

Abstract Title Page
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Title: Effects of a Multi-Family Intervention on Social Capital and Child Outcomes

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Abstract Body

Limit 5 pages single spaced.

Background / Context:

Description of prior research and its intellectual context.

Following the seminal writing of James Coleman (1988), a number of scholars have suggested that inequality in child and adolescent development reflects differences in social capital among families from different backgrounds (e.g., Sampson, Morenoff, & Earls, 1999; Crosnoe, 2004; Kao, 2004). By “social capital,” Coleman referred to relations of trust and shared expectations in a social network of children, parents, and educators. A key marker of social capital is “intergenerational closure,” that is, whether the parents of children in a friendship relation have a relationship themselves, so that social ties link parents as well as their children. These ties are said to promote child development because they enhance the prospects for establishing and enforcing norms, and because they support the flow of information that parents need to guide their children towards success in school and social relationships (Coleman, 1990).

Questions about social capital are especially salient for Latino families. Several studies have noted that a sense of isolation from school systems often perceived by Latino families is a key barrier to the school success of Latino children (Stanton-Salazar, 2001; Valenzuela, 1999). Although Latinos commonly exhibit strong ties among families, these social ties typically do not encompass the school (Flores-Gonzales, 2002; Suarez-Orosco et al., 2003). The networks of middle-class parents are significantly more likely to include educators and other professionals, but the networks of working-class and poor families tend to emphasize kinship groups (Horvat et al., 2003). As a result of these network differences, minority and socioeconomically disadvantaged parents perceive a sense of separation and distance from school authorities (Stanton-Salazar, 2001). Writers in this literature have speculated that the network differences account for part of the achievement and attainment gaps between Latinos and Whites. This conclusion, however, takes as a given that social capital has positive effects on children’s outcomes.

Efforts to test for social capital effects have largely been stymied by problems of endogeneity and unobserved heterogeneity (Mouw, 2006). Does social capital promote child development, or do positive relations emerge among parents and between families and schools when children are thriving in school? The best way to test for causal effects would be to randomly allocate persons to social networks, but that is not feasible. Instead our approach is to randomly assign schools to an intervention that is designed to promote social capital among families and between families and schools.

Purpose / Objective / Research Question / Focus of Study:

Description of the focus of the research.

In our approach, we can obtain experimental estimates of the effects of the family-school intervention on social capital and on child outcomes by comparing these outcomes in treatment and control schools. Estimates of the mediating role of social capital can be interpreted as experimental only if a strong assumption holds: that there is no source of social capital other than family-school intervention. This assumption is not tenable. However, we can obtain quasi-

experimental estimates of the mediating role of social capital using an instrumental variables approach with assignment to the intervention as an instrument (Stapleton, 2010). This approach rests on the more reasonable assumption that the intervention effects operate only through social capital, even though there may be other sources of variation in social capital besides the intervention. Another complication is that due to non-compliance, intent-to-treat effects may be substantially weaker than treatment-on-treated effects. For this reason we estimate causal average complier effects to gauge the impact of the intervention on participating families, compared to families in the control group that would have participated had the intervention been available to them.

With these concerns in mind, our research questions are as follows:

1. What are the effects of the intervention on social capital among families and between families and schools?
2. What are the effects of the intervention on children's social and behavioral outcomes immediately following the intervention?
3. Does social capital mediate the effects of the intervention on child outcomes?
4. What are the effects of the intervention on families and children among those who participated in the intervention (i.e., treatment-on-treated effects)?

Setting:

Description of the research location.

Because of our interest in Latino families, we selected two communities with large Latino populations: Phoenix and San Antonio. In each community, we found school districts that were interested in participating in our study, and community agencies with substantial experience in implementing the intervention we selected. We targeted first graders and their families, and designed a study that would follow students from first to third grade. For this paper, we are reporting first-grade outcomes.

Population / Participants / Subjects:

Description of the participants in the study: who, how many, key features or characteristics.

A total of 52 schools participated in the study, half in Phoenix and half in San Antonio. In each city, half the schools were randomly assigned to the intervention designed to build social capital, and half were assigned to the control group. Due to the intense work required to carry out the intervention, we implemented the intervention over a two-year period, with 12 treatment schools and 12 control schools participating in the study in 2008-2009 (Cohort 1), and 14 treatment and 14 control schools in the study in 2009-2010 (Cohort 2). Schools were randomly assigned to Cohorts 1 and 2 and then randomly assigned to treatment and control. Schools were further assigned to participate in the intervention either in the fall, the winter, or the spring. Measurements of social capital and child outcomes were timed according to the implementation schedule.

Schools were eligible if at least 25% of their students were of Latino origin. As a result, the proportion of Latino students in the study, about 70%, is somewhat greater than that of the districts in which the schools are located. Other minority groups are represented at lower levels,

with 11% African American, 1.5% Asian American, and 1.5% Native American. More than half (65%) of the parents reported being born outside of the United States, and 43% reported that their native language is not English. 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.

To manipulate social capital, we employed a widely used intervention, Families and Schools Together (FAST). FAST is a scientifically tested program designed to develop relations of trust and shared expectations among parents, teachers, and children (McDonald, 2002; McDonald et al., 1997; McDonald et al., 1991; McDonald & Frey, 1999). It is typically implemented in three stages: (1) active outreach to engage parents, (2) an 8-week session of weekly multi-family group meetings, and (3) 2 years of monthly parent-led meetings (FASTWORKS). In our study, a trained team of parents and professionals led FAST sessions for about 60 families of first graders in each school for 8 weeks, followed by 2 years of parent-run monthly meetings. In each school, FAST was implemented in multiple groups of 5–10 families who met simultaneously to build relationships between (a) parents and other parents, (b) parents and school staff, and (c) parents and their children.

At FAST sessions, families sit at their own tables for one hour of parent-led family activities, during which parents direct their children (including siblings of the first grader) in their native language. FAST meetings also include an hour of peer group time, during which children play together in a separate setting while adults talk in groups of 5 to 10. School staff, who are paid members of the FAST team, lead activities for the children, which are intended to help the children see school staff in a more informal role. Meanwhile, small groups of parents discuss topics of their choice and share advice in their language of choice. The intention is for parents to develop an active social network in the school setting, to get to know and trust one another, and to be 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 called “Special Play,” during which each child takes the lead in playing. The goal is for each parent to pay full attention to the child without criticism or interruption. Parents are assigned “homework” in which they are to repeat special play at home.

A distinctive feature of FAST is that the 8-week intervention is followed by 2 years of parent-led monthly meetings, where parents can further develop the relationships established through FAST. However, results in this paper precede the FASTWORKS period as they rely on data obtained immediately after the 8 weeks of FAST.

Research Design:

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

The design for this study is that of a cluster-randomized trial. Schools were randomized to treatment and control, and all first-graders and their families within each school were invited to participate in the study. The schools averaged just under 100 students per school, and just under 60% of the families agreed to participate, so the sample size is about 60 families per school.

Minimum detectable effect size for a sample of this design is about .24, and with a pre-treatment covariate with R-square of .6, we will be able to detect an effect as small as .18. Response rates were virtually identical in treatment and control schools. All selected schools agreed to participate. The total sample is about 3,000 children and families, evenly divided between treatment and control.

Data Collection and Analysis:

Description of the methods for collecting and analyzing data.

Parents and teachers of first graders provided information about their social capital and student academic and social skills through pre-test and post-test surveys. The parent pre-test survey was administered in person at recruitment, the parent post-test survey was administered by mail or telephone interview, and the teacher post-test survey was administered by mail. Almost all children enrolled in the study had teacher reports on their behavior, and 68% of children enrolled in the study had parent post-test survey observations. The response rate among teachers was 98%. Neither teacher nor parent response rates differed significantly between treatment and control groups.

We derived measures of social capital from the parent questionnaires. Among the key measures is the widely-used question about intergenerational closure: “How many of the parents of your children’s friends at school do you know”? We developed a parallel question about parent-school relations: “How many of the school staff would you feel comfortable approaching if you had a question about your child?” We also posed questions about shared expectations with teachers and with other parents, and about a variety of activities with other parents designed to assess interaction and trust among parents.

Parents and teachers reported on student behavior and social skills through a series of questions from the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997). This widely used instrument for assessing social adjustment and behavior problems taps five dimensions of psychological functioning: emotional symptoms, behavior problems, hyperactivity/inattention, peer relationship problems, and prosocial behavior. Emotional symptoms, conduct problems, hyperactivity, and peer problems can also be combined into a “total difficulties” measure.

Because the research subjects are clustered within schools, we use multilevel models to assess treatment effects, with treatment measured at the school level because schools were randomized. Analyses of experimental estimates (research questions 1 and 2) rely on 2-level models of students within schools. Quasi-experimental analyses (research questions 3 and 4) rely on a multilevel instrumental variables and a maximum likelihood mixture model (Borman and Dowling, 2006).

Findings / Results:

Description of the main findings with specific details.

Data from Cohort 1 (n = 1,240) have been analyzed, and results from both cohorts (n ~ 3,000) will be included in the conference paper. Findings thus are as follows: (1) Assignment to FAST led to intensified parent-parent and parent-school social networks in Phoenix, where school-level effect sizes on our four measures ranged from .09 to .35 (see Table 1). (2) Assignment to FAST

did not have this effect in San Antonio; effect sizes are close to zero except in the case of the number of staff respondents would feel comfortable approaching, where the effect size is $-.19$. (3) FAST effects on child outcomes across cities mirror those on parents: in Phoenix, children in FAST schools exhibited fewer behavior problems and more prosocial behavior than those in control schools (Figure 1), whereas this pattern is not evident in San Antonio except in the case of parent-reported peer problems, which follows the expected result (Figure 2). In general, outcome differences between FAST and control schools are more pronounced in teacher reports than in parent reports. This may reflect a response bias among teachers, who were not blind to condition, or it may reflect differences in FAST effects on behavior in the school as compared with the home setting.

The possible mediating role of social capital, and of FAST effects among those who attended FAST sessions, will be examined when data from both cohorts are available and results will be included in the conference paper.

Conclusions:

Description of conclusions, recommendations, and limitations based on findings.

Our study is designed to manipulate social capital experimentally, a rare feature in research on the topic. Moreover, the aim of our study is to test whether an intervention that boosts social capital confers benefits for child development on children in schools characterized by high proportions of low-income Latino families. Thus far, we have preliminary evidence that these processes are occurring in one of our two field sites. The conference paper will provide more definitive findings on the immediate post-treatment outcomes of our study. In the long term, three more years of data will allow us to learn whether FAST brings about positive results into third grade, on academic as well as on behavioral measures.

Appendices

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Appendix A. References

References are to be in APA version 6 format.

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Appendix B. Tables and Figures

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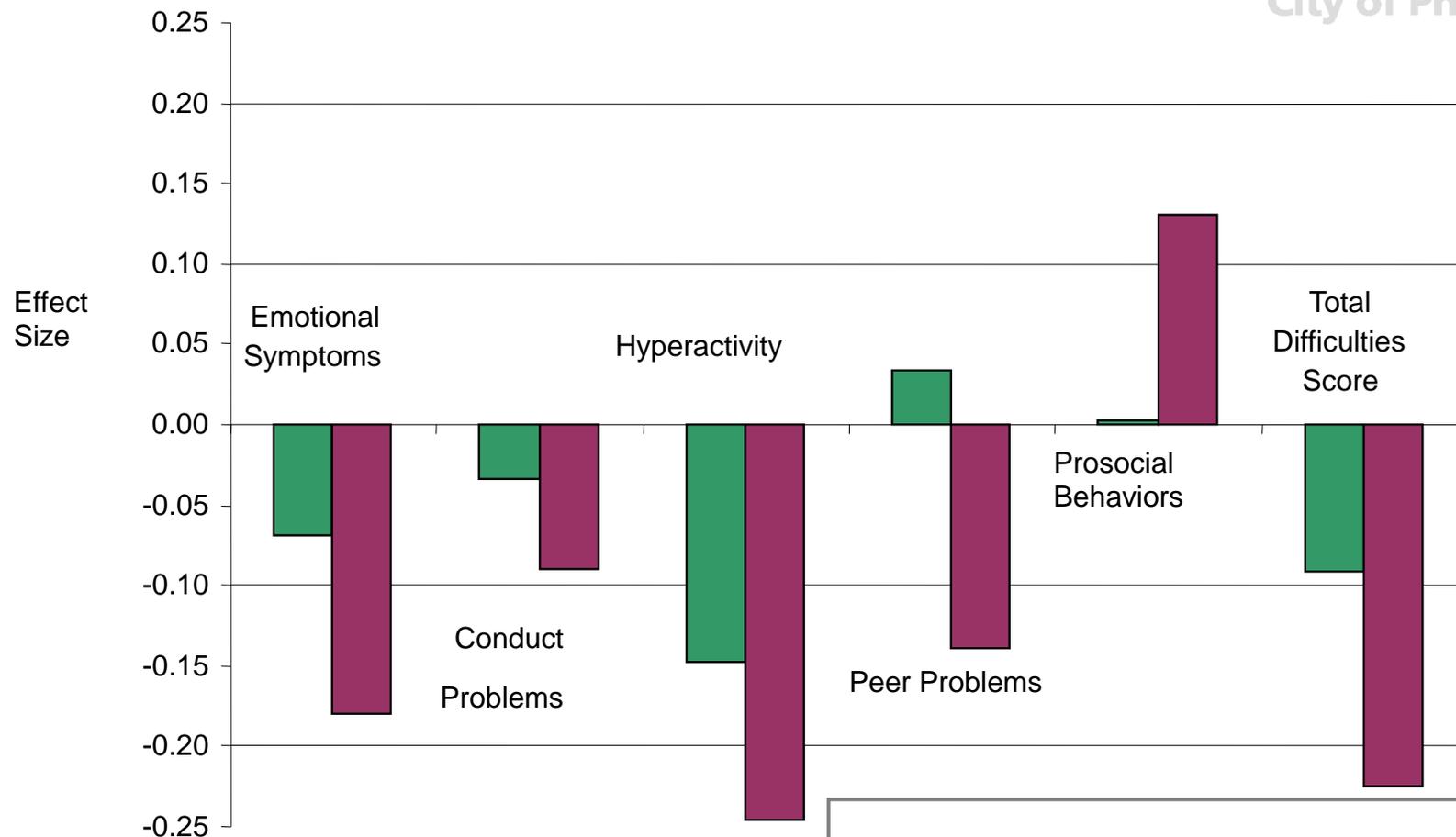
Table 1. Post-Treatment Mean Differences in Parent Reported Social Capital Measures for Treatment vs. Control

	Control (N=12)	FAST (N=12)	Effect Size
Both Cities			
Shared expectations with school staff	3.38	3.38	0.00
Number of staff could approach	3.74	3.76	0.01
Shared expectations with other parents	2.35	2.46	0.10
Number of parents of child's friends	3.29	3.71	0.20
Phoenix			
Shared expectations with school staff	3.27	3.34	0.09
Number of staff could approach	3.40	3.78	0.21
Shared expectations with other parents	2.39	2.58	0.17
Number of parents of child's friends	3.17	3.90	0.35
San Antonio			
Shared expectations with school staff	3.49	3.42	-0.09
Number of staff could approach	4.07	3.73	-0.19
Shared expectations with other parents	2.31	2.34	0.03
Number of parents of child's friends	3.40	3.52	0.06

Note: Results are from school-level model with Cohort 1 only. The conference paper will include both Cohorts 1 and 2 (52 schools) and will estimate multilevel models of students within schools.



Figure 1. Effect of FAST Participation on Teacher and Parent Reported Child Outcomes in Phoenix Schools

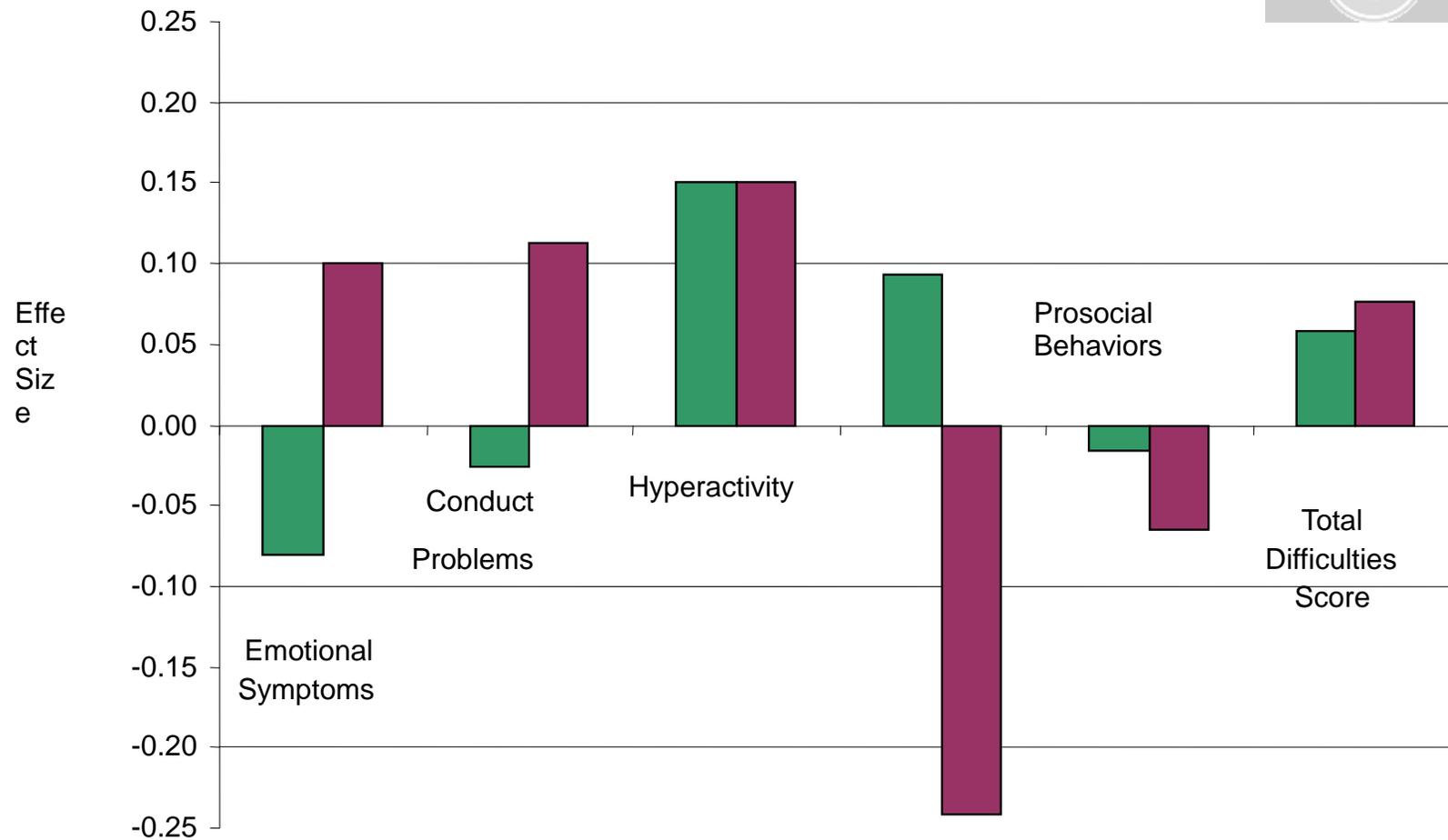


Parents' Reports
Teachers' Reports

Note: Results are from school-level model with Cohort 1 only. The conference paper will include both Cohorts 1 and 2 (52 schools) and will estimate multilevel models of students within schools.



Figure 2. Effect of FAST Participation on Teacher and Parent Reported Child Outcomes in San Antonio Schools



Parents' Reports
Teachers' Reports

Note: Results are from school-level model with Cohort 1 only. The conference paper will include both Cohorts 1 and 2 (52 schools) and will estimate multilevel models of students within schools.