kept in mind in interpreting results.

We examined differences between the intervention and control groups using an intent-to-treat approach, which includes in analyses all those assigned to the intervention group, regardless of the amount of services received. As discussed in Chapter Four of the main document (see http://www.rand.org/pubs/technical_reports/TR991-1.html), comparisons of a control group only to those who complete services (or receive a predetermined amount of services) is likely to bias results. That is, those who do not engage in services or drop out prior to completion may be systematically different than those who remain.

Ideally, analyses would take into account the type and amount of services received to account for dosage variability. However, there were not enough families in this site's sample in order to proceed with this type of analysis. Thus, the findings presented here on the entire intervention sample may obscure important subgroup differences by service dose received.

In the analyses of available data, we present descriptive statistics of primary, secondary, and tertiary outcomes at each time point by intervention and control groups. Because the retention rate was different between the two groups, we also examined whether those that were lost to follow-up differed in any systematic way from those who were retained, using t-tests and chi-square tests.

Using an intent-to-treat approach, we compare groups via chi-square or t-tests at each time point, compare means within groups across time, and examine difference in differences to comparing the two groups on changes over time between baseline and the six-, 12-, 18-, and 24month assessments (when the sample size is at least ten per group). Because the sample size is too small to allow modeling of differences in differences that include covariates (child age, gender, race or ethnicity, family income level, and the child's violence exposure at baseline), results are considered very preliminary.

When conducting large numbers of simultaneous hypothesis tests (as we did in this study), it is important to account for the possibility that some results will achieve statistical significance simply by chance. The use of a traditional 95-percent confidence interval, for example, will result in one out of 20 comparisons achieving statistical significance as a result of random error. We therefore adjusted for false positives using the False Discovery Rate (FDR) method (Benjamini and Hochberg, 1995). Our assessments of statistical significance were based on applying the FDR procedure separately to all of the primary, secondary, and tertiary outcome tests in this report using a false discovery rate of 0.05. The FDR significance level differed for unadjusted difference in difference models because the number of statistical tests varied by outcome type. With six test statistics conducted among the primary outcomes, this led to adopting a statistical significance cutoff of 0.008 in the unadjusted difference in difference results. With 14 secondary outcomes tested, the FDR significance level adopted was 0.003. On the tertiary outcomes, two tests resulted in a significance cutoff of 0.025.

In the discussion of results, we have also identified nonsignificant trends in the data, defined as those tests resulting in p-values of less than 0.05 but not exceeding the FDR criterion for statistical significance. These trends may suggest a practical difference that would be statistically significant with a larger sample size. By the same token, however, they must be interpreted with caution, because we cannot rule out that the difference was due to chance because of the multiple significance tests being conducted.

RESULTS

Baseline Descriptive Statistics

For the descriptive statistics, we provide the characteristics for the full enrolled sample at baseline. As shown in Table 3, the baseline sample was comprised of 52 percent female children, with an average age of 5.4 years. The Dallas Safe Start site enrolled children between the ages of 3 and 9. Children ages 3 to 5 made up 60 percent of all enrolled children, and 28 percent were age 3. The age distribution was equally divided (because of the randomization strategy), with 60 percent of both the intervention and control group containing children ages 3 to 5.

The children in the sample were predominately black (54 percent), with some Hispanic (13 percent) and white (9 percent), and the remaining were other race/ethnicity children (24 percent). Only 7 percent of children had family incomes of greater than \$30,000 per year. According to the caregiver reports, children in the baseline sample had been exposed to an average of 5 types of violence in their lives prior to the baseline assessment. All of the caregivers completing the assessments were the target child's mother. As noted in the table, there were no statistical differences for these characteristics between the intervention and control groups (where statistical tests could be conducted).

In the sample of families retained at six months, the demographics were similar to those at baseline, with slightly fewer female children (48 percent) than at baseline and an increased share of those with family incomes above \$30,000 (11 percent). Again, there were no statistical differences on background characteristics between groups in the sample retained at six months (data not shown). Comparison of those who were lost to follow-up and those who were retained revealed no statistically significant differences between the two groups (data not shown).

We also examined the Dallas Safe Start sample overall at baseline on two outcomes (PTSD and caregiver-child relationship) to assess the level of severity on these indexes among families entering the study. As shown in Table 4, at baseline, 48 percent of caregivers in the full sample reported child PTSD symptoms that fell in the significant range. For boys, 46 percent of caregivers reported child PTSD symptoms in the normal range, 7 percent reported symptoms in the borderline range, and 45 percent reported symptoms in the significant range. For girls, 45 percent of caregivers reported PTSD symptoms in the normal range, 5 percent reported symptoms in the borderline range, and 51 percent reported symptoms in the significant range. In terms of the caregiver-child relationship, 71 percent of the full sample had total stress levels that fell in the clinical range, with 63 percent for girls and 81 percent for boys. For the different subscales, 53 percent of the sample had clinical levels of parental distress, 48 percent had clinical levels of parent-child dysfunctional interaction, and 63 percent had clinical levels of difficult child responses.

Table 3
Dallas Safe Start Sample Characteristics for Families in the Baseline
Assessment Sample

	Combined		Intervention		Control		Test for Comparison P-Values
<i>Child Characteristics</i>	<i>N</i>	<i>Mean</i>	<i>N</i>	<i>Mean</i>	<i>N</i>	<i>Mean</i>	
Age	85	5.4	37	5.4	48	5.5	0.75
CR Violence Exposure	85	5.0	37	4.8	48	5.2	0.60
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	
<i>Gender</i>							
Male	41	48.2	22	59.5	19	39.6	0.07
Female	44	51.8	15	40.5	29	60.4	
<i>Race/Ethnicity</i>							
Hispanic	11	12.9	5	13.5	6	12.5	0.31
White	8	9.4	1	2.7	7	14.6	
Black	46	54.1	21	56.8	25	52.1	
Other	20	23.5	10	27.0	10	20.8	
<i>Caregiver Characteristics</i>							
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	
<i>Family Income Level</i>							
Less than \$5,000	38	46.3	13	37.1	25	53.2	0.49
\$5,000–\$10,000	7	8.5	5	14.3	2	4.3	
\$10,001–\$15,000	15	18.3	7	20.0	8	17.0	
\$15,001–\$20,000	5	6.1	2	5.7	3	6.4	
\$20,001–\$30,000	11	13.4	6	17.1	5	10.6	
More than \$30,000	6	7.3	2	5.7	4	8.5	
<i>Relationship to Child</i>							
Parent-Guardian	85	100.0	37	100.0	48	100.0	—
Other Relationship	0	0.0		0.0		0.0	

NOTES: CR = Caregiver Report. Percentages may not total 100 percent because of rounding.

Table 4
Baseline Assessment Estimates for Dallas Safe Start Families

CR PTSD Symptoms for Ages 3–10	Combined		Boys		Girls	
	N	%	N	%	N	%
Normal	38	45.8	19	46.3	19	45.2
Borderline	5	6.0	3	7.3	2	4.8
Significant	40	48.2	18	45.0	22	51.2
CR Total Parenting Stress for Ages 0–12	N	%	N	%	N	%
Parental Distress—Clinical	45	52.9	23	56.1	22	50.0
Parent-Child Dysfunctional Interaction—Clinical	40	47.6	22	53.7	18	41.2
Difficult Child—Clinical	53	63.1	32	78.1	21	48.8
Total Stress—Clinical	60	71.4	33	80.5	27	62.8

NOTE: CR = Caregiver Report.

Finally, we examined differences between the intervention and control group at baseline for the Dallas program’s primary, secondary, and tertiary outcomes (see this report’s appendix). Primary outcomes for Dallas were parenting stress and externalizing child behavioral problems. The groups were not statistically different, except for the parental distress measure. In this case, the intervention group caregivers reported significantly more parental distress at baseline, relative to the control group caregivers. No statistically significant differences were observed between the groups overall on these measures (see Table A.1, first column).

Secondary outcomes include caregiver PTSD symptoms, depressive symptoms, internalizing child behavioral problems, some aspects of social-emotional competence, caregiver victimization, child violence exposure, parent child relationship, and school readiness. Child self-report measures of depressive and PTSD symptoms are not shown because only five children in the entire Dallas sample were old enough to be assessed on these measures. No statistical differences were observed at baseline on the secondary outcomes (see Table A.2, first column).

Finally, for tertiary outcomes (caregiver resource problems and caregiver personal problems) at baseline, one statistically significant difference emerged. The mean of personal problems score was higher for intervention group caregivers, relative to those in the control group.

Uptake, Dosage, and Process of Care

Family-level service data were recorded by the program on the follow-up Family Status Sheet and submitted at six-month intervals following initial enrollment (see Chapter Two of the main document [http://www.rand.org/pubs/technical_reports/TR991-1.html] for a description). Tables 5a and 5b below show the type and amount of services received by the families assigned to the intervention group. As each of these tables shows, some families randomized to the intervention group did not receive any services from the program. We did not collect data on the reasons for lack of service engagement and therefore cannot address this issue.

Also, the Dallas program reported the sessions delivered by Project Support therapists but not the services of the child mentors. The program model dictated that child mentor services were only offered at the same time as a therapy session. The child mentors' primary role was to accompany the therapist to the home to entertain and monitor children while their mother participated in therapy. In other words, child mentor services were only provided simultaneously with therapy sessions and, to the extent that child mentors were available as planned, would equal the number of sessions for each family.

Table 5a presents the results for services received for all families who were initially enrolled in the intervention group, regardless of whether they continued to participate in the ongoing research assessment. The data displayed in Table 5a include services received by summing all time points reported by the program, with a maximum of 24 months of service provision. Service data for at least one follow-up wave were available on 36 of the 37 Dallas intervention group families. As shown in Table 5a, 56 percent of the intervention group families received at least one session with a Project Support therapist. The remaining families did not receive any documented Project Support services. Among the 20 families that did receive services, the average number of sessions during the six-month program was 11, with half of the families receiving nine or fewer sessions. Of the 20 families who participated, the program reported that 31 percent of families satisfactorily completed services. In the majority of cases, however, the sessions ended because the family discontinued their involvement in services (14, 70 percent) in some way. In one case, the program elected to terminate sessions.

Table 5a
Services Received by Dallas Safe Start Intervention Families (Baseline Sample)

Service	Number with Service	Percentage with Service*	Range	Distribution	Mean	Median
Total Project Support Therapy Sessions (combining case management and family therapy)	20	56%	2–28	2–4 30% 5–9 20% 10–16 30% 17+ 20%	11	8

* The denominator is the 36 intervention group families who were initially enrolled in the intervention group for whom one or more follow-up Family Status Sheets were submitted.
 NOTE: Percentages may not total 100 percent because of rounding.

Table 5b shows the services received by that subgroup of intervention group families who participated in the six-month follow-up research assessment. These are the 11 families included in the intervention group in the retained sample for the Dallas program. Table 5b shows the services they received within the six-month period between baseline and the six-month assessment. Thirteen (81 percent) of the 16 families in the retained sample received at least one session with a Project Support therapist. Among the 13 that received services, the number of sessions received ranged from four to 28, with an average of 14 total sessions. Service ending data were reported on 13 of the 16 families shown in Table 5b. Of those, seven (54 percent) families ended the treatment after satisfactory completion, and six (46 percent) discontinued their participation prior to completion.

Table 5b
Six-Month Services Received by Dallas Safe Start Intervention Families (Six-Month Analysis Sample)

Service	Number with Service	Percentage with Service*	Range	Distribution	Mean	Median
Total Project Support Therapy Sessions (combining case management and family therapy)	13	81%	4–28	4–6 31% 7–13 23% 14–20 31% 21+ 15%	14	12

* The denominator is the 16 intervention group families with a follow-up Family Status Sheet at the six-month assessment point who participated in the six-month research assessment.

NOTE: Percentages may not total 100 percent because of rounding.

Given the sample size, we were unable to utilize dosage information in further analyses (such as creating variables that examine outcomes for families receiving a low, medium, or high intervention dose).

Outcomes Analysis

Then for the primary, secondary, and tertiary outcomes, we examine differences between the intervention and control group at each follow-up assessment point and changes over time from baseline scores in the following sections, using an intent-to-treat approach that included all families allocated to the intervention, regardless of the level of service they received. For the Dallas program, there were only adequate sample sizes to conduct comparisons between groups at the six-, 12-, 18-, and 24-month assessment points. Thus, only these results are discussed in this report.

Comparison of Means Between Groups

A summary of differences in overall group means for the intervention and control groups at each assessment point for Dallas' primary, secondary, and tertiary outcomes is depicted in the appendix. As previously discussed, there was a significant difference between the groups at baseline on caregiver personal problems and on parental distress, in the direction of intervention group caregivers reporting greater difficulty. At the follow-up assessment time points, however, no other statistically significant differences were observed on any of the measures (see Tables A.1, A.2, and A.3).

Mean Differences over Time

Table 6 shows differences over time for the Dallas program's primary outcomes, comparing changes for each individual family between baseline and six months. In the second column of numbers in Table 6, the mean change between six-month scores and baseline scores is shown for each group. The comparison here is whether there was significant change on the outcomes for the families in each group separately (rather than a comparison of one group with the other).

As Table 6 shows, statistically significant changes between the baseline and six-month assessments occurred mostly within the control group. Specifically, the control group reported significant improvements on three measures of caregiver-child relationship (i.e., reductions in parental distress, difficult child reports, and total parenting stress). Within the intervention group, there was also a significant improvement on parental distress. The intervention

group also showed a nonsignificant trend toward decline in total parenting stress, but we cannot rule out that this may be due to chance because of the multiple significance tests being conducted. There were no significant findings when the amount of change was compared between the two groups (see Table 6, final column).

At the time of the 12-month follow-up, however, there were two statistically significant differences within the intervention group only. Relative to their baseline reports, intervention group families reported significant improvement on the caregiver-child relationship measures of parental distress and total parental distress. The control group experienced significant declines on every primary outcome measure, relative to baseline (data not shown).

In direct comparison of the intervention group to the control group on the amount of change, the only significant difference between the groups emerged on the parental distress subscale. Specifically, the intervention group caregivers reported experiencing significantly less parental distress at the 12-month mark (effect = -5.43) compared with caregivers in the control group. However, the sample size did not allow for analyses controlling for demographics. Still, an exploratory analysis conducted controlling only for gender (results not reported) shows that such significant estimate disappears even though the effect estimate is still large. This suggests a trend in the impact on parental distress that could possibly be confirmed with a larger sample size.

There were no significant differences within or between the groups on any measure at the 18-month assessment point.

For the 24-month assessments, significant declines emerged within both the intervention and control groups on parental distress, total parenting stress, and difficult child reports. Within the control group only, there were also significant declines in parent-child dysfunction and child externalizing behaviors. There were, however, no differences between the groups at 24 months on any of the primary outcomes. Table 7 shows the change over time for Dallas' secondary outcomes. Looking at the mean change between baseline and six months within each group separately, a significant decline in caregiver-reported PTSD symptoms was evident within the control group only, and two nonsignificant trends within the control group were observed on two school readiness measures. It is possible, however, that these latter trends are due to chance because of the multiple significance tests being conducted.

Within both groups, there were also significant differences on three measures of child exposure to violence. This is to be expected, as these measures compare lifetime exposure at baseline to exposure over only a six-month period. On the more meaningful comparison of the amount of decline between the two groups, the groups did not significantly differ. There was, however, a nonsignificant trend toward greater decline in witnessing violence among control group children, relative to those in the intervention. This trend may be due to chance because of the multiple significance tests being conducted (see the last column of Table 7).

Control group caregivers also reported a significant decline in non-violence-related traumas in the six-month period after baseline. Again, this particular finding is not surprising because baseline reports include traumas over a one-year period. The most noteworthy finding is a significant difference between the two groups on this measure. At six months, control group caregivers reported larger decreases in traumatic experiences than those in the intervention group (see Table 7, column 3). However, the sample size did not allow for analyses that controlled for demographics.

There was also a statistically significant *increase* in reports of non-domestic violence victimization among mothers in the treatment group in the six months following the baseline assessment. This finding may be due to the low base rate of such victimization in the year prior to the baseline assessment (see Table 7, column 2).

At the 12-month follow-up, there were several statistically significant within-group changes for the intervention group. These were significant declines in reported domestic violence victimization, caregiver experience of other victimization, child witnessing violence, child maltreatment, and total child victimization. There was one nonsignificant trend within the intervention group toward child improvement in affective strengths. However, we cannot rule out that it may be due to chance because of the multiple significance tests being conducted.

Significant improvements were found among the control group for all of these measures, as well as significant improvements on several others: reduction in caregiver traumatic experiences, caregiver report of the child internalizing behavior problems, emotional control, assertiveness, cooperation, child PTSD symptoms, and passage comprehension on the school readiness domain. However, when the two groups were compared on the amount of change on the

secondary outcomes, there were no significant differences between the groups (12-month results not shown).

At the 18-month mark, the same measures emerged as significant for the within-intervention group comparisons over time since the baseline assessment: declines in reported domestic violence victimization, caregiver experience of other victimization, child witnessing violence, child maltreatment, and total child victimization. These declines are relative to baseline levels. These same measures also show significant decline of the control group, with the addition of significant improvement for control group children in PTSD symptoms, one measure of school readiness (passage recognition) and reduction in child assault. Despite these within-group differences, there were no significant between group differences on any measure.

At the 24-month follow-up point, the same three child victimization measures and two caregiver victimization measures showed significant declines relative to baseline. There were also significant improvements in child internalizing problems, child PTSD symptoms, child assertiveness, and word identification on the school readiness domain. For the control group, significant declines (relative to baseline) were observed for child witnessing violence, maltreatment and overall victimization, caregiver domestic violence and other victimization, child PTSD symptoms, and passage comprehension on the school readiness domain. There was a nonsignificant reduction in child assault by this time point, but we cannot rule out that it may be due to chance because of the multiple significance tests being conducted. Like the previous two time points, there were no significant differences between the intervention and control group on any measure.

Table 8 shows the difference between the intervention and control group at each assessment point for Dallas' two tertiary outcomes on the six-month assessment. There was a significant difference within the intervention group only on the personal problems measures, indicating improvement over baseline. There were no differences on either tertiary outcome when the two groups were compared with each other on the amount of change. On the 12-month assessment, again there was a statistically significant decline among intervention group mothers in reported personal problems. A significant decline was also observed for the control group caregivers at this time point. This trend continues through the 18-month and the 24-month follow-up. By the 24-month point, only the control group reported a significant decline in resource problems relative to

baseline. When the two groups were compared with each other, there were no statistically significant differences between them on these measures at any time point (12-, 18-, and 24-month results not shown).

Table 6
Changes in Means for Primary Outcome Variables Between Baseline and Six-Month Assessment

Primary Outcome		N	Within-Family Mean Changes ^a	Group-Level Comparison of Mean Changes (Unadjusted Model) ^b
Behavior/Conduct Problems				
CR Child Behavior Problems for Ages 1–18	Intervention	16	–0.20	0.10
	Control	31	–0.29	
CR Child Externalizing Behavior Problems for Ages 3–18	Intervention	16	–1.63	0.63
	Control	32	–2.25	
Caregiver-Child Relationship				
CR Parental Distress for Ages 0–12	Intervention	16	–5.94 *	–2.94
	Control	32	–3.00 *	
CR Parent–Child Dysfunction for Ages 0–12	Intervention	16	–0.31	1.66
	Control	31	–1.97	
CR Difficult Child for Ages 0–12	Intervention	16	–3.19	0.68
	Control	31	–3.87 *	
CR Total Parental Stress for Ages 0–12	Intervention	16	–9.44 #	–0.37
	Control	31	–9.06 *	

^a This column reflects within-family mean changes between the baseline and six-month scores for each group separately. * indicates a significant paired t-test of differences over time.

^b This column reflects the group-level comparison of within-family mean changes from baseline to six months. * indicates a significant t-test of group differences.

NOTES: CR = Caregiver Report. # indicates a nonsignificant trend in the t-test ($p < 0.05$ but does not meet the FDR correction threshold). Mean change estimates are not shown when the group size is fewer than ten, and comparisons are not shown when the group size is fewer than ten for either group.

Table 7
Changes in Means for Secondary Outcome Variables Between Baseline and Six-Month Assessment

Secondary Outcome		N	Within-Family Mean Changes ^a	Group-Level Comparison of Mean Changes (Unadjusted Model) ^b
PTSD Symptoms				
CR Child PTSD Symptoms for Ages 3–10	Intervention	16	-3.75	0.31
	Control	32	-4.06 *	
Behavior/Conduct Problems				
CR Child Internalizing Behavior Problems for Ages 3–18	Intervention	16	-0.50	0.53
	Control	32	-1.03	
Social-Emotional Competence				
CR Child Affective Strengths for Ages 6–12	Intervention	7	1.18	
	Control	11		
CR Child School Functioning for Ages 6–12	Intervention	7	-1.91	
	Control	11		
CR Child Assertion for Ages 1–12	Intervention	16	-0.02	-0.04
	Control	31	0.02	
CR Child Self-Control for Ages 1–12	Intervention	16	0.24	0.11
	Control	31	0.13	
CR Child Cooperation for Ages 3–12	Intervention	15	0.60	-0.71
	Control	29	1.31	
Caregiver-Child Relationship				
CR Family Involvement for Ages 6–12	Intervention	7	0.73	
	Control	11		
School Readiness/Performance				
Letter Word Identification for Ages 3–18	Intervention	15	2.40	3.86
	Control	28	-1.46	
Passage Comprehension for Ages 3–18	Intervention	13	-1.23	1.48
	Control	28	-2.71 #	
Applied Problems for Ages 3–18	Intervention	12	0.75	-5.16
	Control	22	5.91 #	
Violence Exposure				
CR Total Child Victimization Experiences for Ages 0–12	Intervention	16	-2.56 *	0.88
	Control	32	-3.44 *	
CR Child Maltreatment for Ages 0–12	Intervention	16	-0.81 *	-0.01
	Control	31	-0.81 *	
CR Child Assault for Ages 0–12	Intervention	16	-0.44	-0.08
	Control	31	-0.35	
CR Child Sexual Abuse for Ages 0–12	Intervention	16	0.00	0.00
	Control	32	0.00	
CR Child Witnessing Violence for Ages 0–12	Intervention	16	-1.38 *	0.94 #
	Control	32	-2.31 *	
CR Caregiver Total Number of Traumatic Experiences	Intervention	16	0.13	0.53 *
	Control	32	-0.41 *	

Table 7—continued

Secondary Outcome		N	Within-Family Mean Changes ^a	Group-Level Comparison of Mean Changes (Unadjusted Model) ^b
Violence Exposure				
CR Caregiver Experience of Any Non-DV Traumas ^c	Intervention	16	0.06 *	0.09
	Control	32	-0.03	
CR Caregiver Experience of Any Domestic Violence ^c	Intervention	16	-0.75 *	0.03
	Control	32	-0.78 *	

^a This column reflects within-family mean changes between the baseline and six-month scores for each group separately. * indicates a significant paired t-test of differences over time.

^b This column reflects the group-level comparison of within-family mean changes from baseline to six months. * indicates a significant t-test of group differences.

^c This outcome is a categorical variable, and the unadjusted within-family mean change and the group-level comparison are changes in proportion, while the covariate-adjusted group-level comparison is the difference in proportions obtained from a linear probability model.

NOTES: CR = Caregiver Report; DV = domestic violence. # indicates a nonsignificant trend in the t-test ($p < 0.05$ but does not meet the FDR correction threshold). Mean change estimates are not shown when the group size is fewer than ten, and comparisons are not shown when the group size is fewer than ten for either group.

**Table 8
Changes in Means for Tertiary Outcome Variables Between Baseline and Six-Month Assessment**

Tertiary Outcome		N	Within-Family Mean Changes ^a	Group-Level Comparison of Mean Changes (Unadjusted Model) ^b
Background and Contextual Factors				
CR Caregiver Resource Problems	Intervention	16	-2.13	-0.09
	Control	32	-2.03	
CR Caregiver Personal Problems	Intervention	16	-3.63 *	-2.97
	Control	32	-0.66	

^a This column reflects within-family mean changes between the baseline and six-month scores for each group separately. * indicates a significant paired t-test of differences over time.

^b This column reflects the group-level comparison of within-family mean changes from baseline to six months. * indicates a significant t-test of group differences.

NOTES: CR = Caregiver Report. # indicates a nonsignificant trend in the t-test ($p < 0.05$ but does not meet the FDR correction threshold). Mean change estimates are not shown when the group size is fewer than ten, and comparisons are not shown when the group size is fewer than ten for either group.

CONCLUSIONS

Dallas' Safe Start Program implemented Project Support, a family therapy approach that integrated case management into therapy sessions delivering a skills-based parenting intervention. The services were delivered to child-mother pairs who were identified within a domestic violence shelter population. The evaluation consisted of a randomized controlled trial of the intervention. The program initially enrolled 85 families, with 56 percent of them retained by the time of the six-month assessment. Attrition, however, was not equal across the two groups: 67 percent of the control group was retained, whereas 43 percent of the intervention group remained in the study. We can provide only limited insight into this differential attrition. One possibility is that the higher rate of caregiver personal problems evident within the intervention group at baseline meant that these mothers were less able to engage in the intervention at all. This would be consistent with the findings that only 56 percent of the families randomized to the intervention received even one program session. Indeed, our process evaluation interviews revealed that program staff viewed treatment group mothers as feeling overwhelmed and feeling unable to focus on parenting skills immediately post-shelter exit. The program's case management component was expected by the program to help ease the burden on mothers so that they could more effectively engage in the therapy portion of the program (see Schultz et al., 2010). Thus, it could be that the case management portion of the services prevented or slowed attrition once families began services but that the bulk of intervention group families were lost even before treatment could begin. Of those intervention group families that continued to participate in the research assessments, the majority were reported to have successfully completed the program.

For the families that were retained in the study, there were some within-group improvements, but the key consideration is whether the intervention group fared better than the control group when the two were compared with each other. There were only two measures on which a between-group difference emerged. In one, at the six-month mark, control group caregivers reported experiencing a larger decrease in traumatic experiences as compared with the intervention group. The meaning of this difference is unclear, but, because it was not a sustained difference over time, it may not be particularly meaningful. At the 12-month mark, intervention group caregivers reported experiencing

significantly less parental distress compared with caregivers in the control group. However, the sample size did not allow for analyses controlling for multiple demographics. Still, an exploratory analysis conducted controlling only for child gender shows that the difference is no longer significant. Overall, however, the sample size limitations mean that no overall conclusions can be drawn about the effectiveness of the Dallas Safe Start intervention as implemented on child and family outcomes. The evaluation ended early because of funding constraints when the appropriation for Safe Start was curtailed, which may have affected the sample size. In addition to the small sample size, there were several other limitations that make the results more challenging to interpret. That is, a larger sample size might have allowed for the detection of statistically significant changes associated with the Safe Start services. It is possible that interventions focused on violence could heighten caregiver's sensitivity to and recognition of their child's symptoms and thus any intervention effect may be obscured by caregiver reports of increased or level symptoms. It is also possible that intervention effects may not be as observable in the earlier follow-up time points with the largest sample sizes, particularly for interventions that may result in symptoms worsening temporarily before they improve. The inability to detect significant differences between the groups may also have been due to the particular outcomes measured. That is, the Dallas Safe Start program may have improved the lives of children and families in ways that were not measured (or were measured inadequately) in this study. Another possibility is that the monthly contact and limited case management services provided to the study's control group (see Schultz et al., 2010) may have reduced the amount of difference between the two groups. Finally, the differential retention between the two groups may mean that selection bias played a role in the outcomes observed.

Overall, the Dallas Safe Start program implemented an intervention for a population facing multiple challenges, particularly parenting in a time of transition from domestic violence housing. The program's simultaneous attention to case management and therapy was designed to help address basic needs of the family so that mothers could focus more attention on parenting. Unfortunately, a small retained sample at each wave and probable systematic bias due to differential retention over time greatly hampered our ability to comment on the effectiveness of this approach in improving outcomes for children. It may be that the program benefits those families who have more capacity to engage initially in the intervention. Thus, future directions for

program development and research should focus close attention on identifying and addressing potential barriers to initial intervention engagement, as well as retention over time.

REFERENCES

- Achenbach, T., *Manual for the Child Behavior Checklist/4-18 and 1991 Profile*, Burlington, Vt.: University of Vermont, Department of Psychiatry, 1991.
- Benjamini, Y., and Y. Hochberg, "Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing," *Journal of the Royal Statistical Society, Series B*, Vol. 57, 1995, pp. 289–300.
- Cohen, J., *Statistical Power Analysis for the Behavioral Sciences*, Hillsdale, N.J.: Lawrence Erlbaum Associates, Inc., 1988.
- Jouriles, E. N., R. McDonald, L. Spiller, W. D. Norwood, P. R. Swank, N. Stephens, H. Ware, and W. M. Buzy, "Reducing Conduct Problems Among Children of Battered Women," *Journal of Consulting and Clinical Psychology*, Vol. 69, No. 5, 2001, pp. 774–785.
- McDonald, R., E. N. Jouriles, and N. A. Skopp, "Reducing Conduct Problems Among Children Brought to Women's Shelters: Intervention Effects 24 Months Following Termination of Services," *Journal of Family Psychology*, Vol. 20, No. 1, 2006, pp. 127–136.
- Schultz, D., L. H. Jaycox, L. J. Hickman, A. Chandra, D. Barnes-Proby, J. Acosta, A. Beckman, T. Francois, and L. Honess-Morealle, *National Evaluation of Safe Start Promising Approaches: Assessing Program Implementation*, Santa Monica, Calif.: RAND Corporation, TR-750-DOJ, 2010. As of July 17, 2011: http://www.rand.org/pubs/technical_reports/TR750.html
- Southern Methodist University, *Funding Proposal to the Office of Juvenile Justice and Delinquency Prevention — CFDA Title: Safe Start: Promising Approaches for Children Exposed to Violence*, Dallas, Tex.: Southern Methodist University, 2004.

DALLAS OUTCOMES APPENDIX

Table A.1
Comparison of Means for Dallas Primary Outcome Variables

		Baseline			Six Months		12 Months		18 Months		24 Months	
Primary Outcome		N	Mean	P-Value	N	Mean	N	Mean	N	Mean	N	Mean
Behavior/Conduct Problems												
CR Child Behavior Problems for Ages 1–18	Intervention	37	0.41		16	0.29	16	0.25	14	0.253	12	0.14
	Control	48	0.36		32	0.30	26	0.15	19	0.278	14	-0.02
CR Child Externalizing Behavior Problems for Ages 3–18	Intervention	37	32.32		16	29.13	16	27.94	14	28.21	12	25.83
	Control	48	32.33		32	30.09	26	28.58	19	29.42	14	26.43
Caregiver-Child Relationship												
CR Parent Distress for Ages 0–12	Intervention	37	36.49	*	16	33.00	16	27.69	14	26.07	12	23.58
	Control	48	30.90		32	27.94	26	28.35	19	28.11	14	25.14
CR Parent-Child Dysfunction for Ages 0–12	Intervention	37	25.49		16	25.00	16	22.88	14	23.21	12	22.75
	Control	47	25.91		32	23.69	26	22.27	19	24.21	14	21.29
CR Difficult Child for Ages 0–12	Intervention	37	36.08		16	33.13	16	30.00	14	30.86	12	26.42
	Control	47	33.68		32	30.19	26	29.50	19	30.42	14	27.00
CR Total Parenting Stress for Ages 0–12	Intervention	37	98.05		16	91.13	16	80.56	14	80.14	12	72.75
	Control	47	90.47		32	81.81	26	80.12	19	82.74	14	73.43

* indicates statistically significant (p-value<FDR significance criterion); # indicates nonsignificant trend (p<0.05 and >FDR significance criterion).
 NOTES: CR = Caregiver Report. Data are not shown for outcomes when the cell size is fewer than five for the group. Comparisons were not tested when the group size was fewer than ten for either group.

Table A.2
Comparison of Means for Dallas Secondary Outcome Variables

		Baseline		Six Months		12 Months		18 Months		24 Months	
Secondary Outcome		N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
PTSD Symptoms											
CR Child PTSD Symptoms for Ages 3–10	Intervention	37	47.03	16	39.00	16	38.56	14	40.71	12	34.75
	Control	48	46.13	32	39.81	26	36.58	18	35.78	14	35.71
SR Child PTSD Symptoms for Ages 8–12	Intervention	3		1		3		3		4	
	Control	7		4		5		5		5	
Depression											
SR Child Depressive Symptoms for Ages 8–18	Intervention	3		1		3		3		4	
	Control	7		4		5		5		5	
Behavior/Conduct Problems											
CR Child Internalizing Behavior Problems for Ages 3–18	Intervention	36	16.78	16	15.06	16	14.81	14	15.57	11	14.18
	Control	48	17.25	32	15.56	26	15.50	18	15.67	14	14.29
Social-Emotional Competence											
CR Child Affective Strengths for Ages 6–12	Intervention	17	14.18	7		10	17.50	8		9	
	Control	21	13.95	13	15.46	15	17.60	10	15.60	9	

Table A.2—continued

		Baseline		Six Months		12 Months		18 Months		24 Months	
Secondary Outcome		N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Social-Emotional Competence											
CR Child School Functioning for Ages 6–12	Intervention	16	15.75	7		10	19.30	8		9	
	Control	21	16.05	13	16.00	15	19.93	10	18.90	9	
CR Child Assertion for Ages 1–12	Intervention	37	-0.40	16	-0.12	16	0.08	14	-0.07	12	0.19
	Control	47	-0.10	32	-0.04	26	0.06	18	-0.06	14	0.15
CR Child Self-Control for Ages 1–12	Intervention	37	-0.45	16	-0.27	16	-0.21	14	-0.49	12	-0.23
	Control	47	-0.35	32	-0.18	26	0.02	18	-0.41	14	0.16
CR Child Cooperation for Ages 3–12	Intervention	35	9.74	16	9.25	13	11.08	14	10.64	9	
	Control	46	10.13	30	11.10	24	11.71	18	9.33	12	11.00
Caregiver-Child Relationship											
CR Family Involvement for Ages 6–12	Intervention	17	21.18	7		10	24.30	8		9	
	Control	21	21.00	13	23.62	15	23.87	11	22.91	9	
School Readiness/Performance											
Letter Word Identification for Ages 3–18	Intervention	34	-6.26	16	-2.44	16	-4.25	14	-0.64	11	0.55
	Control	45	-2.78	30	-3.87	24	-5.46	17	-1.00	14	1.86
Passage Comprehension for Ages 3–18	Intervention	33	-0.36	16	-0.56	16	-3.25	14	-0.50	11	-3.27
	Control	42	0.98	30	0.63	22	-0.95	16	-3.81	13	-6.00

Table A.2—continued

		Baseline		Six Months		12 Months		18 Months		24 Months	
Secondary Outcome		N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
School Readiness/Performance											
Applied Problems for Ages 3–18	Intervention	31	-7.03	15	-5.73	15	-5.93	14	-5.14	11	2.09
	Control	40	-7.28	28	-3.11	23	-3.70	17	-3.35	14	-3.21
Violence Exposure											
CR Total Child Victimization Experiences for Ages 0–12	Intervention	37	4.84	16	1.25	16	0.88	14	1.00	12	0.67
	Control	48	5.15	32	1.25	26	1.38	18	0.94	14	0.64
CR Child Maltreatment for Ages 0–12	Intervention	37	1.16	16	0.13	16	0.06	14	0.21	12	0.08
	Control	47	1.23	32	0.13	26	0.23	18	0.11	14	0.07
CR Child Assault for Ages 0–12	Intervention	37	0.84	16	0.19	16	0.31	14	0.14	12	0.25
	Control	47	1.04	32	0.50	26	0.54	18	0.17	14	0.07
CR Child Sexual Abuse for Ages 0–12	Intervention	37	0.08	16	0.00	16	0.00	13	0.00	12	0.00
	Control	48	0.13	32	0.06	26	0.00	18	0.00	14	0.00
CR Child Witnessing Violence for Ages 0–12	Intervention	37	2.41	16	0.63	16	0.19	14	0.43	12	0.17
	Control	48	2.56	32	0.28	26	0.42	18	0.39	14	0.21
CR Caregiver Total Number of Traumatic Experiences	Intervention	37	0.24	16	0.25	16	0.19	14	0.14	12	0.17
	Control	48	0.44	32	0.19	26	0.12	18	0.22	14	0.00

Table A.2—continued

		Baseline		Six Months		12 Months		18 Months		24 Months	
Secondary Outcome		N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Violence Exposure											
CR Caregiver Experience of Any Non-DV Trauma	Intervention	37	0.38	16	0.19	16	0.13	14	0.07	12	0.08
	Control	48	0.31	32	0.22	26	0.00	18	0.06	14	0.07
CR Caregiver Experience of Any DV	Intervention	37	1.00	16	0.25	16	0.06	14	0.14	12	0.00
	Control	48	0.98	32	0.19	26	0.23	18	0.17	14	0.14

* indicates statistically significant (p-value<FDR significance criterion); # indicates nonsignificant trend (p<0.05 and >FDR significance criterion).
 NOTES: CR = Caregiver Report; DV = domestic violence; SR = Child Self-Report. Data are not shown for outcomes when the cell size is fewer than five for the group. Comparisons were not tested when the group size was fewer than ten for either group.

Table A.3
Comparison of Means for Dallas Tertiary Outcome Variables

		Baseline		Six Months		12 Months		18 Months		24 Months	
Tertiary Outcome		N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Background and Contextual Factors											
CR Caregiver Resource Problems	Intervention	37	17.38	16	15.94	16	14.50	14	13.64	12	14.50
	Control	48	18.56	32	15.34	26	14.62	18	14.94	14	12.07
CR Caregiver Personal Problems	Intervention	37	28.89 *	16	26.81	16	24.44	14	21.86	12	21.50
	Control	48	25.00	32	23.75	26	23.96	18	24.83	14	21.57

* indicates statistically significant (p-value<FDR significance criterion); # indicates nonsignificant trend (p<0.05 and >FDR significance criterion).
 NOTES: CR = Caregiver Report. Data are not shown for outcomes when the cell size is fewer than five for the group. Comparisons were not tested when the group size was fewer than ten for either group.