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Abstract Title Page
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Title: Parent Involvement and Child Development: First-Year Results from a School-Randomized Trial in Latino Communities

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Abstract Body

Limit 5 pages single spaced.

Background/context:

Description of prior research, its intellectual context and its policy context.

Unequal development among children from different racial and ethnic groups is a pervasive feature of U.S. society. Differences in social and cognitive characteristics are evident among children before they enter formal schooling and increase as they age (e.g., Downey, von Hippel, & Broh, 2004; Entwisle, Alexander, & Olson, 1997; Lee & Burkam, 2002; West, Denton, & Geronimo-Hausken, 2000). Material sources of disadvantage are widely recognized, but economic aspects of family background tell only part of the story (e.g., Jencks & Phillips, 1998). Social scientists have increasingly noted that the ecological aspects of development—the variety of institutions that impinge on children's lives, and the relations among these institutions—also contribute to inequalities among children from different racial, ethnic, and economic backgrounds.

Institutional sources of disadvantage may be particularly salient for Latino children as compared with non-Hispanic whites. First, it is clear that Latinos are substantially disadvantaged in the education system. Test scores of Latinos lag far behind those of non-Hispanic whites, and since the late 1980s the gap has shown little sign of narrowing (Campbell, Hombo, & Mazzeo, 2000). Second, a sense of isolation from school systems often perceived by Latino families is a key barrier to the school success of Latino children (Valenzuela, 1999; Stanton-Salazar, 2001). Although Latinos commonly exhibit strong ties among families, these social ties typically do not encompass the school (Flores-Gonzales, 2002; Suarez-Orosco, Suarez-Orosco, & Doucet, 2003). As a result, parents perceive a sense of separation and distance from school authorities (Stanton-Salazar, 2001). As Larson and Rumberger (1995) reported in a study of Latino teenagers in California:

> There were deep chasms in the relationship and communication between school and home. School personnel had many negative misconceptions about the motivations and values of parents. There was widespread belief that parents did not sufficiently value education and that they were unwilling to give sufficient time to rearing their children and participating in school activities. On the other hand, we found most parents to be fearful and alienated from school authorities while at the same time assigning expertise and responsibility to school personnel for educating their children. (p. A66)

An intervention that promotes stronger family-school relations is thus likely to improve academic and social development for Latino children in particular.

Purpose / objective / research question / focus of study:

Description of what the research focused on and why.

The purpose of this study is to test the effects on children's social, behavioral, and academic outcomes of an intervention, Families and Schools Together (FAST), when implemented in two novel ways: (a) in schools with predominantly Latino children and (b) on an entire grade-level cohort instead of with individual families targeted for the intervention.

The FAST program is a multi-family group prevention program that is implemented in three stages: (a) active outreach to engage parents; (b) an 8-week program of weekly multi-family group meetings; and (c) 2 years of follow-up monthly parent-led meetings. Previous randomized controlled trials have demonstrated positive effects of FAST on reducing child aggression and improving teacher-reported academic outcomes (Abt Associates, 2001; Kratochwill et al., 2004; McDonald et al., 2006). In these studies, children (or, in one case, classrooms) were targeted for the intervention and then matched pairs were randomly assigned to treatment or control. In this study, by contrast, schools were designated by participating school districts in San Antonio, TX, and Phoenix, AZ, and then schools were randomly assigned within district to treatment or control, enabling us to recruit the entire first-grade cohort of treatment schools for participation in FAST. (More details on the research design are provided below.)

Recruiting entire cohorts of families is intended to create stronger social networks of families and schools and thereby trigger an important potential mechanism for parent involvement: *social capital*, that is, relations of trust and shared expectations that support information flows and the reinforcement of positive school norms that help children succeed in school. While social capital has been examined in a variety of observational studies, its causal effects are suspect due to selectivity bias (Mouw, 2006). In this study, we use an intervention designed to manipulate social capital to test its causal effects.

Setting:
Description of where the research took place.

The study is taking place in one school district in the San Antonio metropolitan area and three school districts in the Phoenix metropolitan area. About 60% of students in both communities are of Latino background. However, San Antonio represents an older, well-established community whereas the Phoenix districts include a large proportion of recent immigrants including many undocumented immigrants.

Population / Participants / Subjects:
Description of participants in the study: who (or what) how many, key features (or characteristics).

A total of about 3000 first graders and their families will participate in the study; as of Year 1, over 1200 have been enrolled (see research design for details of phased implementation). Consistent with the focus on schools with high concentrations of Latino children, schools were eligible for the study if at least 25 percent of their students were of Latino origin. Thus, the proportion of Latino students in the study, about 70 percent, is somewhat greater than that of the districts in which the schools are located. In addition to Latinos, other minority groups are represented at lower levels, with 11 percent African American, 1.5 percent Asian American, and 1.5 percent Native American. About 75% of students in the sample receive free or reduced-price lunch.

Intervention / Program / Practice:
Description of the intervention, program or practice, including details of administration and duration.

In the intervention for this study, a trained team of parents and professionals leads FAST sessions for about 60 families of first graders in each school for 8 weeks, followed by 2 years of

parent-run monthly meetings. Until recently, FAST has been implemented as one group of 5–10 families of at-risk children. In this study, the program is being implemented with multiple groups of 5–10 families universally recruited (not targeted for particular at-risk conditions) meeting simultaneously to build relationships (a) between parents and their elementary school children, (b) between parents and other parents of children attending the same school, and (c) between children, parents, and teachers.

Description of FAST sessions. At FAST sessions, families sit at their own tables for one hour of parent-led family activities, during which the parent directs the child and his or her siblings in their native language. The child listens to the instructions, while also observing that the parent knows what to do at the school (whether the parent is literate in English or not). The children listen to their parents for directions, draw pictures, take turns, and explain their ideas and feelings. These non-didactic activities usually generate family laughter; because the program takes place at the school, the good feelings generalize across both home and school settings. The positive experience reduces the anxiety a child might feel about being at school, which supports the learning process with the teacher.

FAST meetings also include an hour of peer group time, during which children play together in a separate setting while the adults talk in groups of 5 to 10. High school volunteers, who are doing community service with school faculty, generate and lead activities for the children's time. The child sees the school faculty in a more informal role, leading fun activities. At the same time, the small groups of parents discuss topics of their choice and share advice in the language of choice. An active social network of parents grows in the school setting; because they get to know and trust one another, they are more likely to return to the school for other events. The peer group and parent time is followed by 15 minutes of one-to-one parent-child time, during which the child takes the lead in playing. The parent pays full attention and does not criticize or interrupt. None of these activities demands parental literacy or mastery of English. Repeating this special play time is the parent "homework."

Follow-up to FAST. The eight weekly meetings of FAST are followed by 2 years of monthly meetings at the school. The responsibility for facilitating the after-school family support groups becomes that of the parents who have graduated from FAST. The follow-up meetings, known as FASTWORKS, provide a supportive structure for increased parent involvement at school, which becomes self-sustaining as it maintains the newly formed relationships. Especially for minority-culture parents, such a structure is welcomed as a way of finding out the "appropriate" way to negotiate the school institution for their children's success.

Fidelity of implementation. FAST has a quality assurance structure that has supported treatment integrity in program implementation in schools in both urban and rural settings and across diverse ethnic and socioeconomic groups. The quality assurance structure involves certified FAST trainers who conduct multiple site visits to train teams using FAST manuals and video materials. Subsequently, the trainers observe implementation and complete the Program Integrity Checklist to ensure fidelity of implementation. Trainers make three site visits during the eight weekly meetings and two site visits per year for the monthly FASTWORKS sessions. These site visits include assessment and debriefing so that program integrity can be maintained and local adaptations noted.

Research Design:
Description of research design (e.g., qualitative case study, quasi-experimental design, secondary analysis, analytic essay, randomized field trial).

The study design is a blocked, cluster-randomized trial with school districts as blocks and schools as clusters. A total of 26 eligible schools were identified in the San Antonio district and 26 from the three Phoenix districts combined, for a total of 52 participating schools. Schools were randomly assigned within blocks to the first year or second year of implementation (24 to the first year and 28 to the second year). Then, schools were randomly assigned within blocks and years to treatment and control groups. The result is a randomly selected 12 treatment and 12 control schools in Year 1 and 14 treatment and 14 control schools in Year 2. Table 1 shows that the randomization was successful: there are no significant differences in observed demographic or academic performance measures between schools assigned to the treatment and control groups.

In Year 1 (2008-2009), which is the focus of this paper, implementation occurred in three phases – fall, winter, and spring – with two treatment and two control schools in each phase. Overall, just under 60% of families in both treatment and control schools consented to participate in the study; differential recruitment was less than 2 percent (58.5 versus 56.9 percent in treatment and control, respectively). The high rate of non-participation limits the generalizability of the results, but the lack of differential participation means the impact estimates will still be unbiased. Virtually all families in treatment schools who consented to participate in the study also consented to participate in FAST.

Power calculations for the study as a whole (52 schools) indicate a minimum detectable effect size as low as .18 for student achievement, which has available a strong pre-treatment covariate (prior achievement), and .24 for outcomes such as student behavior for which pre-treatment covariates are weaker. For this paper, the reliance on Year 1 data only (24 schools) results in a minimum detectable effect size of .28 for achievement and .37 for social and behavioral outcomes. Figure 1 displays both sets of power calculations. Thus, results from the first year alone should be interpreted with caution as findings that cannot be reliably distinguished from zero in the first year may turn out to be significant when the full data set is available.

Data Collection and Analysis:
Description of the methods for collecting and analyzing data.

The larger study relies on mixed methods but analyses for this paper consist of quantitative tests of the hypothesis that assignment to treatment enhances children's social and behavioral outcomes. Data collection includes surveys of parents and teachers; interviews and focus groups with parents, teachers, principals, and FAST team members; observations of FAST sessions; and school administrative records which, in Year 3, will include student performance on high-stakes standardized tests of achievement in reading and mathematics. For this paper, data are drawn from teacher surveys (measures of child outcomes) and administrative records (child social background measures). Over 95 percent of treatment and control school teachers in Year 1 completed questionnaires on their individual students. (The response rate among parents was 67 percent, again with no differential response from those in treatment and control schools.)

Child outcomes. For this paper, outcomes are assessed with the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997), a widely used instrument for assessing social adjustment and behavioral problems. The SDQ taps five dimensions of psychological functioning: emotional symptoms, behavior problems, hyperactivity/inattention, peer relationship problems, and prosocial behavior. It has been used in a range of contexts with reliabilities between .7 and .8 in the U.S., U.K., Australia, and elsewhere (Goodman, 2001; Hawes & Dadds, 2004; Bourdon et al., 2005). The SDQ can be completed by parents and teachers; for this paper, we use teacher reports provided approximately one month after the completion of FAST.

Statistical analyses. Data are analyzed with multi-level models as is appropriate for cluster-randomized designs (Raudenbush, 1997). Dummy variables for school, year, and phase (fall, winter, spring) are included as school-level covariates, as are average school achievement from the year prior to intervention. The treatment effect is measured at the school level because schools were the unit of randomization. Student-level indicators of gender, race/ethnicity, language, minority status, and free/reduced-price lunch are included at the student level.

Findings / Results:
Description of main findings with specific details.

At this point, results are available only for the first 8 schools (fall administration of Year 1). Consequently, only suggestive findings can be reported, and we will confine ourselves to simple descriptions of treatment-control comparisons rather than the full multilevel models. Full results for the 24 Year-1 schools will be reported in the complete paper.

As revealed in Table 2, teacher ratings of child behavior are consistently better in treatment schools than in control schools. Again, we caution that the data come from only 8 schools and the student-level chi-square tests are provided purely as a heuristic to draw attention to notable differences, not as tests of null hypotheses. Still, these findings are highly suggestive and lead us to anticipate meaningful differences when the full data are examined in multilevel models. For example, 59 percent of students in treatment schools were rated as "certainly" well-behaved, as compared with 47 percent of students in control schools, and 67 percent as compared with 54 percent "certainly" had at least one good friend in treatment and control schools, respectively. Interestingly, the data show some evidence of polarization, in that on some items, students in treatment schools are overrepresented in both the "certainly true" and "not true" categories. For example, on whether a student "thinks things out before acting," treatment students were rated more often than control students in both the "not true" category (17 percent versus 10 percent) and the "certainly true" category (35 percent versus 23 percent). For the complete paper to be presented at the conference, these results will be combined into the five dimensions of the SDQ and examined with the multilevel models described above.

Conclusions:
Description of conclusions and recommendations based on findings and overall study.

If the findings hinted at here hold up to further scrutiny, the results of this study will indicate that the FAST intervention, a multi-family program that strengthens family-school relations by bringing children and their parents into schools for a series of after-school programs, is effective at improving child well-being.

Appendices

Not included in page count.

Appendix A. References

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Appendix B. Tables and Figures

Not included in page count.

Table 1. Randomization Check: Comparison of Treatment and Control Schools on Pre-Treatment Indicators

	Treatment Schools	Control Schools	t-test p-value
Enrollment	722.3	762.2	0.509
% Average Attendance	95.8	95.9	0.644
% African American	10.8	10.8	0.994
% Native American	1.0	1.4	0.497
% Asian	1.4	1.4	0.861
% Hispanic	71.5	75.0	0.501
% White	15.2	11.8	0.448
% Free-Reduced Lunch	76.9	76.7	0.958
% Limited English Proficient	23.6	19.8	0.340
% Special Education	11.6	11.4	0.755
% Proficient in Reading	73.6	70.7	0.630
% Proficient in Math	71.9	69.4	0.614
% Adequate Yearly Progress	72.0	70.8	0.930

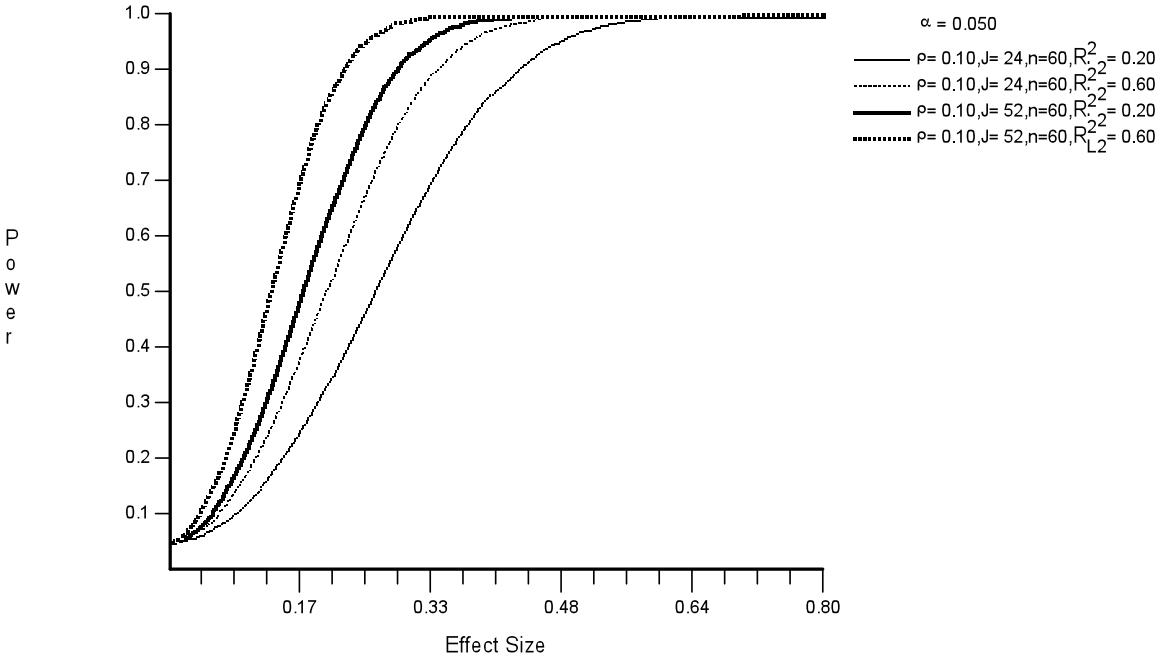
Note: N= 26 treatment and 26 control schools.

Table 2. Social skills and problem behavior by treatment (n=336 children in 8 schools)

		Not True	Somewhat True	Certainly True	Chi2	
a. Considerate of other people's feelings	control	3.05	52.67	44.27		
	treatment	3.92	38.73	57.35	6.29	*
b. Restless, overactive, cannot stay still for long	control	56.49	30.53	12.98		
	treatment	59.31	25.00	15.69	1.41	
c. Often complains of headaches, stomachaches, or	control	78.63	14.50	6.87		
	treatment	77.34	19.21	3.45	2.98	
d. Shares readily with other children, e.g., toys or treats	control	4.58	58.02	37.40		
	treatment	6.37	38.73	54.90	11.95	**
e. Often loses temper	control	87.02	8.40	4.58		
	treatment	87.25	11.27	1.47	3.52	
f. Rather solitary, prefers to play alone	control	79.39	16.03	4.58		
	treatment	83.33	12.75	3.92	0.85	
g. Generally well behaved, usually does what adults	control	3.82	48.85	47.33		
	treatment	9.80	30.88	59.31	12.73	**
h. Many worries or often seems worried	control	82.44	14.50	3.05		
	treatment	76.96	20.10	2.94	1.70	
i. Helpful if someone is hurt, upset, or feeling ill	control	6.87	52.67	40.46		
	treatment	8.82	36.76	54.41	8.25	*
j. Constantly fidgeting or squirming	control	61.83	25.19	12.98		
	treatment	66.67	16.67	16.67	3.90	
k. Has at least one good friend	control	5.34	40.46	54.20		
	treatment	5.39	26.96	67.65	6.82	*
l. Often fights with other children or bullies them	control	80.92	16.03	3.05		
	treatment	85.22	9.85	4.93	3.32	
m. Often unhappy, depressed or tearful	control	85.50	13.74	0.76		
	treatment	88.73	9.31	1.96	2.28	
n. Generally liked by other children	control	3.05	40.46	56.49		
	treatment	4.41	29.41	66.18	4.47	
o. Easily distracted, concentration wanders	control	45.80	37.40	16.79		
	treatment	50.98	31.37	17.65	1.33	
p. Nervous in new situations, easily loses confidence	control	62.60	33.59	3.82		
	treatment	65.52	29.06	5.42	1.06	
q. Kind to younger children	control	0.00	61.07	38.93		
	treatment	3.45	41.38	55.17	15.11	**
r. Often lies or cheats	control	84.73	12.98	2.29		
	treatment	84.31	10.78	4.90	1.73	
s. Picked on or bullied by other children	control	90.08	9.16	0.76		
	treatment	89.66	7.39	2.96	2.14	
t. Often offers to help others (parents, teacher, or children)	control	8.40	47.33	44.27		
	treatment	7.35	42.65	50.00	1.05	
u. Thinks things out before acting	control	10.69	66.41	22.90		
	treatment	17.73	47.29	34.98	11.79	**
v. Steals from home, school, or elsewhere	control	95.42	4.58	0.00		
	treatment	93.63	4.90	1.47	1.97	
w. Gets along better with adults than with other children	control	50.38	46.56	3.05		
	treatment	72.91	25.12	1.97	17.61	**
x. Has many fears or is easily scared	control	90.08	8.40	1.53		
	treatment	82.84	13.73	3.43	3.51	
y. Good attention span, completes chores or homework	control	12.21	46.56	41.22		
	treatment	18.63	33.33	48.04	6.48	*

†p<0.10 *p<0.05 **p<0.01 ***p<0.001

Figure 1. Minimum Detectable Effect size (MDE) after Year 1 (24 schools) and Year 2 (52 schools)



Note: In Year 1, with 24 schools, MDE with alpha = .05 and power = .8 is .28 with R2 = .6 and .37 with R2 = .2

When the sample size is complete with 52 schools in Year 2, MDE will be is .18 with R2 = .6 and .24 with R2 = .2