

Differences between Hispanic and non-Hispanic families in social capital and child development: First-year findings from an experimental study

Adam Gamoran^{a,*}, Ruth N. López Turley^b, Alyn Turner^a, Rachel Fish^a

^a University of Wisconsin-Madison, , United States

^b Rice University, , United States

Received 15 March 2011; received in revised form 5 August 2011; accepted 9 August 2011

Abstract

Disadvantages faced by Hispanic children in the U.S., compared to non-Hispanic Whites, have been widely reported. Economic differences account for some of the gaps, but the social isolation of Hispanic families also serves as a barrier to children's success. Whereas Hispanic families tend to have strong kinship networks, their social ties often do not encompass the school and other authority systems. As a result, Hispanic families may have less access to *social capital*, that is, relations of trust and shared expectations that foster the flow of relevant information and support social norms that contribute to children's academic and social development. To study the role of social capital in child development, we embarked on a school-randomized trial in two cities with large Hispanic populations: San Antonio, Texas, and Phoenix, Arizona. In this paper, we report on first-year data from what will be a three-year longitudinal study, including 24 of an eventual 52 schools and about 1300 of what will be a sample of over 3000 children. We aimed to manipulate social capital through an intervention called Families and Schools Together (FAST), a multi-family after-school program that enhances relations among families, between parents and schools, and between parents and children through a sequence of structured activities over 8 weekly sessions. In the first year, 12 schools were randomly assigned to participate in FAST, and 12 served as controls. Data come from district administrative records, surveys of parents prior to FAST, and surveys of parents and teachers immediately after FAST. Surveys prior to FAST confirm that Hispanic parents have less extensive parent-school networks compared to non-Hispanic Whites. Comparisons of school means on post-FAST surveys indicate that parents in FAST schools experience more extensive social networks than those in control schools, but the differences are much more apparent in Phoenix than in San Antonio. Similarly, a pattern of better behavioral outcomes for children in FAST schools is evident in Phoenix but not San Antonio. Individual-level comparisons suggest that for some outcomes, effects may be larger for non-Hispanic Whites than for Hispanics, which would undermine potential contributions to reducing inequality.

© 2011 Published by Elsevier Ltd on behalf of International Sociological Association Research Committee 28 on Social Stratification and Mobility.

Keywords: Educational inequality; Social capital; Ethnic minorities; Social experiment

* Corresponding author. Tel.: +1 608 262 2704; fax: +1 608 263 6448.
E-mail address: gamoran@ssc.wisc.edu (A. Gamoran).

1. Introduction

Numerous government reports and research studies have documented the disadvantages of Hispanic children in the United States.¹ Differences in social, behavioral, and academic development are evident before children enter formal schooling and increase as they age (Downey, von Hippel, & Broh, 2004; Entwisle, Alexander, & Olson, 1997; Lee & Burkam, 2002; West et al., 2000). Test scores of Hispanic children lag far behind those of non-Hispanic Whites, and the gap has shown little sign of narrowing since the 1980s (Rampey et al., 2009).² Persistent gaps reflect continued immigration, as Hispanics who are proficient in English have caught up slightly with Whites over the last decade, while differences between Hispanics who are English language learners and those who are proficient in English have grown (Hemphill & Vanneman, 2011). Cognitive inequalities among children are also closely linked to socioeconomic inequalities among their parents (Kao & Thompson, 2003). According to the National Center for Education Statistics (2009), only 68% of Hispanic adults have high school diplomas, compared to 94% of Whites. Hispanics are three times as likely as Whites to live in poverty, and Mexican Americans, who make up 59% of the Hispanic population (and almost all of the Hispanics in our study), are particularly disadvantaged economically (Chapa & De La Rosa, 2004).

Furthermore, the salience of inequality between Hispanics and Whites will increase in the years to come, not only because Hispanics are the fastest-growing ethnic minority group in the U.S., but also because their population is significantly younger. About 34% of the Hispanic population is under the age of 18, compared to only 21% of the White population (U.S. Census Bureau, 2008). Among second-generation Hispanics, the median age is only 13, meaning that a large majority of them are currently in school (Tienda & Mitchell, 2006). Constituting about 15% of the total U.S. population, the Hispanic population grew by about 57% between 1990 and 2000, whereas the total U.S. population increased by only 13% during that time. If current levels of educational disadvantage are unabated as the Hispanic population

expands, then an increasing fraction of the U.S. population will be insufficiently prepared for work and civic life. Thus, the problem is not one for the Hispanic community alone, but for U.S. society as a whole. Without effective intervention, many of these children will grow up to reproduce the disadvantages of their parents (Kao & Thompson, 2003).

2. Identifying and removing ecological barriers to success for Hispanic families

Hispanic families often perceive a sense of isolation from school systems, and several studies have noted that this isolation is a key barrier to the school success of Hispanic children (Stanton-Salazar, 2001; Valenzuela, 1999). Although Hispanics commonly exhibit strong ties among families, these social ties typically do not encompass the school (Flores-Gonzales, 2002; Suarez-Orosco, Suarez-Orosco, & Doucet, 2003) and, more generally, do not include as many experts as the social networks of Whites (Cornwell & Cornwell, 2008). 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, Weininger, & Lareau, 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). As Larson and Rumberger (1995, p.166) 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.

2.1. Social capital and school success

A sense of distance from the school system prevents the development of family–school *social capital*, that is, relations of trust and shared expectations that may be embedded in social networks (Stanton-Salazar, 2001). A key marker of social capital is “intergenerational

¹ By “Hispanic,” we mean those who self-identify as being of Spanish or Latin descent. We use the terms “Hispanic” and “Latino” interchangeably. We recognize that “Hispanic” is not a monolithic category, and we discuss some of the nuances of Hispanic identity later in the paper. Mora (2009) provides a cogent discussion of the history and meaning of “Hispanic” as a demographic category in the U.S.

² Hereafter, we use the term “Whites” to refer to non-Hispanic Whites.

closure,” which Coleman (1990) defined as a closed social network in which parents interact with the parents of their children’s friends. Social capital is a collective phenomenon; it resides in the relationships among individuals rather than in the individuals themselves. However, individuals can draw upon social capital to advance their interests. Social capital facilitates the flow of information, so that parents can stay informed about their children’s activities even when they are out of direct contact, and parents can monitor the expectations held for their children by others, such as teachers (Carbonaro, 1998). Also, social capital facilitates the development and enforcement of norms, which are substantiated by the shared expectations and trust that defines social capital. In short, social capital consists of a network of trusted relationships that provides parents with access to information and support to enforce norms that enhance their children’s chances for success in school.

In addition to the tight network bonds emphasized in Coleman’s (1990) theory of social capital, a looser and broader network of social relations may facilitate the flow of information even if they are less instrumental in fostering shared values and reinforcing norms of a community. Sociologists such as Granovetter (1977) have long recognized the value of “weak ties” as a conduit for information, and the distinction between strong and weak ties has been adapted for social capital theory by scholars such as Putnam (2000) with the terms “bonding” and “bridging” social capital. Whereas bonding social capital refers to the connections among individuals who interact regularly within a culturally homogeneous group, bridging social capital refers to ties that cut across social groups. Both forms of social capital – with parents and educators of similar social backgrounds, and with those from other social groups – may support parents’ efforts to promote their children’s development.

2.2. *Need for family–school social capital among Hispanics*

If social networks among Hispanic families are already strong, but ties to schools are more tenuous, then increasing social capital between families and educators and among families in a school community may be a particularly powerful practice for enhancing the development of and reducing the disparities faced by children from low-income Hispanic families. Valenzuela and Dornbusch (1994) found that a strong family orientation contributed to school success among Mexican–American youth, but only among those with highly educated parents, hinting that family support for child development is more powerful when it includes

greater contact with the education system. As Suarez-Orosco et al. (2003, p. 432) explained:

Our ethnographic data suggest the crucial role of networks of social relations extending beyond the family in the successful adjustment of immigrant youth. In nearly every story of immigrant success, there is a caring adult who took an interest in the child and became actively engaged in her life.

Social relations that support children’s school performance can be a source of information about resources and activities that promote success, and they can provide opportunities for parents to interact effectively with the school system, other community institutions, and other parents of children in the same school to obtain the resources their children need. Enhancing existing social capital among Hispanic families by increasing family–school ties may improve children’s chances of success.

2.3. *An intervention approach to social capital development*

Prior studies of social capital for children and youth have drawn on observational data, relying on naturally occurring variation among families to identify links between social capital and child development. By contrast, our approach is to attempt to manipulate social capital experimentally. There are two main advantages to this approach. First, if the manipulation is successful, we may induce variation beyond what ordinarily occurs, allowing us to test the effects of social capital across a wider range. This is particularly important if certain population subgroups, e.g. Hispanics, are generally located in a different place in the distribution of social capital than other subgroups, e.g. non-Hispanic Whites. Second, the experimental approach permits an unbiased assessment of the effects of the intervention on social capital and on child outcomes. (A test for mediating effects of social capital as the link between the intervention and child outcomes requires additional assumptions and is beyond the scope of this paper.)

Improved relations among children, parents, and schools need ample time to develop, and, for some outcomes, the effects of social capital may emerge over a period of several years. For example, parent involvement during elementary school is associated with temporally distant outcomes such as a lower probability of dropping out of high school (Barnard, 2004). Similarly, sixth graders who participated in “I Have a Dream” programs providing long-term financial, academic, and social

support were about twice as likely to graduate from high school as their peers who did not participate in these programs (Kahne & Bailey, 1999).³ Unfortunately, few family–school interventions last long enough to develop strong relationships, and few studies investigate the long-term effects of these relationships. Thus, an intervention that promotes stronger family–school relations needs to last long enough to develop strong and meaningful relations, and any efforts to investigate the effects of these relations must be longitudinal.

3. Methods

One way to test whether increasing social capital enhances child development is to manipulate social capital and observe changes in relations among families and between families and schools as well as in child outcomes. Without a comparison group it would be difficult to discern whether changes in relations and outcomes reflect natural changes over time, or the deliberate manipulation of social capital. Selecting a comparison group is problematic, however, because those who volunteer for social-capital-building activities may be different than those who do not, creating a problem of selection bias in estimating outcome effects. In response to these challenges, we designed a study in which schools are randomly assigned to an intervention that manipulates social capital. This paper reports on pre-treatment and immediate post-treatment outcomes in the first year of the study for the two locales in which the research is taking place and for various demographic groups, with particular attention to differences between Hispanics and other groups and among different groups of Hispanics. The research questions for this paper are as follows:

1. To what extent do initial (pre-treatment) differences between Hispanics and others reflect the findings of past research that Hispanic families tend to have strong social ties among families but weaker connections with schools?
2. Can we implement an intervention that boosts social capital among families and between families and schools? Do the effects of the intervention differ by locale?
3. Does the intervention result in differences in child outcomes?

³ “I Have a Dream” is a national network of philanthropic programs that select 6th grade classes in disadvantaged communities and promise college scholarships to all students who graduate from high school. Students receive ongoing social supports such as tutoring, mentoring, and counseling.

4. Do the effects of the intervention on social capital and/or child outcomes differ by demographic group? In particular, are the effects larger for Hispanic groups as compared to non-Hispanic Whites?

The present study is based on data from the first of two cohorts, and the second cohort will provide an opportunity for replication and further testing of the findings reported here.

3.1. Intervention design

To manipulate social capital, we employed a widely used intervention, Families and Schools Together (FAST), which is an intensive 8-week after-school program designed to increase social capital among parents, teachers, and young children. FAST is a scientifically tested program designed to develop relations of trust and shared expectations among parents, teachers, and children (McDonald, 2002; McDonald, Coe-Braddish, Billingham, Dibble, & Rice, 1991; McDonald et al., 1997, 2006; McDonald & Frey, 1999). The FAST program is a multi-family group prevention program that is typically implemented in three stages: (1) active outreach to engage parents, (2) 8 successive weeks of multi-family group meetings, and (3) 2 years of monthly parent-led meetings (FASTWORKS). Only the first two stages are relevant for this paper, as the survey-based outcome data were collected within a few weeks after the 8-week multi-family group meetings. For the 8-week series, a trained team of parents and professionals led FAST sessions for about 60 families of first graders in each school. Families were organized in groups (or “hubs”) of 10–15 families. Each hub met separately, usually on different nights of the week.

3.1.1. Description of FAST sessions

Weekly FAST sessions involve a sequence of research-based structured activities intended to build relationships between (a) parents and other parents, (b) parents and school staff, and (c) parents and their children. The activities follow a defined sequence. First, families sit at their own tables for an hour of parent-led family interaction, during which parents direct their children (including siblings of the first grader) in their native language. The goal is for the children to listen to instructions, observing that their parents know what to do at the school (regardless of parents’ English literacy levels). The children listen to their parents for directions, draw pictures, take turns, and explain their ideas and feelings. These activities usually generate family laughter and good feelings which are generalized across home

and school settings, reducing anxiety about school and supporting the learning process.

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 5–10. Members of the FAST team generate and lead fun activities for the children. 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 min 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.

Each FAST team includes at least one member of the school staff. Sometimes these were first grade teachers, but often a counselor, social worker, librarian, or teacher from another grade filled this role. Also, school principals showed their support by attending the FAST graduation, and many principals attended additional FAST sessions. FAST thus builds relations between parents and school staff in two ways: directly, by creating a new, informal context in which parents can get to know a member of the school staff who can serve as a resource for them subsequently; and indirectly by bringing parents to feel more at ease and empowered in the school, thus increasing the likelihood they will approach school staff to address their needs.

3.1.2. *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 make up to three site visits per 8-week session, where they complete the Program Integrity Checklist after each site visit, followed by a debriefing where trainers provide feedback to the implementation team and subsequent adaptations can be made.

3.2. *Study population and sample*

San Antonio, Texas, and Phoenix, Arizona, were selected as research sites because both cities have social service agencies experienced in implementing FAST and because they have high proportions of Hispanic

families. San Antonio and Phoenix are the nation’s fastest-growing cities with populations of one million or more, and about 60% of students in both communities are Hispanic. However, Phoenix’s Hispanic population includes a large proportion of recent immigrants, many of whom are undocumented, and San Antonio’s Hispanic population has fewer recent immigrants. In both cities, the vast majority of Hispanics are of Mexican origin.

3.2.1. *Randomization*

Because social capital is defined as relations of trust and shared expectations, and because in our conception, children benefit from the social networks of their parents, social capital is conceptualized as a property of a group rather than of individuals. Although individuals within a social group may vary in their enactment of social capital, it is more appropriately viewed as located in contextual rather than individual conditions. As a result, randomization occurred at the level of the school rather than the student.

A total of 26 eligible schools were identified in each city (the 26 San Antonio schools were from one district, and the 26 Phoenix schools were from three districts). The large number of schools in each site necessitated a staggered implementation consisting of two consecutive cohorts of first graders, where each cohort was made up of roughly half the schools (24 in the first cohort and 28 in the second). Schools were randomly assigned to one of the two cohorts, and then they were randomly assigned to treatment and control groups, resulting in Cohort 1 consisting of 12 FAST and 12 comparison schools and Cohort 2 consisting of 14 FAST and 14 comparison schools.

3.2.2. *Recruitment*

We aimed to recruit universally all first graders in participating schools, which on average had 96 first graders per school. The local social service agencies that implemented FAST recruited families to the study (at treatment and control schools) through family dinner events, parent–teacher conferences, and home visits. All potential participants learned about the study, chose whether to consent to be in the study, and received a \$10 gift card as compensation for filling out a short 3-page pre-test questionnaire. Parents in the treatment schools also learned about FAST and chose whether to consent and participate in FAST. Teachers also learned about the study, chose whether to participate, and were compensated \$150 for filling out questionnaires for all of their participating students about two weeks after the FAST intervention concluded.

This paper focuses on data from Cohort 1, collected during 2008–2009, in three seasons (fall, winter, and spring), with two treatment and two control schools in each season. Just under 60% of families consented to participate in the study, and there were no statistically significant differences in recruitment rates between the treatment and control schools. The high rate of non-participation limits the generalizability of the results, but the lack of differential participation means that estimates of treatment vs. control differences will be unbiased. Almost all families in treatment schools who consented to participate in the study also consented to participate in FAST. In FAST schools, 73.2% of families who consented attended at least one FAST session. Among those who attended at least one session, 33.8% of families “graduated” with a full “dose” of FAST, meaning they began in weeks 1 or 2 and attended 6 or more sessions in total.

3.2.3. *Sample description*

About 3000 first graders and their families will participate in the study; over 1200 are in Cohort 1, the sample for this paper. Consistent with the focus on schools with high concentrations of Latino children, schools were eligible for the study if at least 25% of their students were of Latino origin. Thus, the proportion of Latino students in the study, about 77%, 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 a third (36%) 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 are eligible for free or reduced-price lunch.

3.3. *Research design*

Focusing on Cohort 1, this paper uses data from the first year (2008–2009) of what is to be a three-year longitudinal study, ending when the students are in third grade (2010–2011 for Cohort 1 and 2011–2012 for Cohort 2). In 2008–2009, parents and teachers of Cohort 1 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 the time of recruitment, the parent post-test survey was administered by mail or telephone interview, and the teacher

post-test survey was administered by mail.⁴ Almost all children enrolled in the study had teacher reports on their behavior ($n = 1242$), and 70% of children enrolled in the study had parent post-test survey observations ($n = 904$). Neither teacher nor parent response rates differed significantly between treatment and control groups. For this paper, we use all available data when presenting school means, but reports on parents or students are limited to students with both teacher and parent reports. A small amount of item-level missing data were deleted listwise in presentations of results for students and parents.

3.4. *Measures*

Although we are interested in both the structure and quality of the social networks in the treatment and control schools, the data available thus far only allow us to consider a limited number of relevant questions. More data and time are needed to test the effects of FAST on the emergence of social capital and its subsequent effect on child outcomes. For these reasons, we focus on a subset of variables that are straightforward to interpret and demand less of the data to estimate.

3.5. *Parent–staff relationships*

We asked parents, “How many of the school staff would you feel comfortable approaching if you had a question about your child?” Parents could respond knowing none, one, two, three, four, five, or six or more school staff. Prior to treatment, the parents in our study reported on average knowing between three and four members of the school staff (mean 3.76, s.d. 1.80). Very few parents did not know any staff (about 1.5%). We also asked parents, “How much does the school staff share your expectations for your child?” Prior to treatment, parents reported having high levels of shared expectations with school staff; about 26% of parents reported that they and the school staff have some shared expectations and about 66% reported that they and the school staff have a lot of shared expectations.⁵

⁴ Sources for the parent pre-test instrument include Bryk and Schneider (2002) and McDonald and Moberg (2002); sources for the parent post-test instrument include Goodman (1997) and Shumow, Vandell, and Kang (1996); and sources for the teacher post-test instrument include Goodman (1997), Shumow et al. (1996), and Gresham and Elliott (1990).

⁵ The highest response category for the number of staff known includes six or more staff, which was the modal category chosen (30%).

3.6. Parent–parent relationships

We measured the structure of parent–parent networks using the concept of intergenerational closure, for which parents were asked, “How many parents of your child’s friends at this school do you know?” The descriptive statistics for this measure suggest more variation (mean 3.08, s.d. 2.13).⁶ At baseline, about 18% of parents reported not knowing any of their child’s friends’ parents.

Parents’ perceptions of shared expectations with other parents at the school were measured through a single question: “How much do other parents share your expectations for your child?” About 34% of the parents in our sample reported that other parents at the school shared none of their expectations for their children.

3.7. Teacher and parent judgment of student social–behavioral skills

Teachers reported on student behaviors 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.

We report on each of the five dimensions separately, and we also combined emotional symptoms, conduct problems, hyperactivity, and peer problems into a “total difficulties” measure. Parent and teacher reports correlate moderately, with correlation coefficients ranging from 0.15 (emotional problems) to 0.40 (hyperactivity problems). Mean levels of most of the problem indicators, as well as prosocial behaviors, are higher in parent reports. Scale reliabilities (measured with Chronbach’s alpha) for teacher reports of child behavior are high, ranging from 0.70 to 0.90, with the exception of the peer problems scale which has an alpha of 0.60. Reliabilities for parent-reported scales composed of the same measures are somewhat lower, with peer problems at just 0.50 and the others ranging from 0.63 to 0.73. These patterns suggest that we may want to focus ultimately on the two composite scales of prosocial behavior (teacher alpha = 0.85, parent alpha = 0.67)

This suggests that we might have trouble with a ceiling effect when testing the effects of FAST on parent–staff relationships.

⁶ The modal category was six or more parents (20%); however, parents were more evenly distributed across the response categories for this variable, so we are not as concerned about a ceiling effect.

and total behavior problems (teacher alpha = 0.70, parent alpha = 0.73). The composite reliabilities are consistent with other validation studies carried out in the U.S. (Bourdon, Goodman, Rae, Simpson, & Koretz, 2005; Dickey & Blumberg, 2004).

3.8. Indicators of race/ethnicity

Two sources of data provided information on racial and ethnic origins. First, school administrative records provided data on whether students were categorized as White, Black, Hispanic, Native American/Alaskan Native, or Asian/Pacific Islander. Parents report this information when they register their children for school. Administrative data are available on virtually all students in the study ($n = 1262$; another 37 students could not be matched to administrative records). In the administrative records, 77% of students were classified as Hispanic, 14% as White, 8% as Black, 1% as Native American/Alaskan Native, and less than 1% as Asian/Pacific Islander. Second, parents provided survey responses to questions about their native language, whether or not they were born in the U.S. and, for those born outside the U.S., how many years they have lived in the U.S. Due to survey non-response, we have data on these questions for about two-thirds of the children in the study ($n = 831$). Among the parents who responded, 43% reported that their native language was not English; almost all of these respondents listed Spanish as their native language. Only 3% of parent respondents reported having lived in the U.S. for less than 3 years, but 36% were born outside the U.S. Within the Hispanic group, indicators of language and nativity track one another closely: among 270 parents of Hispanic children who were born outside the U.S., 261 reported Spanish as their native language, whereas among the 348 parents born in the U.S., 279 listed English as their native language.

Recent writers have emphasized the need to recognize that the U.S. Hispanic population is not homogeneous, but contains many dimensions of internal diversity. Because nearly all the Hispanics in our study are of Mexican descent, we do not distinguish among Hispanics by national origin, but we divide them by native language. We used the parent survey responses to subdivide students listed as Hispanic in district records into two subgroups: Hispanic–Spanish language, meaning their parents were native Spanish speakers, and Hispanic–English language, indicating their parents were native English speakers. Because language and nativity were closely related, a two-by-two classification was not viable, and we chose language origin as the stronger indicator of ethnic origin.

3.9. Statistical power

Power calculations for the larger study (52 schools) indicate a minimum detectable effect size of 0.24 for social and behavioral outcomes. For this paper, because we are using only Cohort 1 data (24 schools), the minimum detectable effect size is 0.37. Thus, findings that cannot reliably be distinguished from zero in this analysis may turn out to be significant when data from both cohorts are available.

3.10. Statistical methods

Because the design of the study is a cluster-randomized trial, the appropriate statistical method will take into account both the school and the student levels, that is, it will be a multilevel model. For this paper, because we have data from only 24 of the 52 schools (albeit a random subsample of schools), and because we intend to examine outcomes for population subgroups, the data will not yet bear a full multilevel analysis. Consequently we rely on simple mean comparisons. We use school-level comparisons to examine treatment–control differences (since schools were assigned to treatment and control) and student-level comparisons to examine differences among race/ethnic groups.

4. Results

We present results that respond to our four questions. First, we consider whether pre-treatment differences among ethnic groups conform to expectations. Second, we assess differences between treatment and control schools on social capital, overall and for the two cities. Third, we examine differences between treatment and control schools on child developmental outcomes. Fourth, we consider differences between families that attended treatment and control schools for respondents in different ethnic categories.

4.1. Initial differences in social capital among ethnic groups

Based on prior research, we expected to find that pre-treatment relations between parents and school staff are less extensive for Hispanic families compared to Whites. By contrast, we expect to find more intense relationships between families for Hispanics compared to Whites. This expectation is tempered somewhat because our survey focused on relations among parents at the child's school, which may or may not include the kinship networks that have been identified as particularly strong

among Hispanic families. Finally, we would expect differences between Hispanics and Whites to be more pronounced for the subgroup of Hispanic respondents whose native language was Spanish, due to their presumably less extensive integration in the non-Hispanic White society.

Comparisons of pre-treatment means, reported in Table 1, are largely consistent with our expectations. Across the two cities, White respondents felt comfortable contacting a larger number of school staff (4.34) than Hispanics overall (3.66) (see the first panel of Table 1). Moreover, Hispanic respondents from native Spanish language backgrounds exhibited fewer ties with school staff than those with native English language backgrounds (3.49 vs. 3.84). However, neither group of Hispanic respondents perceived lower levels of shared expectations with school staff; indeed the means for Hispanics were slightly higher than that of Whites. This pattern may reflect the perception among parents from less educated backgrounds that educators are the experts when it comes to educational prescriptions (Lareau, 2000).

With regard to relations with other parents, means for Hispanic parents overall are just slightly higher than the means for Whites on shared expectations and the number of parents of children's school friends that parents know. However, the Hispanic–Spanish language subgroup stands out as having both more shared expectations with other parents at the child's school (2.58), and knowing more parents of their children's friends (3.47), compared to other groups. This may be evidence of the stronger family ties among Hispanics despite our focus on parents at the child's school.

It is also worth noting that respondents in all demographic groups generally exhibited more extensive social relations with school staff than with other parents. Parents reported sharing expectations with school staff to a greater degree than they did with other parents, and they reported feeling comfortable approaching a larger number of school staff than they the number of parents they knew of their children's friends. Among Hispanics of Spanish language origins, however, where the number of staff was particularly low and the number of parents was particularly high, the two figures are about even (3.47 vs. 3.49). Overall, the findings suggest that Hispanic parents have more extensive parental networks and less extensive school networks than White parents, and the pattern is especially marked among parents whose native language is Spanish, a group that consists largely of immigrants to the U.S. As revealed in the second and third panels of Table 1, this pattern generally holds in both cities.

Table 1
Mean differences among racial/ethnic groups in parent-reported pre-treatment social capital.

<i>Both cities</i>	White N = 120	Hispanic (All) N = 646	Hispanic (English language) N = 294	Hispanic (Spanish language) N = 342	Black N = 65
Number of staff could approach	4.34	3.66***	3.84*	3.49***	3.86
Shared expectations with school staff	3.54	3.65	3.65	3.64	3.46
Number of parents at child's school	3.03	3.14	2.78	3.47*	2.80
Shared expectations with other parents	2.24	2.32	2.05	2.58**	1.91
<i>Phoenix</i>	White N = 54	Hispanic (All) N = 241	Hispanic (English) N = 52	Hispanic (Spanish) N = 187	Black N = 34
Number of staff could approach	4.22	3.58*	4.10	3.45**	3.50
Shared expectations with school staff	3.40	3.56	3.63	3.55	3.38
Number of parents at child's school	2.94	3.19	2.67	3.35	2.47
Shared expectations with other parents	2.42	2.45	2.29	2.50	1.82*
<i>San Antonio</i>	White N = 66	Hispanic (All) N = 405	Hispanic (English) N = 242	Hispanic (Spanish) N = 155	Black N = 31
Number of staff could approach	4.42	3.70**	3.79*	3.53***	4.26
Shared expectations with school staff	3.64	3.70	3.66	3.76	3.55
Number of parents at child's school	3.09	3.10	2.81	3.62	3.16
Shared expectations with other parents	2.11	2.25	2.00	2.66***	2.00

Non-Hispanic White is reference group:

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

Finally, non-Hispanic blacks appear to be especially disadvantaged in their pre-treatment parent–school and parent–parent social capital compared to the other groups. This is particularly true in terms of their parent–parent networks in Phoenix.

4.2. Effects of FAST on social capital: school mean differences

Our next question is whether the intervention induced differences between schools in levels of parent-reported social capital. As noted earlier, a multilevel model will be the appropriate method to answer this question with the full data. For now, focusing on Cohort 1 only, we limit the analysis to mean comparisons.

Table 2 points towards meaningful differences between FAST and control schools in both indicators for relationships among parents but neither indicator of relationships between parents and school staff. The effect size (mean difference divided by the pooled student standard deviation) is 0.23 for number of parents of child's friends and 0.15 for shared expectations with other parents. However, closer scrutiny suggests important differences between cities. In Phoenix (see the second panel of Table 2), treatment–control differences in effect-size units are 0.39 for number of parents of

child's friends, 0.26 for shared expectations with other parents, 0.20 for number of staff parents could approach, and 0.07 for shared expectations with school staff. These effects are large enough to be substantively meaningful. In San Antonio, by contrast, effects for relations with parents are near zero, and effects for relations with staff are negative.

We performed tests of statistical significance with $p < .10$ as the criterion of significance in light of the small sample size. By this criterion, the treatment–control difference in the number of parents of children's friends that parents know is significant for both cities combined, and the difference in number of staff parents could approach is significant for Phoenix. The difference in number of parent in Phoenix is large ($E.S. = .39$) with a p -value of .11. These results indicate effects on social capital and the second cohort will permit replication with a multi-level model.

4.3. Effects of FAST on child outcomes: school mean differences

Based on the design of FAST as a program that enhances relations between parents and school staff, parents and other parents, and parents and children, and on past research about the advantages of such positive

Table 2

School-level mean differences in post-treatment parent reported social capital measures by FAST participation.

<i>Both cities</i>	Control <i>N</i> = 12	FAST <i>N</i> = 12	Effect size
Number of staff could approach	3.73	3.75	0.01
Shared expectations with school staff	3.39	3.38	−0.01
Number of parents of child's friends	3.25	3.74 [†]	0.23
Shared expectations with other parents	2.32	2.49	0.15
<i>Phoenix</i>	Control <i>N</i> = 6	FAST <i>N</i> = 6	Effect size
Number of staff could approach	3.38	3.74 [†]	0.20
Shared expectations with school staff	3.28	3.34	0.07
Number of parents of child's friends	3.10	3.93	0.39
Shared expectations with other parents	2.34	2.63	0.26
<i>San Antonio</i>	Control <i>N</i> = 6	FAST <i>N</i> = 6	Effect size
Number of staff could approach	4.08	3.76	−0.18
Shared expectations with school staff	3.49	3.43	−0.08
Number of parents of child's friends	3.41	3.55	0.06
Shared expectations with other parents	2.31	2.36	0.04

Effect sizes in student standard deviation units.

[†] $p < 0.10$.

relations for child development, we anticipated that children in FAST schools would exhibit more positive social and behavioral outcomes following the FAST program. At this point, because we only have data from the first cohort of participants, or fewer than half the schools in the larger study, we are limited both in terms of statistical power and the time elapsed since the treatment, which restricts our ability to detect the effects of FAST on child outcomes. Indeed, we found that none of the effects of FAST on child outcomes are statistically significant. However, there are a number of substantively meaningful differences in child outcomes for children who participated in FAST relative to those who were in the comparison schools.⁷ These differences tend to vary by who is reporting (parent vs. teacher) and by city.

The top panel of Table 3 reveals that, from the parents' perspective, mean differences in child behavior between treatment and control schools were small. Some of the teacher-reported differences, however, are noticeably larger. In particular, teacher-reported peer problems

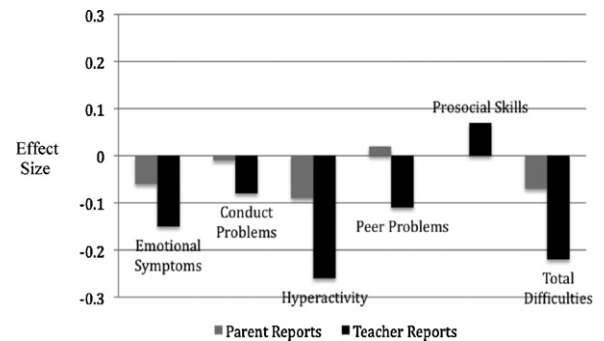


Fig. 1. Effects of FAST participation on teacher- and parent-reported child outcomes in Phoenix schools.

were greater in control schools than in treatment schools (effect size = -0.18 , p -value = 0.15). This pattern is consistent with the expectation that social capital generated by FAST improves child social skills.

4.4. FAST effects by city

In general, we observe notably stronger FAST effects in Phoenix than in San Antonio, for both teacher and parent reports. These differences are evident in the second and third panels of Table 3 and are graphically illustrated in Figs. 1 (Phoenix) and 2 (San Antonio). For example, the effect size for the teacher reported total difficulties scale is 0.07 in San Antonio, but -0.22 in Phoenix. This pattern may reflect the more pronounced effects of FAST on the structure of social networks in Phoenix, as reported above. An exception to this pattern

⁷ Response rates were higher among teachers than among parents enrolled in the study. Consequently, estimates of the differences between children in FAST schools and children in comparison schools from parent reports are drawn from a select subsample of children whose parents responded to the follow-up survey ($N = 904$), while estimates from teacher reports are drawn from observations on children whose teachers responded to the follow-up survey ($N = 1299$). Teacher report estimates calculated from the select subsample are in some cases different from those reported (more or less pronounced depending on the measure), which indicates that the parent follow up sample is not representative of the all of the children in the study.

Table 3
School-level mean teacher and parent reported child outcomes by FAST participation.

Both cities	Teacher Reports			Parent Reports		
	Control <i>N</i> = 12	FAST <i>N</i> = 12	Effect size	Control <i>N</i> = 12	FAST <i>N</i> = 12	Effect size
Emotional symptoms	1.50	1.44	−0.03	2.09	1.95	−0.07
Conduct problems	1.07	1.09	0.01	1.55	1.50	−0.03
Hyperactivity	2.88	2.69	−0.06	3.42	3.49	0.03
Peer problems	1.57	1.28	−0.18	1.61	1.69	0.05
Prosocial skills	7.84	7.86	0.01	8.49	8.49	0.00
Total Difficulties	7.02	6.51	−0.08	8.67	8.62	−0.01
<i>Phoenix</i>	Control <i>N</i> = 6	FAST <i>N</i> = 6	Effect size	Control <i>N</i> = 6	FAST <i>N</i> = 6	Effect size
Emotional symptoms	1.53	1.20	−0.15	2.13	2.01	−0.06
Conduct problems	0.99	0.83	−0.08	1.46	1.44	−0.01
Hyperactivity	2.80	2.00	−0.26	3.44	3.22	−0.09
Peer problems	1.43	1.24	−0.11	1.60	1.62	0.02
Prosocial skills	8.17	8.33	0.07	8.44	8.45	0.00
Total difficulties	6.75	5.28	−0.22	8.64	8.26	−0.07
<i>San Antonio</i>	Control <i>N</i> = 6	FAST <i>N</i> = 6	Effect size	Control <i>N</i> = 6	FAST <i>N</i> = 6	Effect size
Emotional symptoms	1.47	1.68	0.10	2.04	1.89	−0.08
Conduct problems	1.16	1.36	0.11	1.63	1.58	−0.04
Hyperactivity	2.96	3.38	0.14	3.41	3.76	0.15
Peer problems	1.71	1.32	−0.24	1.62	1.76	0.09
Prosocial skills	7.52	7.38	−0.06	8.54	8.53	−0.01
Total difficulties	7.29	7.73	0.07	8.71	8.98	0.05

Effect sizes in student standard deviation units.

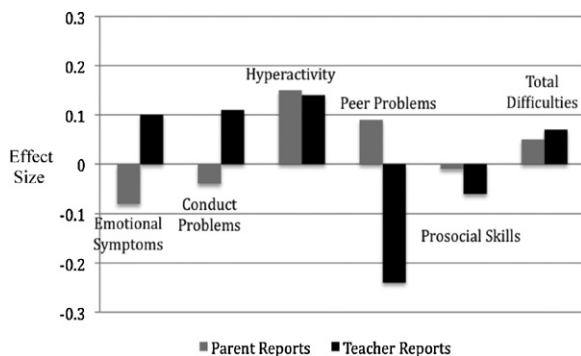


Fig. 2. Effects of FAST participation on teacher- and parent-reported child outcomes in San Antonio schools.

appears in the case of teacher-reported peer problems, where the effect is even larger in San Antonio (−0.24) than in Phoenix (−0.11).

4.5. Child outcomes by FAST participation status

The treatment–control differences we have reported thus far come from all families that provided data, but not all families in FAST schools participated in FAST. It seems likely FAST effects could be larger for those who actually participate. In Table 4, we compare child

outcomes on the two composite scales (Prosocial Skills and Total Behavioral Difficulties) for three groups of respondents in FAST schools: those who attended FAST never or only once; those who attended 2–5 FAST sessions; and those who “graduated,” defined as attending 6 or more FAST sessions. The comparisons are suggestive enough to warrant more complex models with additional data. In general, pro-social skills show few differences based on the number of FAST sessions attended, but behavioral difficulties were lower among those who attended more sessions. For example in San Antonio, parent-reported total difficulties averaged 8.60 in the control group. In the FAST group, the averages were 9.31, 9.08, and 8.24 among those who attended 0–1, 2–5, or 6–8 sessions respectively. The difference of just over 1 point between those who attended once or never and those who graduated is about 19% of a standard deviation, in contrast to the effect size of near zero for parent-reported total difficulties reported in Table 3. The pattern is similar for teacher-reported total difficulties in San Antonio. In Phoenix, however, the lowest levels of behavioral difficulties, whether reported by parents or teachers, emerge for those who attended 2–5 times rather than for the graduates. Most notably for teacher-reported total difficulties, the means were 7.74, 3.58,

Table 4
Mean differences in child outcomes by level of FAST participation.

<i>Both cities</i>	Control group <i>N</i> = 426	Attended 0–1 sessions <i>N</i> = 165	Attended 2–5 sessions <i>N</i> = 139	(<i>Graduated</i>) Attended 6–8 sessions <i>N</i> = 133
Teacher reported pro-social skills	7.96	7.47*	7.88	7.46*
Teacher reported total difficulties	6.87	7.78	6.90	6.87
Parent reported pro-social skills	8.47	8.38	8.61	8.49
Parent reported total difficulties	8.86	9.12	8.85	8.35
<i>Phoenix</i>	Control group <i>N</i> = 211	Attended 0–1 sessions <i>N</i> = 72	Attended 2–5 sessions <i>N</i> = 33	(<i>Graduated</i>) Attended 6–8 sessions <i>N</i> = 33
Teacher reported pro-social skills	8.29	7.67*	8.94	7.85
Teacher reported total difficulties	6.66	7.74	3.58**	5.59
Parent reported pro-social skills	8.37	8.36	8.52	8.16
Parent reported total difficulties	9.14	8.87	8.13	8.70
<i>San Antonio</i>	Control group <i>N</i> = 215	Attended 0–1 sessions <i>N</i> = 93	Attended 2–5 sessions <i>N</i> = 106	(<i>Graduated</i>) Attended 6–8 sessions <i>N</i> = 100
Teacher reported pro-social skills	7.64	7.32	7.56	7.33
Teacher reported total difficulties	7.08	7.80	7.93	7.29
Parent reported pro-social skills	8.56	8.39	8.64	8.60
Parent reported total difficulties	8.60	9.31	9.08	8.24

Control is reference group.

* $p < 0.05$.

** $p < 0.01$.

Table 5
Effect sizes of FAST participation on parent-reported post-treatment social capital by racial/ethnic group.

<i>Both cities</i>	School level <i>N</i> = 24	Student level <i>N</i> = 863	White <i>N</i> = 120	Hispanic(All) <i>N</i> = 646	Hispanic (English) <i>N</i> = 294	Hispanic (Spanish) <i>N</i> = 342	Black <i>N</i> = 65
Number of staff could approach	0.01	0.01	0.04	−0.03	−0.21	0.13	0.07
Shared expectations with school staff	−0.01	0.00	0.13	0.01	−0.17	0.21	−0.41
Number of parents of child's friends	0.23	0.15	0.50**	0.14	0.19*	0.10	−0.31
Shared expectations with other parents	0.15	0.11	0.25	0.08	0.03	0.13	0.05
<i>Phoenix</i>	School level <i>N</i> = 12	Student level <i>N</i> = 349	White <i>N</i> = 54	Hispanic (All) <i>N</i> = 241	Hispanic (English) <i>N</i> = 52	Hispanic (Spanish) <i>N</i> = 187	Black <i>N</i> = 34
Number of staff could approach	0.20	0.17	0.45	0.12	0.13	0.12	0.01
Shared expectations with school staff	0.07	−0.04	0.35	−0.01	0.29	−0.08	−0.46
Number of parents of child's friends	0.39	0.26**	1.13**	0.18	0.25	0.16	−0.48
Shared expectations with other parents	0.26	0.17	0.64**	0.10	0.05	0.10	−0.09
<i>San Antonio</i>	School level <i>N</i> = 12	Student level <i>N</i> = 514	White <i>N</i> = 66	Hispanic (All) <i>N</i> = 504	Hispanic (English) <i>N</i> = 242	Hispanic (Spanish) <i>N</i> = 155	Black <i>N</i> = 31
Number of staff could approach	−0.18	−0.16	−0.17	−0.17	−0.32	0.12	0.03
Shared expectations with school staff	−0.08	−0.05	−0.04	−0.04	−0.32	0.42***	−0.47
Number of parents of child's friends	0.06	0.05	0.12	0.12	0.13	−0.01	−0.30
Shared expectations with other parents	0.04	0.07	0.09	0.09	0.02	0.08	0.08

Effect sizes (treatment–control) in student standard deviation units.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

Table 6
Effect sizes of FAST participation on children's socio-emotional outcomes by racial/ethnic group.

<i>Both cities</i>	School level <i>N</i> = 24	Student level <i>N</i> = 863	White <i>N</i> = 120	Hispanic (All) <i>N</i> = 646	Hispanic (English) <i>N</i> = 294	Hispanic (Spanish) <i>N</i> = 342	Black <i>N</i> = 65
Teacher reported pro-social skills	0.01	−0.16*	0.00	−0.12	0.09	−0.28*	−0.81**
Teacher reported total difficulties	−0.08	0.05	−0.04	0.01	−0.12	0.14	0.60**
Parent reported pro-social skills	0.00	0.01	0.00	0.04	0.03	0.04	−0.22
Parent reported total difficulties	−0.01	−0.01	0.16	−0.02	0.09	−0.11	0.03
<i>Phoenix</i>	School level <i>N</i> = 12	Student level <i>N</i> = 349	White <i>N</i> = 54	Hispanic (All) <i>N</i> = 241	Hispanic (English) <i>N</i> = 52	Hispanic (Spanish) <i>N</i> = 187	Black <i>N</i> = 34
Teacher reported pro-social skills	0.07	−0.12	0.33	−0.09	0.30	−0.19	−1.12**
Teacher reported total difficulties	−0.23	−0.07	−0.48	−0.13	−0.08	−0.14	0.83
Parent reported pro-social skills	0.00	−0.01	0.41	−0.08	0.14	−0.13	−0.32
Parent reported total difficulties	−0.07	−0.08	0.00	−0.05	0.30	−0.17	0.37
<i>San Antonio</i>	School level <i>N</i> = 12	Student level <i>N</i> = 514	White <i>N</i> = 66	Hispanic (All) <i>N</i> = 504	Hispanic (English) <i>N</i> = 242	Hispanic (Spanish) <i>N</i> = 155	Black <i>N</i> = 31
Teacher reported pro-social skills	−0.06	−0.10	−0.27	−0.03	0.08	−0.22	−0.40
Teacher reported total difficulties	0.07	0.09	0.31	0.01	−0.11	0.32**	0.50
Parent reported pro-social skills	−0.01	0.00	−0.27	0.07	0.01	0.14	−0.24
Parent reported total difficulties	0.05	0.05	0.28	0.01	0.00	0.11	−0.08

Effect sizes in student standard deviation units. Control group is the reference group.

* $p < 0.05$.

** $p < 0.01$.

and 5.59 for those who attended 0–1, 2–5, and 6–8 FAST sessions, respectively. It seems likely there are unobserved selectivity patterns that we are not able to detect in this descriptive analysis, and we cannot confirm that the observed differences are caused by FAST attendance; alternatively, they may reflect differences in which families choose to participate in FAST. Still they encourage us to produce quasi-experimental estimates of FAST effects among participants (also known as “treatment-on-treated” effects), when data on both cohorts are available.

4.6. Differences between ethnic groups in social capital and child outcomes

In response to our last research question, we examined differences in social capital and child outcomes by demographic group. Because we are examining differences among students from varied race/ethnic groups, we focus in this exploratory analysis on individual-level mean comparisons. For comparison with our earlier findings, we also note effect sizes for school mean differences. All effect sizes are calculated based on pooled student-level standard deviations. We report results for the two cities combined and separately by city.

4.7. Ethnic differences in parent-reported social capital

Table 5 displays values on the social capital scales. The first column of Table 5 indicates effect sizes at the school level (from Table 2). The remaining columns report effect sizes for the comparison of students in treatment and control schools in the full sample and divided by race/ethnic subgroup. Two main findings stand out in this table. First, effects on intergenerational closure (parents know the parents of their children's friends) pertain largely to Whites. In the total sample, for example, the effect sizes are .50, .19 and .10 for Whites, Hispanic–English language, and Hispanic–Spanish language, respectively. These ethnic differences are especially striking in Phoenix, where they also appear for parents' shared expectations. Recall that pre-treatment differences in these conditions favored Hispanics in the Spanish subgroup over Whites and other Hispanics (see Table 1), so the pattern seems to indicate that FAST helps Whites catch up to Spanish-language Hispanics in the extent of their parent networks.

Second, among parents in San Antonio, FAST effects on levels of perceived shared expectations with school staff were much higher among Hispanics of Spanish

language background than among parents from other groups. This result is especially noteworthy because prior to FAST, Hispanic respondents generally had weaker relations with school staff than did Whites. Here too, then, FAST appears to help the group that starts out behind catch up to other groups. Yet the pattern is not consistent across indicators or across cities, as is evident in Table 5. For example in San Antonio the greatest increase in shared expectations with school staff was for Hispanic parents of Spanish language origins, but in Phoenix the greatest increase on this indicator was for White parents, followed closely by those of Hispanic–English language backgrounds.

4.8. *Ethnic differences in teacher- and parent-reported child outcomes*

Differences by ethnic group in FAST effects on child outcomes are less clearly patterned, but some of the same findings can be discerned (see Table 6). In particular, the benefits of FAST in reducing behavioral difficulties and improving pro-social skills in Phoenix are clearer for Whites than for either group of Hispanics. For example, the effect size for teacher-reported total difficulties in Phoenix was -0.48 for Whites but -0.13 for Hispanics. Almost none of these differences are statistically significant, but they are potentially important signals and may be replicated as the study proceeds.

5. Discussion and conclusions

For the most part, the results reported in this paper confirm initial expectations about differences between White and Hispanic families in parent social networks. They reveal that parents from Hispanic backgrounds identify fewer school staff whom they would feel comfortable approaching in case of a question or problem, yet those from Spanish language backgrounds have closer connections with other parents whose children attend the same school, compared to other demographic groups.

Impact findings reported at this stage are limited in two ways. First, less than half the data are available because the FAST intervention has been implemented in only the first 12 of the 26 treatment schools (and, correspondingly, only the first 12 of the control schools have been studied). Second, the results addressed in this paper come from a very early point, immediately after the FAST intervention, in a study that will yield follow-up data after one year (for parents) and two years (for parents, teachers, and student achievement).

With those caveats in mind, preliminary evidence points to promising FAST effects on social capital and

child outcomes in Phoenix but not in San Antonio. The reason for the cross-city differences is not clear but two hypotheses may be identified. First, the populations of the two cities are very different. San Antonio is an older, more established community, whereas the districts in our Phoenix sample are growing rapidly and consist of more recent immigrants, including undocumented residents. One possibility, then, is that program impacts are greater in a less settled community. Second, it is possible that implementation occurred with higher quality or greater fidelity in Phoenix than in San Antonio.

The preliminary analyses also revealed better behavioral outcomes for children whose families attended FAST than for children whose families did not. This pattern held in San Antonio as well as in Phoenix. We cannot yet say whether this is a causal pattern, but it directs us to examine FAST effects among those who participated in addition to effects among those who were in the FAST schools more broadly. The finding that FAST attendance was linked to more positive outcomes in both cities might suggest that implementation differences are not the main explanation for between-city differences in FAST effects, but at this point it is not clear whether these attendance (or “dosage”) effects should be granted a causal interpretation.

Finally, we found possible evidence of differential treatment effects across ethnic groups. In particular the benefits of FAST in Phoenix, where the effects were largest, appear more pronounced for Whites than for either group of Hispanics. This discovery is clearer for parent relationships than for child outcomes, but it is suggestive in both cases. The possibility of differential effects by ethnic groups has profound implications for the larger issues that motivated this study. On the one hand, an intervention that boosts social capital may benefit Hispanic children. On the other hand, if the benefits are greater for Whites, as may be the case for several outcomes, then the social-capital-building intervention we examined will do little to reduce inequality between Hispanic and White children in the U.S.

A major concern for the larger study from which this paper draws is whether social capital of parents exerts a causal impact on outcomes for children. We do not address this question directly in this paper, but the findings of this paper are relevant for the larger issue. We found that in one of our two research sites (Phoenix), a program designed to enhance social capital and introduced to schools randomly led to higher levels on both our social capital scales and child outcome scales. In the other site, we found no consistent effects on either social capital or child outcomes. These results are consistent with an interpretation that in Phoenix but not San

Antonio, FAST elevated social capital, and social capital enhanced child outcomes. We will examine the full causal chain in our future studies.

This paper demonstrates the feasibility of manipulating social capital through a designed intervention, and this points the way towards experimental studies of social capital and other social phenomena. It also shows, however, that interventions may not have the same effect in all population subgroups, a finding that is particularly striking in light of the way FAST embraces cultural adaptations in its implementation process. Finally, the paper reminds us of the importance of understanding the mechanisms through which inequalities are generated so as to better design interventions to combat them.

Acknowledgements

Earlier versions of this paper were presented at the 2010 meetings of the Society for Research on Educational Effectiveness, the American Educational Research Association, the Research Committee on Social Stratification (RC28) of the International Sociological Association, and the conference on “Sources of Inequality across the Globe” at the Juan March Institute, Madrid, Spain. The authors are grateful for helpful comments from Annette Lareau, Florencia Torche, Deborah Vandell, Ruth Zambrana, and other participants in these sessions, and from the RSSM editors and referees. The authors also express their appreciation to Lynn McDonald and many other partners in the larger project from which this paper is drawn. Research on the paper was supported by grants from the National Institute of Child Health and Human Development (grant no. 1R01HD051762-01A2) and the Institute of Education Sciences (grants no. R305C050055 and R305B090009). Findings and conclusion in the paper are the responsibility of the authors and do not necessarily represent the official views of the supporting agencies.

References

- Barnard, W. M. (2004). Parent involvement in elementary school and educational attainment. *Children and Youth Services Review*, 26, 39–62.
- Bourdon, K. H., Goodman, R., Rae, D. S., Simpson, G., & Koretz, D. S. (2005). The Strengths and Difficulties questionnaire: US normative data and psychometric properties. *Journal of the American Academy of Child and Adolescent Psychiatry*, 44, 557–564.
- Bryk, A. S., & Schneider, B. L. (2002). Trust in schools: A core resource for improvement. *New York: Russell Sage Foundation*.
- Carbonaro, W. J. (1998). A little help from my friend's parents: Intergenerational closure and educational outcomes. *Sociology of Education*, 71, 295–313.
- Chapa, J., & De La Rosa, B. (2004). Latino population growth, socioeconomic and demographic characteristics, and implications for educational attainment. *Education and Urban Society*, 36, 130–149.
- Coleman, J. S. (1990). *Foundations of social theory*. Cambridge, MA: Harvard University Press.
- Cornwell, E. Y., & Cornwell, B. (2008). Access to expertise as a form of social capital: An examination of race- and class-based disparities in network ties to experts. *Sociological Perspectives*, 51, 853–876.
- Dickey, W. C., & Blumberg, S. J. (2004). Revisiting the factor structure of the strengths and difficulties questionnaire: United States, 2001. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43, 1159–1167.
- Downey, D., von Hippel, P. T., & Broh, B. A. (2004). Are schools the great equalizer? Cognitive inequality during the summer months and the school year. *American Sociological Review*, 69, 613–635.
- Entwisle, D. R., Alexander, K. L., & Olson, L. S. (1997). *Children, schools, and inequality*. Boulder, CO: Westview Press.
- Flores-Gonzales, N. (2002). *School kids/street kids: Identity development in Latino students*. New York: Teachers College Press.
- Goodman, R. (1997). The Strengths and Difficulties questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, 38, 581–586.
- Granovetter, M. S. (1977). The strength of weak ties. *American Journal of Sociology*, 78, 1360–1380.
- Gresham, F. M., & Elliott, S. N. (1990). *Social Skills Rating System*. Circle Pines, MN: American Guidance Services.
- Hemphill, F. C., & Vanneman, A. (2011). *Achievement gaps: How Hispanic and White students in public schools perform in mathematics and reading on the National Assessment of Educational Progress (NCES 2011-459)*. Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U. S. Department of Education.
- Horvat, E. M., Weininger, E. B., & Lareau, A. (2003). From social ties to social capital: Class differences in the relations between schools and parent networks. *American Educational Research Journal*, 40, 319–351.
- Kahne, J., & Bailey, K. (1999). The role of social capital in youth development: The case of “I Have a Dream” programs. *Educational Evaluation and Policy Analysis*, 21, 321–343.
- Kao, G., & Thompson, J. S. (2003). Racial and ethnic stratification in educational achievement and attainment. *Annual Review of Sociology*, 29, 417–442.
- Lareau, A. (2000). *Home advantage: Social class and parental intervention in elementary education* (2nd ed.). Lanham, MD: Rowman and Littlefield.
- Larson, K., & Rumberger, R. W. (1995). Doubling school success in highest-risk Latino youth: Results from a middle school intervention study. In R. F. Macias, & R. G. Garcia Ramos (Eds.), *Changing schools for changing students* (pp. 157–179). Santa Barbara: University of California, Linguistic Minority Research Institute.
- Lee, V. E., & Burkam, D. (2002). *Inequality at the starting gate*. Washington, DC: Economic Policy Institute.
- McDonald, L. (2002). Evidence-based, family-strengthening strategies to reduce delinquency: FAST – Families and Schools Together. In A. R. Roberts, & G. J. Green (Eds.), *Social workers' desk reference* (pp. 717–722). New York: Oxford University Press.
- McDonald, L., Billingham, S., Conrad, P., Morgan, A., Nina, O., & Payton, E. (1997). Families and Schools Together (FAST): Integrating community development with clinical strategy. *Families in Society*, 78, 140–155.

- McDonald, L., Coe-Braddish, D., Billingham, S., Dibble, N., & Rice, C. (1991). Families and Schools Together: An innovative substance abuse prevention program. *Social Work in Education*, 13, 118–128.
- McDonald, L., & Frey, H. E. (1999). *Families and Schools Together: Building relationships*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.
- McDonald, L., & Moberg, D. P. (2002). Social relationships questionnaire. *Madison, WI: FAST National Training and Evaluation Center*.
- McDonald, L., Moberg, D. P., Brown, R., Rodriguez-Espiricueta, I., Flores, N. I., Burke, M. P., et al. (2006). After-school multi-family groups: A randomized controlled trial involving low-income, urban, Latino children. *Children & Schools*, 28(1), 25–34.
- Mora, G. C. (2009). *De muchos, uno: The institutionalization of Latino panethnicity, 1960–1990*. Unpublished doctoral dissertation, Department of Sociology, Princeton University.
- National Center for Education Statistics. (2009). *The condition of education 2009 (No. NCES 2009-081)*. Washington, DC: US Government Printing Office.
- Putnam, R. (2000). *Bowling alone: The collapse and revival of American communities*. New York: Simon & Schuster.
- Rampey, B. D., Dion, G. S., & Donahue, P. L. (2009). *The Nation's Report Card: Long-Term Trend 2008 (No. NCES 2009497)*. Washington, DC: US Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.
- Shumow, L., Vandell, D. L., & Kang, K. (1996). School choice, family characteristics, and home-school relations: Contributors to school achievement? *Journal of Educational Psychology*, 88, 451–460.
- Stanton-Salazar, R. (2001). *Manufacturing hope and despair: The school and kin support networks of U.S.-Mexican youth*. New York: Teachers College Press.
- Suarez-Orosco, C., Suarez-Orosco, M., & Doucet, F. (2003). The academic engagement and achievement of Latino youth. In J. Banks, & C. McGee-Banks (Eds.), *Handbook of research on multicultural education* (2nd ed., pp. 420–437). San Francisco: Jossey-Bass.
- Tienda, M., & Mitchell, F. (Eds.). (2006). *Multiple origins, uncertain destinies: Hispanics and the American future*. Washington, DC: National Academies Press.
- U.S. Census Bureau (2008). *Current Population Survey, Annual Social and Economic Supplement*.
- Valenzuela, A. (1999). *Subtractive schooling: U.S. Mexican youth and the politics of caring*. Albany: State University of New York Press.
- Valenzuela, A., & Dornbusch, S. M. (1994). Familism and social capital in the academic achievement of Mexican origin and Anglo adolescents. *Social Science Quarterly*, 75, 18–36.
- West, J., Denton, K., & Germino-Hausken, E. (2000). *America's kindergartners: Findings from the Early Childhood Longitudinal Study, kindergarten class of 1998–1999, fall 1998 (No. NCES 2000-070)*. Washington, DC: National Center for Education Statistics.