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Community Education Circles in the Lawrence Public Schools: Evaluation Design and Baseline Survey Data

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Abstract:

This paper describes a plan for evaluating the Community Education Circles (CECs) program that is being implemented in the Lawrence Public Schools as part of an effort to enhance family-school engagement and improve outcomes for both students and parents. The CECs program supports the larger Lawrence Working Families Initiative, which in 2013 was awarded a multiyear grant through the Boston Fed's Working Cities Challenge. This paper accomplishes several objectives: (1) describe the goals and methods of the CECs program as well as the larger goals of the Lawrence Working Families Initiative; (2) describe the methods that will be used to evaluate the success of the CECs program; (3) describe important features of the survey data and the school administrative data that have been collected so far for the families that are participating in our study. Concerning the last objective, we describe aspects of a family's structure and employment situation, primary language, demographic information and immigrant status, measures of a family's financial situation and financial stress, and measures of parents' satisfaction with the schools and of their involvement in their child's learning. We also identify relationships between such characteristics that may present barriers to the achievement of the goals of the CECs program across a diverse set of families.

JEL Codes: I20, I24, I30, I38

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1. Introduction and Background on the Lawrence Working Families Initiative

The Federal Reserve Bank of Boston launched its Working Cities Challenge in 2013 as an initiative to help boost economic growth and development in the region's smaller, post-industrial "Gateway Cities," with a specific goal of improving economic outcomes for low-income families. The Challenge's first round invited the smaller cities of Massachusetts to submit proposals aimed at local economic revitalization, with a focus on promoting collaborative leadership across diverse groups of stakeholders as a means to that end.[1] The proposals, which differed considerably in the particular aspects of economic development being targeted, were judged by a panel of experts not affiliated with the Bank. The six winning cities in the first round received a total of $2.8M in funding from external sources to help them implement their proposals. In addition to raising the funds for the grants awarded under the Working Cities Challenge, the Federal Reserve Bank of Boston contributes to the Challenge by assisting in the implementation and evaluation of the winning initiatives.

Lawrence, one of the first-round winners of the Working Cities Challenge, received a multi-year grant of $700,000 in January 2013. Located about an hour's drive north of Boston, Lawrence has around 80,000 inhabitants. Formerly a thriving center of textile manufacturing, the city has suffered from protracted economic stagnation in the wake of the deindustrialization that began in the 1950s. The median household income in Lawrence falls well below the national median and as of 2014, 26 percent of its families live in poverty, a share that was over twice the 2014 national average poverty rate of 11 percent. Having experienced successive waves of immigration since the mid-1800s, at present roughly three-quarters of the city's population self-identifies as Hispanic or Latino (of any race), and more than 40 percent report the Dominican Republic as their place of origin. The median age of the city's residents is 31 years, which is significantly below the national median age of 38 years.[2]

[1]In 2015 a similar challenge was made available to the smaller cities of Rhode Island and in 2016 the third round of the Challenge invited Connecticut's smaller cities to submit proposals.

[2]The data pertaining to Lawrence are taken from the American Community Survey (U.S. Census Bureau/American FactFinder 2014.)

In addition to the city's economic struggles, Lawrence's public school system has been a chronic underperformer in a state that is distinguished for its high-quality public schools. In 2010 Lawrence's school superintendent was removed from office after being indicted for corruption and financial mismanagement. In late 2011 the Massachusetts education commissioner placed the Lawrence Public Schools into receivership under the direction of Jeffrey Riley, who was given broad authority over the school system. A "turnaround plan" was launched with the goal of creating high-performing schools. Some of the strategies being deployed in the turnaround effort include giving the individual schools greater autonomy, expanding the school day, enlisting the assistance of partner organizations, and "increasing student engagement through enrichment opportunities."

Lawrence's winning proposal for the Working Cities Challenge, titled the "Lawrence Working Families Initiative," aims to improve employment opportunities and overall economic outcomes for families, as well as to support the turnaround goals of the Lawrence Public Schools by promoting greater engagement between families and schools. The proposal's twin goals—to improve family economic outcomes as well as children's schooling outcomes—reflect the Initiative's governing premise that "a successful turnaround of Lawrence schools is a whole community and whole family effort, and that children thrive when their families are stable."[3] Consistent with this premise, academic research has identified numerous ways in which a family's financial situation—for better or worse—influences its children's educational performance.

In keeping with the goals of the Working Cities Challenge, the Lawrence Working Families Initiative harnesses the resources of numerous contributors, including the Lawrence Public Schools, Lawrence Community Works, the City of Lawrence, other local nonprofit organizations and public institutions, and Lawrence-area employers. The Lawrence Public Schools' Family Resource Center was founded in 2013 to serve as the Initiative's main base of operations. The Center's mission is to provide access to "essential community and school resources to

[3]The source of this quotation is https://www.lawrence.k12.ma.us/departments/community-family-student-engagement/lawrence-working-families-initiative.

address social, academic, health and economic challenges."[4] In addition to providing access to such resources, the Center provides intensive coaching to a subset of families aimed at helping them achieve their economic and financial goals.[5]

Lawrence Community Works and the Lawrence Public Schools jointly lead a separate program called Community Education Circles (CECs) that is related to the Lawrence Working Families Initiative. With funding from the W.K. Kellogg Foundation, the CECs program consists of a series of informal meetings of parents, students, and teachers. As described in more detail in the next section, the CECs, held on school premises over dinner, are designed to foster a greater sense of belonging, engagement, and cultural competency among the various groups that make up the school community.

In 2014, members from the Boston Fed's Regional & Community Outreach Department and the Research Department began working with members of Lawrence Community Works, the Family Resource Center, and staff members from the Lawrence Public Schools in order to develop a plan for evaluating the CECs and (separately) evaluating the Center's programs. Because the evaluation is ongoing, we are not yet in a position to say anything about the CECs' success in meeting its objectives. This paper describes the plan for evaluating the CECs program and the progress made to date on the evaluation process. (The evaluation of the Family Resource Center will be described in a separate paper.) This paper provides extensive information on the characteristics of the families that are participating in our study of the CECs, based on surveys of these families conducted in 2014 and 2015, together with data provided to us by the Lawrence Public Schools. In particular, we describe the overall characteristics pertaining to family structure, primary language, demographic information and immigration status, measures of the financial situation and the employment situation of individual families, measures of the extent of parental involvement in their child's (children's) education, school activities, and the school community. We also identify some relationships between certain

[4]The source of this quotation is https://www.lawrence.k12.ma.us/about-lps/family-resource-center.

[5]A brief video about the Lawrence Working Families Initiative can be found online at https://www.lawrencecommunityworks.org/site/2016/11/21/lwfi/.

characteristics that may present barriers to achieving the CECs' goals given a diverse set of families.

The remainder of the paper is organized as follows. Section 2 provides background information on the CECs and describes their implementation within the Lawrence Public Schools. Section 3 describes the methods that will be applied in evaluating the CECs. Section 4 describes the survey data, the data from the Lawrence Public Schools, and identifies systematic relationships among the various characteristics of interest. Section 5 concludes by outlining the next steps in the evaluation process.

2. Community Education Circles

Community Education Circles (CECs), one of the programs implemented by Lawrence Community Works in conjunction with the Lawrence Working Families Initiative, consists of a series of four interactive dinners held for families with children enrolled in selected elementary school classrooms in the Lawrence Public Schools. For each participating class, the dinners bring together a trained facilitator with the classroom teacher, parents, and students in order to promote a greater level of belonging and engagement among the families and between the families and the school community. As stated by Lawrence Community Works in an unpublished progress report submitted to the Kellogg Foundation, the theory underlying the CECs is that "building stronger relationships between parents, teachers, and students would yield improved educational outcomes for the students, a greater sense of belonging and buoyancy for the parents, and improved cultural competency for the teachers" (LCW 2015, p. 1). Lawrence Community Works developed this mission statement through its experience with neighborhood organizing efforts, but noted that the theory had not "been fully tested in a school environment" (LCW 2015, p. 1).

At the Circle dinners, the facilitator leads the parents in sharing "how they learned to become the person they are today, what are their dreams for the future and the future of their children, how they can best work together, and what they would like to do together to improve the educational outcomes for their children" (LCW 2015, p. 1). The agenda for each of the four dinners is different, but all are designed with the common theme of supporting greater engage-

ment and deeper relationships among the attendees. To encourage participation, Lawrence Community Works provides stipends for the teachers who take part and supplies the food, childcare, and meeting materials for the families who attend the dinners.

The CECs program started when Lawrence Community Works, motivated by its observation of "a strongly resonant theme of disconnection between parents and school faculty/ administration, furthered by a lack of effective engagement infrastructure" (LCW 2013, p. 1), began a one-classroom test of the program's approach during the 2012–2013 academic year. Although it is universally desirable to improve the engagement between families and schools, Lawrence seemed especially in need of a program to foster such connections. Many students in the Lawrence Public Schools have parents who are immigrants, and these children "often have a double challenge to success—family poverty, and navigating the disconnect between the cultural understandings, norms, strengths, and weaknesses of their parents' culture of origin and the dominant culture in American schools" (LCW 2013). Although the first Community Education Circle was implemented in a high school classroom, Lawrence Community Works subsequently reoriented the program to serve elementary school classrooms. In fall 2013, the initiative expanded to a total of four classrooms in two different schools. Encouraged by the experience with the early CECs and using feedback from the participants, Lawrence Community Works further improved the design of the meetings and expanded the program to a total of 35 CECs across four schools in the 2014 fall semester and the 2015 winter/spring semester.

The preliminary anecdotal evidence is quite positive regarding the effectiveness of the CECs. Based on its observations and debriefing of participants, Lawrence Community Works reports that the "first round of Circles yielded deeper connectivity between the families and the schools, more parent attendance in school activities, more consistent communication between parents and teachers, and a greater sense of community between the parents, students, and teachers of those particular classrooms" (LCW 2015). This anecdotal evidence is encouraging, but might be biased as a result of selection effects and because the evidence does not consider how these same family-school relationships might have evolved over the school year in the absence of the CECs. In the paper's next section, we outline the research methodology and data

collection approach that we will employ in the future to conduct a quantitative assessment of the effects of the CECs program.

3. Description of Evaluation Method

The Intent-to-Treat Approach

The research design for evaluating the CECs involves an intent-to-treat (ITT) approach. The CECs were offered to families in selected kindergarten through third grade classrooms (plus one fourth grade classroom) at several Lawrence elementary schools during the 2014–2015 school year. Since participation was voluntary, some parents from the invited classrooms attended meetings of the CECs and some did not. This self-selection implies that among the invited families, the actual participation in the CECs was not a random choice. As the ITT literature notes,[6] if we only compared the participating families with the families that were not invited or with those that were invited but did not participate, we would not be able to separate the effects of the treatment from the effects of the characteristics that led the families to participate in the first place. Hence in evaluating the CECs program, we compare the outcomes for all the invited families—even those who did not attend the CECs—with a control group of families who were not invited to participate. Another way to say this is that the "treatment" consists of being invited to participate in the CECs. The invitees are much more *likely* to attend CECs than are non-invitees, so we will be evaluating the effects of probabilistic participation rather than the effects of actual participation.

The control group, selected by our partners in the Lawrence public school system, consists of families whose children attended schools that are demographically similar to the schools in which CECs were held and whose children were in the same grade levels as the children in the treatment families. Thus, the families in the control group should differ from the families

[6] See, for example, the discussion in Kling, Liebman, and Katz (2007), comparing intent-to-treat (ITT) estimates with the effect of treatment on the treated (TOT) in the moving-to-opportunity (MTO) experiment. A more recent analysis of the same experiment (Ludwig et al., 2013) characterizes ITT estimates as follows: "We present intention-to-treat (ITT) estimates that capture the effect of being offered the chance to use an MTO voucher to move into a different neighborhood" (p. 228).

invited to participate in the CECs only in the schools that their children attended. The CECs were conducted in a total of 35 classrooms across four schools; the control group families were drawn from a total of 58 classrooms at six other schools.

The Survey

The baseline survey that was sent to parents in the treatment and control groups included three main modules: (i) questions about involvement and engagement with their child's school experience during the preceding school year, (ii) questions about the first parent's family structure and current employment/student status and situation (e.g., wages, hours, commute), and (iii) questions about the family's financial situation. These three modules required each respondent to fill out nine pages. The respondents also were asked to fill in a fourth module (five more pages), identical to the second, regarding the second parent/guardian, if one was present. The types of questions included in each module are described in more detail in the box titled "Overview of the Survey and the Lawrence Public Schools Data."

In December 2014 we sent baseline surveys in both English and Spanish to over 1,800 families, all of whom had at least one child attending kindergarten through fourth grade in the Lawrence Public Schools. Approximately one-sixth of these families included those with children in the classrooms that had been invited to participate in the CECs, and the remaining families included students in classrooms at one of the six schools in the control group. After the initial mailing, we sent reminder postcards and made follow-up phone calls. In February, we sent duplicate surveys to over 1,500 families who had not yet returned the survey. In spring 2015, CECs were held at two more schools, so we subsequently sent the baseline surveys to the 800 families in these additional classrooms in order to increase the size of the treatment group.

Along with the survey, we sent the parents a form to sign indicating their informed consent regarding participation in the study and a form authorizing the Lawrence Public Schools to release school-related data for their child. If the parents did not return the signed consent form, we were not able to use their survey results in our study; by the same token, if they did not sign a release form, we could not obtain the LPS data for their children. Hence we put some effort into sending follow-up letters regarding missing consent and release forms, as well as missing

surveys. In all, the survey mailing included an explanatory letter about the research, the survey, and the consent and release forms, all written in Spanish and English, plus a postage-paid return envelope. Our partners in Lawrence public school system affixed the mailing labels, since we were not authorized to have names and addresses until after the families agreed to enter the study by sending us the survey and consent forms.

From the over 2,600 baseline surveys mailed, we received over 500 completed surveys, for an overall response rate of 21 percent. The response rate was 18 percent for the intent-to-treat group and 22 percent for the control group. See Figure 1 for a visual depiction of the research design and the number of families in each category.

Based on the sign-in sheets at the Circle dinners, almost 400 parents attended at least one of the four meetings held during the 2014–2015 school year. Of the parents who signed in, we were able to match about one-sixth of the names with the parents who returned a completed survey and consent form. Thus, in our sample, almost one-third of the intent-to-treat group actually participated in at least one evening at a Community Education Circle.

Lawrence Public Schools Data

In addition to the family data collected through the survey, we also obtained school-related data from the Lawrence Public Schools; the types of data the school system supplied are outlined in the box, "Overview of the Survey and the Lawrence Public Schools Data." We have both survey data and school-related data for 530 children. We have school-related data for an additional 60 children for whom we cannot also use their survey data because the parents of these children—despite completing the survey and signing the LPS data-release form—failed to complete the consent form for participation in our study. There are approximately 10 children for whom we have only survey data because the school staff could not identify these individuals in their database—most likely the children were no longer attending a Lawrence public school at the time our data request was filled.

4. Baseline Sample Characteristics and Descriptive Findings

In this section, we describe the socioeconomic and demographic characteristics of our baseline sample and investigate the various relationships between a family's background characteristics and the response patterns occurring on different portions of our survey. We first compare the characteristics of our sample population to the corresponding characteristics of all Lawrence residents and all Massachusetts residents. (The statistics for Lawrence and Massachusetts are taken from the American Community Survey.) We then describe the relationships among some of the key variables of interest in our sample population, such as the relationship between a parent's immigration status and the family's employment situation. Finally, we investigate what potential barriers may prevent achieving the various goals embodied in the CECs by matching a family's background characteristics to survey-derived measures of parental involvement in their children's education, parental satisfaction with the schools, and the family's financial stability.

How Our Sample of Families Compares with Residents of Lawrence and Massachusetts

The basic comparative statistics for our research survey's Community Education Circle treatment and control groups are presented in Table 1, along with the estimates for the same or similar variables as measured by the U.S. Census Bureau's American Community Survey (ACS) for the city of Lawrence and for Massachusetts (U.S. Census Bureau/American FactFinder 2014). Our research sample draws from a subset of Lawrence's population (those families with children in kindergarten through fourth grade in the Lawrence Public Schools), so we expect the characteristics of our sample population to differ substantially from those of Lawrence's general population. However, in analyzing the survey data, it is useful to see how the characteristics of our sample population differ from those of the larger community. Similarly, it is interesting to compare the demographic and socioeconomic characteristics of the city of Lawrence with those of Massachusetts as a whole.

The educational attainment of the parents who completed our research survey is generally similar to that of the population of adults aged 25 years and older who are living in Lawrence; both groups tend to have markedly lower levels of education than the Massachusetts

population which is 25 years of age and older. The parents in our sample are nearly three times as likely not to have completed high school when compared to adults in Massachusetts, and Massachusetts adults are over three times as likely to have a four-year college degree or higher as compared to the parents in our sample. These differences in educational attainment point to the difficulty that Lawrence residents are likely to face in securing reasonably well-paying jobs. Among parents, low educational attainment is a potential impediment to participating in their children's school experience, particularly if the parents do not feel well equipped to help their children with school work.

A lack of English language fluency is another barrier to labor market success and school engagement that many Lawrence residents face. In both our research sample and in the ACS estimates for Lawrence, over 75 percent of adults indicate that they primarily speak a language other than English at home; the ACS estimate for Massachusetts is only 11 percent. In our research sample, 46 percent of the parents indicate that they are not fluent in English, compared to only 2 percent of Massachusetts residents. Although 42 percent of Lawrence's population is estimated to have been born outside of the United States (compared to 16 percent for Massachusetts), only one-quarter of the students in our research sample are not native born.[7] It is likely that many of the native-born students in our research sample have parents who immigrated to the United States before their children were born.

Not surprisingly, the parents in our research sample have an age distribution that differs markedly from that of the general population living in both Lawrence and Massachusetts that is 20 years of age or older. The parents in our research sample are very heavily concentrated in the 25–39 year age range. Somewhat surprisingly, only 3 percent of the parents are under 25 years of age (and none are younger than 20 years). Only 11 percent are 45 years of age or older, compared to over half of the residents living in Lawrence and in Massachusetts. This difference is important to take into account when considering some of the other differences between our research sample and the broader population estimates for Lawrence and Massachusetts.

[7] In our data, we observe the nativity of students, but not that of their parents.

Of the parents in our research sample, the percentage who are in the labor force is substantially greater than the labor force participation rate for Lawrence or for Massachusetts (labor force participation rates are measured for all residents who are 16 years of age or older). This high labor force participation rate likely reflects the fact that the research sample—consisting of parents of school-age children—has relatively few people who are likely to be still in school full-time or to have retired. The unemployment rate for the research sample is higher than the rate for all Lawrence residents, which in turn is higher than the Massachusetts unemployment rate. This result seems likely to reflect the barriers to employment members of our research sample face rather than differences in age composition.

In the Lawrence Public Schools, the percentage of students who the Massachusetts Department of Education classifies as economically disadvantaged is over twice the statewide percentage, and the percentage of students in our sample who are classified as economically disadvantaged is even higher than the general rate for Lawrence.[8] This difference may reflect the fact that our sample is drawn from families with children in kindergarten through fourth grade. A family's economic well-being may improve somewhat as the parents gain labor market experience over time and no longer face the impediments to labor force participation associated with having young children. Furthermore, most of the school populations from which our sample is drawn suffer from a greater incidence of economic disadvantage compared to the Lawrence Public School's district-wide average.

[8] In 2015, the Massachusetts Department of Education stopped identifying low-income students as those who were eligible to receive a free or reduced-price lunch and instead adopted the criterion of "economically disadvantaged," a category that includes children in families receiving benefits through any of these programs: Temporary Assistance for Needy Families, the Supplemental Nutrition Assistance Program (SNAP, popularly known as the food stamp program), foster care, or Medicaid. This change in the identification of low-income status was occasioned by the launch of the Community Eligibility Program (CEP), a federal government initiative in which qualifying public school districts became eligible to receive funding to provide free lunches to all of their students. The program was made widely available in Massachusetts beginning with the 2014–2015 school year, and as of the 2015-2016 school year many large school districts in the state, including Lawrence, participated in the CEP and thus offered free lunches to all students regardless of income.

Relationships among Socioeconomic and Demographic Factors within our Sample of LPS Families

As discussed earlier and documented in the subsection above, Lawrence is a relatively disadvantaged city, and in some respects our sample of families appears to be even more disadvantaged when compared with families citywide and even compared with the average family whose children are enrolled in the Lawrence public school system. This subsection of the paper examines how various characteristics of the sample families are related to each other. In particular, Tables 2 and 3 relate a family's employment status to its immigration status, primary language, educational attainment, and to an economic disadvantage indicator. Table 2 examines these relationships among one-parent families, while Table 3 describes the analogous relationships when considering only two-parent families. The sample is about evenly divided between families headed by one parent (46 percent) and by two parents (54 percent). Almost two-thirds of the single parents are employed, and over four-fifths of the two-parent families have at least one employed parent; indeed, 55 percent of the two-parent families report that both parents are employed.[9]

The only information we have on immigration status refers to the child, so in these tables the only families who are classified as immigrants are *recent* immigrants—they entered the country after their children (who are now enrolled in kindergarten through fourth grade) were born. All the other families are classified as "non-immigrants," even though this group may include parents who immigrated to the United States before their school-age children were born. In contrast, primary language refers to the parent who filled out the survey. The recent immigrants who are single parents are more likely to be employed than the single-parents classified as non-immigrants; similarly, among two-parent families, recent immigrants are more likely to have both parents employed than are non-immigrant families. The same is true of

[9] For two-parent families, the employment status categories are complicated by missing data, mostly regarding the second parent in the family. The one-parent versus two-parent family groupings were based on several variables, starting by matching parent addresses in either our survey data or in the Lawrence Public School data. Some two-parent families did not fill out the survey information for the second parent, and therefore we have incomplete data on the second parent's employment status.

Spanish-speaking parents compared with English-speakers—Spanish speakers, whether they are the sole head of household or in two-parent families, are employed to a greater degree than are English-speaking parents.[10] Many of these Spanish-speaking parents have apparently overcome the difficulties other researchers have documented regarding employment barriers faced by those with limited English.

As is the case for the U.S. population as a whole, within the sample the more educated parents generally have higher employment rates than individuals who are less educated. However, the pattern is much less pronounced (indeed perhaps not measurably present) for single parents, while in two-parent families, those in which at least one parent has a bachelor's degree or higher are much more likely to have both parents employed than those in which at least one parent has a high school education or less.

Not surprisingly, the three lowest panels in Tables 2 and 3 indicate that those families with at least one employed parent are less often classified as economically disadvantaged than those families in which we observe only parents who are not employed. Nonetheless, having a job does not eliminate a family's need for public transfers (the key element in the "economically disadvantaged" classification). In our sample, almost three-fifths of the two-parent families in which both parents are employed are economically disadvantaged, as are four-fifths of the families headed by a single parent with a job.

Table 4 focuses on a family's primary language. The upper panel clarifies the overlap between a household's immigration status and the parents' primary language: in all of the recent-immigrant families, the parent's primary language is listed as Spanish or other.[11] The second panel suggests that the educational distribution of Spanish speakers is somewhat bimodal compared with English-speaking parents, although the distribution is much more

[10] Note that because we measure immigration status for children only, many non-immigrant children may have foreign-born parents who immigrated to the United States before their children were born. Evidence of this can be seen in Table 1 which reports that a greater fraction of Lawrence residents over five years of age are immigrants than what we observe among our sample children (42 percent compared with 25 percent). In addition, the sample contains a much smaller fraction of immigrant children (about one-quarter) than of Spanish-speaking parents (over three-quarters).

[11] Over 98 percent of those answering "Spanish or other" said that Spanish was their primary language.

loaded at the low end: 30 percent of Spanish speakers have less than a high school degree compared with 18 percent of English speakers; at the same time, about 13 percent of Spanish speakers report a having a four-year bachelor's degree or higher, as compared with 11 percent of English speakers. Among these parents, economic disadvantage is not associated with their primary language: Spanish speakers are about as likely to be economically disadvantaged as are English speakers.

Table 5 focuses on immigration status. A greater fraction of recent immigrant parents have a bachelor's degree or more compared with the parents classified as non-immigrants, but (unlike the case for Spanish speakers in the previous table) recent immigrant parents are just as likely as the non-immigrant parents to have ended their education with a high school diploma or less. In addition, recent immigrant families are more likely than others to be categorized as economically disadvantaged.

Barriers to School Involvement and School Satisfaction

The goals of the CECs include increasing parents' sense of belonging to the school community, increasing parents' levels of engagement with the school and involvement in their children's education, and improving teachers' cultural competency in dealing with their students and the parents of their students. To investigate what potential barriers and factors might impede or facilitate achieving the program's goals, we use the survey responses to construct indexes related to the desired outcomes of the CECs and relate these to the characteristics of school families. Three of these indexes measure, respectively, "parental involvement in child's learning," "school communications," and "school satisfaction." Of these three indexes, the first relates directly to the goal of raising the level of parental involvement. The latter two indexes relate to the goals of enhancing the teachers' cultural competency—which could affect the perceived quality of school communications as well as the parents' level of satisfaction with the schools—and may also relate to the goal of enhancing the parents' sense of belonging to the school community. In Tables 6–8, we categorize a family's response on each of these indexes to the family's characteristics, which include the first language of the parent

who filled out the survey, the highest level of educational attainment of that same parent, and the employment status of one or both parents.

The index of parental involvement in a child's learning is based on the survey responses to questions such as "How often do you read to your children?" and the other ones listed in the notes below Table 6. The responses were divided into three groups, corresponding to having a low level of involvement in their children's learning, being somewhat involved, and being highly involved.[12] Across all the families in the sample responding to this question, 25 percent selected the lowest level of involvement, 40 percent reported middling involvement, and 35 percent selected the highest level of involvement. Somewhat strikingly, when decomposing the sample based on the parent's educational attainment, primary language, or employment status, the share of families with the highest level of involvement is at least 30 percent within every subgroup, and the share with low involvement is at most 31 percent in any of the subgroups.

When parental involvement levels are compared according to the family's primary language, the results suggest that English-speaking families may find it easier to be highly involved in a child's learning. English-speaking families are more likely to report a high level of involvement compared to Spanish-speaking families; conversely, Spanish-speaking families are much more likely to report having a low level of involvement in their child's learning. When comparing the levels of involvement by the parents' educational attainment, the results indicate that parents with limited schooling are more likely to have a low level of involvement in a child's learning than are parents who have more education. Even among the least educated parents, however, 31 percent of families report a high level of involvement, a share that is not far short of 35 percent, the average level of involvement across all families. Moreover, while 58 percent of parents with a bachelor's degree or higher report high involvement—considerably more than the corresponding fractions of less-educated parents—a non-negligible fraction of the highly educated (15 percent) exhibit only a low level of involvement in their child's learning.

[12]Each category, such as "low involvement" or "high involvement," corresponds to a range of values for the number of times per week parents engaged in various activities, such as reading to a child and helping a child with homework.

Compared to the involvement levels based on a family's primary language, the relationship between the parents' employment status and the level of involvement in their child's education is less straightforward. On average, families with two employed parents are more involved than are other types of families. However, when we exclude two-parent families in which both parents are employed, the two-parent families are not consistently more highly involved than one-parent families. For example, the one-parent families in which the parent is not employed are somewhat more likely to be highly involved in their child's learning than are two-parent families in which only one parent is employed.

Not surprisingly, the parents' primary language affects their perceptions of the quality of school communications, as measured by our index of school communications (Table 7). English-speaking families are much more likely than Spanish-speaking families to rate school communications as good (the highest rating) and are less likely to give school communications an average rating, although English-speaking and Spanish-speaking families are about equally likely to find that school communications are poor.

The tendency to give school communications a good rating decreases continuously with a parent's education level, suggesting that more educated parents have higher standards and/or higher expectations concerning school communications. Nonetheless the share of parents that rate communications as poor does not increase in lockstep with education levels. For example, parents with just a high school education are nearly as likely as those with at least some college education to perceive school communications as poor.

A family's employment status is not strongly associated with a parent's rating of school communications. Single-parent households, regardless of employment status, are more likely to find school communications are poor than are two-parent families. At the same time, a relatively large share of single-parent households in which the parent is employed rated school communications as good—more, for example, than the share of families with two-employed-parents who feel school communications are good.

Considering the sample as a whole, more than half of the parents report a high level of satisfaction with the school according to our index of school satisfaction (Table 8); this high rating on the index means that the parent answered "very satisfied" on every question to which

he or she responded. Perhaps surprisingly, based on their weaker perceptions of school communications, Spanish-speaking parents are more satisfied with their child's school than are English-speaking parents, a result that suggests that the quality of communications is not the sole or deciding factor in a parent's overall satisfaction with the school. English-speaking parents are not much more likely than Spanish-speaking parents to report a low level of school satisfaction, but English speakers are more likely to report only a middling level of satisfaction. These findings suggest that English-speaking parents either have higher expectations for the school or that they simply feel more comfortable reporting dissatisfaction with their child's school.

Similar to the patterns observed in the ratings of school communications, higher levels of educational attainment are associated with lower levels of parental school satisfaction on average, but the differences across education groups are less dramatic along the dimension of school satisfaction. For example, while a parent with a bachelor's degree or higher is less likely to be highly satisfied with the school than are parents with less education, close to 50 percent of the most educated parents do say that they are highly satisfied. Moreover, the share of parents who give the lowest satisfaction rating does not increase in lockstep with education levels—in fact, the most highly educated parents are the least likely to report a low satisfaction level, but they are more likely than any other group to report only a medium level of satisfaction.

The relationship between a family's employment status and its school satisfaction does not reveal any clear patterns. The only fact that stands out is that single-parent families in which the parent is not employed are much less likely to report a high level of school satisfaction than are other families—and, as seen in the previous table, this same type of family is much less likely than the other types to perceive that school communications are good.

Barriers to Family Financial Stability

Tables 9 and 10 examine the relationship between two measures of a family's financial stability and the parent's primary language, educational attainment, and employment status. Table 9 examines a measure of financial stress that is based on the responses to questions asking whether anyone in the household had trouble paying various bills during the past four months.

Overall, 65 percent of families in the sample report at least one instance of having had difficulty paying a bill. Somewhat surprisingly, the parents whose primary language is English report having somewhat greater difficulty with paying bills than do parents whose primary language is not English (predominantly Spanish speakers). We noted earlier that Spanish-speaking parents are employed to a greater degree than are English-speaking parents. These results suggest that in managing their household finances, Spanish-speaking families are able to compensate for the potential impediments to employment and earnings posed by a lack of English language skills.

Although we expected to find that a household's financial stress tends to decrease in families headed by parents with higher levels of educational attainment, this hypothesis is not supported by the results presented in Table 9. In our survey data there is no distinct pattern relating parental educational attainment and financial stress. This result may again suggest that parents with relatively low levels of education are able to manage their finances in a way that compensates for the lower earnings associated with lower educational attainment.

The relationship between financial stress and parental employment is also surprisingly weak, although it runs in the expected direction. Families with two employed parents tend to have less trouble paying bills than do most other families, while the families with a single parent who is not employed tend to have the highest levels of financial stress. However, the patterns are not as clear-cut as one might expect.

We also examined another measure of a family's financial stability, based on the answers to a question asking how frequently over the past four months that the household was able to set aside money for emergency savings; the tabulations of this measure are shown in Table 10. Over half of the families report having never been able to set money aside. The percentage of parents that report being unable to save is actually somewhat greater for English speakers than for those parents whose primary language is not English. There is some hint of educational attainment being associated with a greater ability to save, but this pattern appears only when comparing parents who lack a high school diploma with those who have a least a high school education.

The relationship between saving and a family's employment status runs in the expected direction. Families headed by a single parent who is not employed are the least likely to have saved during the past four months, while families with two parents who are both employed are the most likely to have been able to save. One reason that there may be a stronger relationship between a family's employment status and financial stability than between a family's primary language or educational attainment and financial stability is that an individual's employment status is more subject to temporary fluctuations than is one's primary language or educational attainment. Families may save during periods when one or both parents are employed in order to hedge against future periods of non-employment.

5. Next Steps

This paper outlines our research strategy for analyzing the effectiveness of the Community Education Circles, a program administered in the Lawrence Public Schools to foster better educational outcomes and community ties in classrooms with students from economically disadvantaged families. In addition, we present selected statistics from a baseline survey of families that are participating in the evaluation study, including families in the control group as well as families in the intent-to-treat group. In addition to providing baseline data that will be useful in gauging the effectiveness of the CECs, our survey data confirm that families with children enrolled in the Lawrence public school system face substantial disadvantages relative to typical families living in Massachusetts.

We are currently conducting follow-up surveys of the study population in order to determine whether the CECs intervention had any measurable effects on the outcomes of interest, such as parental involvement in their children's education and parents' satisfaction with their children's school. By examining multiyear data from the Lawrence Public Schools for our survey participants as this information becomes available, we will be well-positioned to gauge whether the CECs were effective in improving students' test scores and attendance. Follow-up data on an individual family's economic stress will be collected to understand how changes in economic circumstances may affect family engagement and students' academic

performance, and also to examine whether parents' participation in the CECs might help to lessen the impact of economic stress on children's educational outcomes.

References

American FactFinder. 2014. *2010 – 2014 American Community Survey*. Washington, DC: U.S. Census Bureau. Online data source.

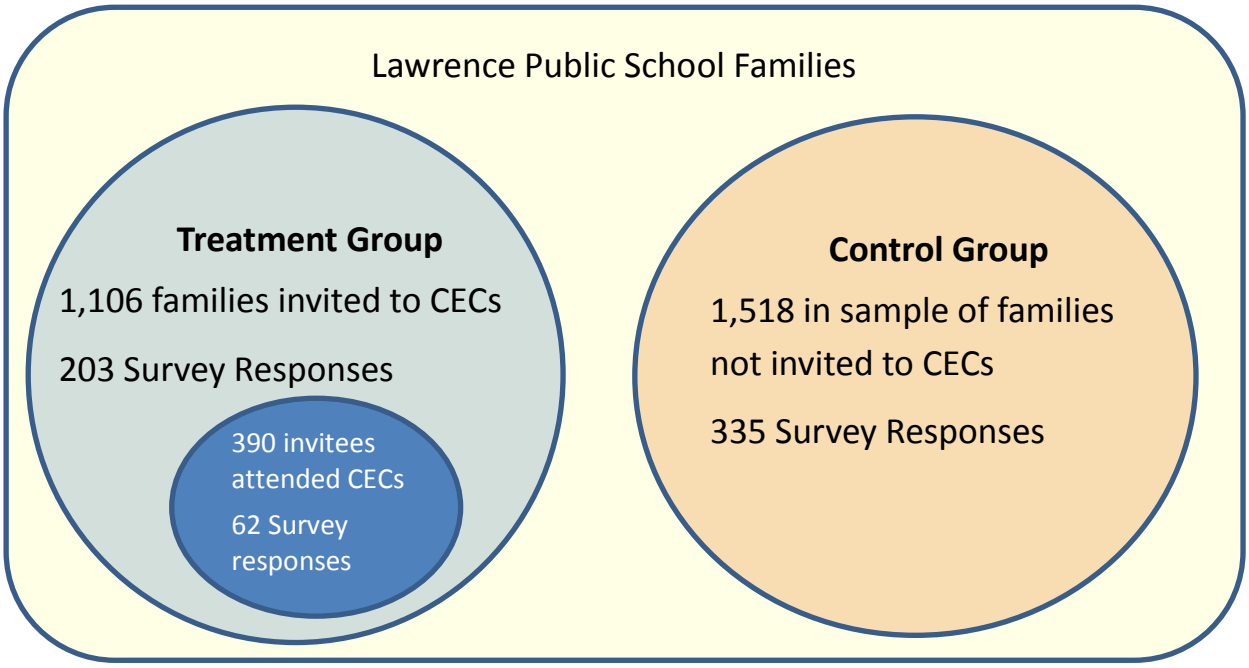
Kling, Jeffrey R., Jeffrey B. Liebman, and Lawrence F. Katz. 2007. "Experimental Analysis of Neighborhood Effects." *Econometrica* 75 (1): 83–119.

Lawrence Community Works. 2013. "Untitled Funding Proposal to W. K. Kellogg Foundation." Unpublished.

Lawrence Community Works. 2015. "Untitled Progress Report to W.K. Kellogg Foundation." Unpublished.

Ludwig, Jens, Greg J. Duncan, Lisa A. Gennetian, Lawrence F. Katz, Ronald C. Kessler, Jeffrey R. Kling, and Lisa Sanbonmatsu. 2013. "Long-Term Neighborhood Effects on Low-Income Families: Evidence from Moving to Opportunity." *American Economic Review* 103 (3): 226–231.

Figure 1: Community Education Circles (CECs) Research Design



Source: Authors' illustration.
Note: The research sample of 2,624 treatment and control group families represents more than one-quarter of the total number (9,700) of Lawrence Public School families. The intent-to-treat approach compares the outcomes for the respondents in the treatment and control groups.

Box: Overview of the Survey and the Lawrence Public School (LPS) Data

Survey Questions (Parent)

- School communication, satisfaction, involvement and engagement, sense of community, and involvement in child's learning/school experience
- Parent 1's family structure, language, education, public benefits, labor force and student status, work hours, work schedule, wages, commute, and job search
- Household financial stability/stress
- Parent 2, if present, same questions as parent 1

LPS Data (Child)

- Student demographics including age, gender, race, ethnicity, language, immigration status, living situation, siblings, and place of birth
- Enrollment in LPS including current grade, attendance, previous years' enrollment, and entrances and exits from LPS
- Economic disadvantage indicator
- Performance data: Report card information (all grades), and MCAS scores (3rd and 4th grade only)
- Other assessments, as available

Table 1: Characteristics of the Sample Population Compared with City and State Residents (Percent)

	Research Sample[a]	Lawrence	Massachusetts
EDUCATIONAL ATTAINMENT[b]			
Less than High School Graduate	28	32	11
High School Graduate or GED[c]	32	32	26
Some College or Associate's Degree	28	25	24
Bachelor's Degree or Higher	12	12	40
NATIVITY[d]			
Native Population	75	58	84
Foreign-Born Population	25	42	16
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH[e]			
English Only	22	23	89
Language Other than English	78	77	11
Speak English Less than "Very Well"	46	38	2
AGE			
20 to 24 Years Old	3	13	10
25 to 29 Years Old	22	12	9
30 to 34 Years Old	29	10	8
35 to 39 Years Old	22	10	8
40 to 44 Years Old	13	9	9
45+ Years Old	11	46	56
EMPLOYMENT STATUS			
In Labor Force	78	64	68
Employed	66	55	62
Unemployed	12	9	6
Not in Labor Force	22	37	32
ECONOMIC DISADVANTAGE INDICATOR[f]			
Disadvantaged	75	62	26
Not Disadvantaged	25	38	74

Source: Lawrence and Massachusetts economic disadvantage indicator from Massachusetts Department of Education at http://profiles.doe.mass.edu/profiles/student.aspx?orgcode=01490000&orgtypecode=5&leftNavId=305&&fycode=2015. Lawrence and Massachusetts data for the other tables gathered from 2010-14 American Community Survey estimates available from American Factfinder at http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml. Research sample is based on our parent surveys and data from Lawrence Public Schools (LPS).

[a] The research sample consists of selected LPS families.

[b] Population 25 years and over for ACS data, LPS parents of any age who filled out the survey for our research sample.

[c] Includes those who obtained another equivalent to a high school diploma.

[d] Population 5 years and over for ACS data, research sample figures report immigration status of child.

[e] Population 5 years and over for ACS data, LPS parents of any age who filled out the survey for our research sample.

[f] The economic disadvantage data for Lawrence and Massachusetts come from Mass DOE for 2014-2015.

Table 2: Barriers to Employment, Single-Parent Households[a]			
	Employment Status (Percent)		
	Employed	Not Employed	All
Full Sample (N = 235)	65	35	100
Immigration Status			
Not a Recent Immigrant[b]	64 80	36 84	100 81
Recent Immigrant	71 21	30 16	100 19
All Observations[c, d]	65 100	35 100	100 100
Primary Language			
English	47 16	53 33	100 22
Spanish[e]	70 84	30 67	100 78
All Observations[c, f]	65 100	35 100	100 100
Highest Education			
Less than High School	67 29	33 28	100 29
High School Graduate or GED	63 31	37 35	100 32
Some College or Associate's Degree	67 28	33 27	100 28
Bachelor's Degree or Higher	68 12	32 11	100 11
All Observations[c, g]	66 100	34 100	100 100
Economic Disadvantage			
Not Disadvantaged	74 21	26 14	100 18
Disadvantaged	64 80	37 86	100 82
All Observations[c, h]	65 100	35 100	100 100

Notes: Row percents in red, column percents in black. Not all row and column percents add to one hundred due to rounding.

[a] The sample includes all single-parent households for which we have employment status data.

[b] Households in which the relevant child was born in the United States. Parent's immigration status is not known with certainty because they may have immigrated to the United States before the child was born.

[c] The number of observations may change due to missing data.

[d] All observations in the sample for which we have immigration status data.

[e] Spanish or other language.

[f] All observations in the sample for which we have language data.

[g] All observations in the sample for which we have education data.

[h] All observations in the sample for which we have economic disadvantage data.

Table 3: Barriers to Employment, Two-Parent Households[a]				
	Employment Status (Percent)			
	Both Employed	One Employed[b]	One Not Employed[b]	All
Full Sample (N = 273)	55	27	18	100
Immigration Status				
Not a Recent Immigrant[c]	52	28	20	100
	70	74	85	74
Recent Immigrant	63	27	10	100
	30	26	15	26
All Observations[d, e]	55	28	18	100
	100	100	100	100
Primary Language				
English	53	21	26	100
	22	19	35	23
Spanish[f]	57	28	15	100
	78	82	65	77
All Observations[d, g]	56	26	17	100
	100	100	100	100
Highest Education				
Less than High School	39	34	27	100
	18	32	37	25
High School Graduate or GED	55	25	20	100
	32	31	37	33
Some College or Associate's Degree	61	28	12	100
	32	31	20	30
Bachelor's Degree or Higher	78	13	9	100
	18	6	7	13
All Observations[d, h]	56	27	18	100
	100	100	100	100
Economic Disadvantage				
Not Disadvantaged	71	19	11	100
	41	22	19	32
Disadvantaged	48	32	21	100
	59	78	81	68
All Observations[d, i]	55	28	18	100
	100	100	100	100

Notes: Row percents in red, column percents in black. Not all row and column percents add to 100 due to rounding.
[a] The sample includes all two-parent households for which we have employment status data for at least one parent (the primary parent).
[b] Employment status of the primary parent; employment status of the other parent is not observed or not employed.
[c] Households in which the relevant child was born in the United States. Parents' immigration status is not known with certainty because they may have immigrated to the United States before the child was born.
[d] The number of observations may change due to missing data.
[e] All observations in the sample for which we have immigration status data.
[f] Spanish or other language.
[g] All observations in the sample for which we have language data.
[h] All observations in the sample for which we have education data.
[i] All observations in the sample for which we have economic disadvantage data.

Table 4: Parent's Primary Language, All Households[a]			
	Primary Language (Percent)		
	English	Spanish[b]	All
Full Sample (N = 479)	22	78	100
Immigration Status			
Not a Recent Immigrant[c]	29 100	71 71	100 77
Recent Immigrant	0 0	100 29	100 23
All Observations[d, e]	22 100	78 100	100 100
Highest Education			
Less than High School	15 18	85 30	100 28
High School Graduate or GED	21 30	79 33	100 32
Some College or Associate's Degree	34 41	66 24	100 28
Bachelor's Degree or Higher	20 11	80 13	100 12
All Observations[d, f]	23 100	77 100	100 100
Economic Disadvantage			
Not Disadvantaged	22 26	78 27	100 27
Disadvantaged	23 74	78 73	100 74
All Observations[d, g]	22 100	78 100	100 100

Notes: Row percents in red, column percents in black. Not all row and column percents add to 100 due to rounding.
[a] The sample includes all households for which we have language data. "Primary language" pertains to the parent that filled out the survey.
[b] Spanish or other language.
[c] Households in which the relevant child was born in the United States. Immigration status of the parent(s) is not known with certainty because they may have immigrated to the United States before the child was born.
[d] The number of observations may change due to missing data.
[e] All observations in the sample for which we have immigration status data.
[f] All observations in the sample for which we have education data.
[g] All observations in the sample for which we have economic disadvantage data.

Table 5: Immigration Status, All Households[a]			
	Immigration Status (Percent)		
	Not a Recent Immigrant[b]	Recent Immigrant	All
Full Sample (N = 526)	77	23	100
Highest Education			
Less than High School	78	22	100
	28	28	28
High School Graduate or GED	77	23	100
	32	33	32
Some College or Associate's Degree	88	12	100
	32	17	28
Bachelor's Degree or Higher	59	41	100
	9	22	12
All Observations[c, d]	78	22	100
	100	100	100
Economic Disadvantage			
Not Disadvantaged	82	18	100
	28	19	25
Disadvantaged	73	27	100
	72	81	75
All Observations[c, e]	75	25	100
	100	100	100

Notes: Row percents in red, column percents in black. Not all row and column percents add to 100 due to rounding.

[a] The sample includes all households for which we have immigration status data.

[b] Households in which the relevant child was born in the United States. Immigration status of the parent(s) is not known with certainty because they may have immigrated to the United States before the child was born.

[c] The number of observations may change due to missing data.

[d] All observations in the sample for which we have education data.

[e] All observations in the sample for which we have economic disadvantage data.

Table 6: Barriers to Educational Involvement I, All Households[a]				
	Involvement in Child's Learning (Percent)[b]			
	A Little	Some	A Lot	All
Full Sample (N = 510)	25	41	34	100
Primary Language				
English	18	40	41	100
Spanish[c]	27	41	32	100
All Observations[d, e]	25	41	34	100
Highest Education				
Less than High School	31	37	31	100
High School Graduate or GED	24	45	32	100
Some College or Associate's Degree	24	42	34	100
Bachelor's Degree or Higher	15	27	58	100
All Observations[d, f]	25	40	35	100
Family Employment Status				
One Parent: Employed	27	43	30	100
One Parent: Not Employed	30	36	34	100
Two Parents: Both Employed	22	38	41	100
Two Parents: One Employed[g]	26	43	31	100
Two Parents: One Not Employed[h]	23	38	38	100
All Observations[d, i]	25	40	35	100

Notes: Not all row and column percents add to 100 due to rounding

[a] The sample includes all households for which we have data about involvement in child's learning.

[b] Respondents are grouped based on how frequently they are involved in their child's learning, measured by the frequency of reading to their child, talking to their child about school, and helping their child with homework.

[c] Spanish or other language

[d] The number of observations may change due to missing data.

[e] All observations for which we have language data.

[f] All observations for which we have education data.

[g] Primary parent employed, other parent not observed or not employed.

[h] Primary parent not employed, other parent not observed or not employed.

[i] All observations for which we have employment status data.

Table 7: Barriers to Educational Involvement II, All Households[a]				
	School Communications (Percent)[b]			
	Poor	Average	Good	All
Full Sample (N = 502)	32	34	34	100
Primary Language				
English	31	28	40	100
Spanish[c]	32	35	32	100
All Observations[d, e]	32	34	34	100
Highest Education				
Less than High School	24	31	46	100
High School Graduate or GED	34	32	34	100
Some College or Associate's Degree	35	37	28	100
Bachelor's Degree or Higher	35	44	22	100
All Observations[d, f]	32	34	34	100
Family Employment Status				
One Parent: Employed	35	29	36	100
One Parent: Not Employed	38	35	27	100
Two Parents: Both Employed	28	39	33	100
Two Parents: One Employed[g]	30	30	40	100
Two Parents: One Not Employed[h]	31	36	33	100
All Observations[d, i]	32	34	34	100

Notes: Not all row and column percents add to 100 due to rounding

[a] The sample includes all households for which we have school communication data.

[b] Respondents are grouped based on their rankings of up to ten aspects of how well their child's school communicated with them—the poor communications group feels that the school is doing a poor to okay job of communicating with them, whereas the good communications group feels that the school is communicating very well with them.

[c] Spanish or other language.

[d] The number of observations may change due to missing data.

[e] All observations for which we have language data.

[f] All observations for which we have education data.

[g] Primary parent employed, other parent not observed or not employed.

[h] Primary parent not employed, other parent not observed or not employed.

[i] All observations for which we have employment status data.

Table 8: Barriers to Educational Involvement III, All Households[a]				
	School Satisfaction (Percent)[b]			
	Low	**Medium**	**High**	**All**
Full Sample (N = 490)	22	24	54	100
Primary Language				
English	23	31	46	100
Spanish[c]	21	23	56	100
All Observations[d, e]	21	25	54	100
Highest Education				
Less than High School	22	23	55	100
High School Graduate or GED	20	26	55	100
Some College or Associate's Degree	27	22	52	100
Bachelor's Degree or Higher	19	33	48	100
All Observations[d, f]	22	25	53	100
Family Employment Status				
One Parent: Employed	23	21	57	100
One Parent: Not Employed	22	33	46	100
Two Parents: Both Employed	23	24	53	100
Two Parents: One Employed[g]	22	17	62	100
Two Parents: One Not Employed[h]	16	31	53	100
All Observations[d, i]	22	24	54	100

Notes: Not all row and column percents add to 100 due to rounding

[a] The sample includes all households for which we have school satisfaction data.

[b] Respondents are grouped based on their rankings of up to eight aspects of their child's school (academics, teachers, support, and so on). Respondents with low school satisfaction levels range from feeling very dissatisfied with to neutral about the school, respondents with medium school satisfaction are somewhat satisfied with the school, and respondents with high school satisfaction are very satisfied with the school.

[c] Spanish or other language.

[d] The number of observations may change due to missing data.

[e] All observations for which we have language data.

[f] All observations for which we have education data.

[g] Primary parent employed, other parent not observed or not employed.

[h] Primary parent not employed, other parent not observed or not employed.

[i] All observations for which we have employment status data.

Table 9: Barriers to Financial Stability I, All Households[a]				
	Financial Stress (Percent)[b]			
	None	Some	A Lot	All
Full Sample (N = 474)	35	39	26	100
Primary Language				
English	21	52	28	100
Spanish[c]	39	36	25	100
All Observations[d, e]	35	39	26	100
Highest Education				
Less than High School	38	32	30	100
High School Graduate or GED	42	36	22	100
Some College or Associate's Degree	24	50	26	100
Bachelor's Degree or Higher	35	35	30	100
All Observations[d, f]	35	39	26	100
Family Employment Status				
One Parent: Employed	38	38	25	100
One Parent: Not Employed	28	39	32	100
Two Parents: Both Employed	37	41	22	100
Two Parents: One Employed[g]	30	37	33	100
Two Parents: One Not Employed[h]	34	42	24	100
All Observations[d, i]	35	39	26	100

Notes: Not all row and column percents add to 100 due to rounding

[a] The sample includes all households for which we have financial stress data.

[b] Respondents are grouped based on the number of bills (rent, utility, phone, gas/electric, medical, and credit card) they had trouble paying in the past four months. The group with no financial stress had trouble paying none of these bills, the group with some financial stress had trouble with one or two of these bills, and the group with a lot of financial stress had trouble paying three or more of these bills.

[c] Spanish or other language.

[d] The number of observations may change due to missing data.

[e] All observations for which we have language data.

[f] All observations for which we have education data.

[g] Primary parent employed, other parent not observed or not employed.

[h] Primary parent not employed, other parent not observed or not employed.

[i] All observations for which we have employment status data.

Table 10: Barriers to Financial Stability II, All Households[a]			
	Saving Frequency (Percent)[b]		
	Never	Seldom to Always	All[g]
Full Sample (N = 444)[g]	56	44	100
Primary Language			
English	63	37	100
Spanish[c]	54	46	100
All Observations[d, e]	56	44	100
Highest Education			
Less than High School	67	33	100
High School Graduate or GED	52	48	100
Some College or Associate's Degree	51	49	100
Bachelor's Degree or Higher	51	49	100
All Observations[d, f]	55	45	100
Family Employment Status			
One Parent: Employed	60	40	100
One Parent: Not Employed	66	34	100
Two Parents: Both Employed	47	53	100
Two Parents: One Employed[g]	57	43	100
Two Parents: One Not Employed[h]	50	50	100
All Observations[d, i]	56	44	100

Notes: Not all row and column percents add to 100 due to rounding

[a] The sample includes all households for which we have saving frequency data.

[b] Respondents are grouped based on how much they save, ranging from never to always.

[c] Spanish or other language.

[d] The number of observations may change due to missing data.

[e] All observations for which we have language data.

[f] All observations for which we have education data.

[g] Primary parent employed, other parent not observed or not employed.

[h] Primary parent not employed, other parent not observed or not employed.

[i] All observations for which we have employment status data.