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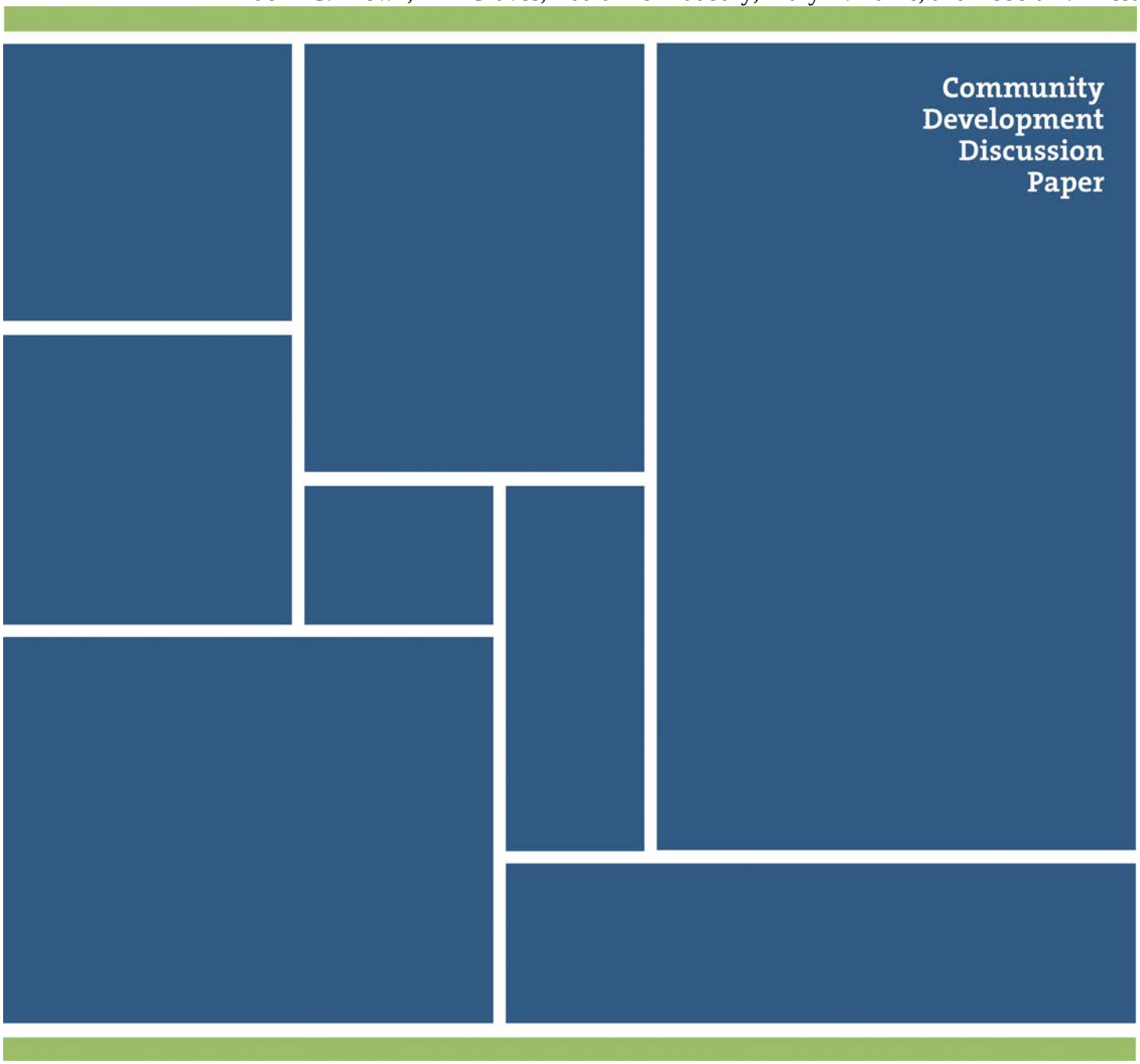

Involvement, Engagement, and Community: Dimensions and Correlates of Parental Participation in a Majority-Minority Urban School District

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Abstract

This study examines dimensions of parental participation in their children's schools and determinants of that participation. The rich literature on this issue explores questions of how parents participate and what predicts parental participation. We draw upon a unique survey of 400 parents of children attending public elementary schools in Lawrence, Massachusetts. The district is a majority Hispanic school district with strong ties to immigrant communities, primarily from the Dominican Republic. The study uses exploratory factor analysis to examine the widely held view that parental involvement can be understood as occurring along a single continuum. Our factor analysis of survey responses suggests that standard forms of participation can be aligned along two distinct dimensions, reactive involvement on the one hand and proactive engagement on the other. Analysis of novel survey questions reveals the existence of a third dimension that we term parental community. The survey and administrative data suggest that income and very recent immigration, but not educational attainment, can be important factors in involvement, while family circumstances are the main correlate of engagement. Our measures of language usage and immigration status suggest that households with the closest proximity to a Spanish-language/immigrant culture feel the strongest sense of parental community. Perhaps surprisingly, educational attainment is inversely related to the sense of community. The findings may be valuable for targeting outreach efforts and programming designed to involve parents more fully in their children's schooling.

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Introduction

Many scholars, policymakers, and educators, not to mention parents themselves, believe that parents' efforts to support children's schooling contribute to student success (Bryk 2010; Comer 1984; Epstein 1995). That belief has led to significant programming and funding directed toward promoting parental activities to generate student success, especially where students are struggling.

According to government reports and research studies, one student group at an educational disadvantage in the United States is Hispanic children. Test scores of Hispanic children fall "far behind" the scores of non-Hispanic whites (Rampey, Dion, and Donohue 2009), and consequently efforts have been directed toward increasing Hispanic parental engagement with their children's studies (see Hoover-Dempsey and Sandler 1997). This approach has been popular among parents, schools, and communities seeking to reduce inequality and improve student outcomes at schools serving disadvantaged students (Darling-Hammond 2010).

Two problems make it difficult to unequivocally endorse policies that promote parental engagement, especially as a means to improve Hispanic student achievement, however. The first is that while there is a general consensus among scholars and policymakers regarding the achievement gap between Hispanic children and non-Hispanic whites, the evidence of a parental effort gap is more ambiguous. Numerous literature reviews and metasyntheses argue this ambiguity owes in part to that fact that findings depend largely on which kind of parental efforts and achievement are measured by researchers. Typical definitions of school-based parental involvement may not reflect the full range of educational activities families engage in to ensure school success. Second, Hispanic parents encounter cultural and institutional barriers when asked to participate in the forms of involvement that are most often measured (De Gaetano 2007).

Most reviews of the available research do not come to a firm conclusion about the relationship between parental effort, immigrant status, and student success (see Jeynes 2016 and Mattingly, Prislin, McKenzie, Rodriguez, and Kayzar 2002). Because most findings are correlational, economists are less convinced of a causal relationship (Avvisati, Besbas, and Guyon 2010). Moreover, while there is robust theory about the individual and institutional factors that influence a parent's inclination to engage (e.g., Hoover-Dempsey and Sandler 1997), there are very few empirical studies that test the predictions of these theories. Many scholars assume that parental income is the main correlate of parental input into their children's education (Desimone 1999), but that may be partly due to the fact that many datasets have very little information about parents beyond their socioeconomic status. Any number of other characteristics, including marital status, family size, and, for Hispanic parents, nativity status or English language proficiency, may influence parental effort. In sum, much remains unknown about the levels and determinants of parental effort in education in general and in particular among Hispanic families.

In this paper, we review what is known about the levels of parental inputs into students' schooling. We then examine both a publicly available national database and results from our survey of a large sample

of parents with children enrolled in a Hispanic-majority school district. The survey provides rich material about the community of parents of children attending kindergarten through third grade. We use these data to describe parental participation and to analyze the socioeconomic, life-stage, and cultural correlates of the different forms that this participation takes. We find that rather than describing parental participation in the school community along a one-dimensional continuum (from minimal involvement to active engagement), we need a three-dimensional perspective. We term the three dimensions involvement, engagement, and community. Although the involvement and engagement dimensions are correlated with each other, the stark differences in the ways that household characteristics influence them suggest that they represent two alternative axes along which parents may participate in the educational community. Our third dimension, community, is only weakly correlated with the other two, which are the more traditional aspects of parental participation. Yet, the high levels of trust and community evident among a large share of surveyed parents suggests community may be an untapped resource and pathway for parental participation that could lead to better education for their children.

Frameworks for understanding parental participation

When studying parental participation in children's education, researchers and educators typically examine a range of efforts parents make. These may vary in terms of location, but typically take place in three contexts: home, school, and community. Epstein's framework has become a standard starting point for specifying the kinds of activities that fall under the rubric of parental effort. These include basic obligations at home, communication, involvement in school, home learning activities, shared decision making within the school, and community partnerships (Epstein 2009).

More recently, scholars have called for inclusion of forms of efforts that account for cultural diversity and the sociological context of schooling. Some document actions that are frequently unaccounted for in the traditional framing, including actions that marginalized families and families of color take to facilitate success (Carreón, Drake, and Barton 2005; López, Scribner, and Mahitivanichcha 2001). Some scholarship examines how cultural norms among Hispanic parents intersect with traditional types of parental involvement (Delgado-Gaitan 1991). Cultural values held by many immigrant Hispanics include *respeto* (high esteem for adults and professionals in the community (Villalba, Brunelli, Lewis, & Orfanedes 2007) and the belief that the school's role is to provide an academic education, while the parents' responsibility is to provide a moral grounding (Smrekar and Cohen-Vogel 2001). Walker, Ice, Hoover-Dempsey, and Sandler (2011) note that some families view the act of making suggestions about their child's schooling to teachers or administrators as disrespectful and an interference with the work of the school.

Other scholars seek to illuminate how social relationships constitute a form of engagement. Coleman (1988) finds that social networks in the form of "intergenerational closure" or "social networks in which parents interact with the parents of their children's friends" are an important component of school success.

Strong ties among families may make it easier for parents to exchange information with one another about schools, teachers, or parenting strategies. Similarly, Durand (2011) argues that students whose parents possess social capital—social ties to one another that allow for the exchange of information and support—have an advantage over children whose parents lack social capital. In her study of Latino parents, Durand (2011) noted that parents' school-related efforts often include a learned set of activities, which she calls "scripts." Depending on their background and social group, parents' knowledge of how to enact scripts and their confidence in being able to alter them varies. Other researchers identify bridging social capital—social ties to people outside one's immediate social circle—as a resource for families. Sheldon (2002), for example, finds that social networks predict parental involvement at home and at school. Parents with high stocks of bridging social capital use their social ties to gain access to resources, aid, and assistance. This literature notes that the social networks of working-class and poor families and Hispanics in particular exhibit fewer ties to experts, professionals, and others outside their social group but strong ties within them, particularly among kinship groups (see Horvat, Weininger, and Lareau 2003). Gamoran, Turley, Turner, and Fish (2012) add that the isolation of poor families from the school system is considered to be a key barrier to school success.[1]

Another strand of the literature points out that although some parents may attempt to satisfy or comply with existing school practices, others may actually work to modify them. As such, some suggest that it is reasonable to differentiate between involvement and engagement, where engagement involves a bidirectional exchange between the parents and the school (as when, for example, a parent serves on the school board or participates in school planning events) whereas involvement entails unidirectional action (as when the parent completes activities initiated by the school, such as helping with homework or participating in fundraising efforts). Alternatively, we can view involvement and engagement as being two ends of a continuum of the degree to which parental initiative is valued.

Still other research attempts to explain the different forces that enable or motivate parents to expend efforts to ensure their children's school success. The Hoover-Dempsey et al. (2005) model argues that a number of factors influence engagement. To begin with, as mentioned above, cultural beliefs—chief among them whether or not parents believe their role includes educational involvement—are a key underpinning of parents' efforts. Second, parental self-efficacy and skills, including their educational background and exposure to education systems, also predict involvement. Both parents' efficacy and how parents view their roles in their children's education (role construction) can depend upon the parents' experience with the relevant school system. Third, life context, or parents' available time and life circumstances, also contribute to parental involvement. It has been commonly observed that parental engagement decreases as children age, with engagement highest when children are in kindergarten. Hill and Taylor (2004) note that inflexible

[1] See also Cornwell and Cornwell (2008); Flores-González (2002), and Suarez-Orozco, Suarez-Orozco, and Doucet (2004).

work schedules, lack of transportation, and lack of child care may prevent parents from attending school meetings or events. Fourth, institutional actions contribute to parental involvement. Schools provide opportunities for parents to engage with the schools and facilitate children's success, but the ways they do so involves assumptions about parents' socioeconomic status and background. Parents who lack English-language skills have reduced access to communication and activities conducted in English. Additionally, qualitative studies of parents also indicate some Hispanic parents prefer informal and unscheduled visits (Freeman, 2010).

This study

Our study draws upon the results of a unique survey of parents of children enrolled in the Lawrence, Massachusetts, public schools in kindergarten through grade three. It offers an opportunity to examine parental participation in a school community with a high proportion of immigrant children and children of immigrants. As noted above, one line of scholarship into parental participation investigates the different forms of parental effort, while another line considers the correlates of parental effort. In the literature investigating different forms of effort, one might expect to see the types of effort organized along a continuum, from more basic involvement to deeper forms of engagement, whereas in the literature on correlates of parental effort, one might expect to learn which characteristics of the parents align with which forms of parental effort. People might make the assumption that less-educated parents with fewer resources and less sophistication about schooling might make more basic efforts, perhaps limited to merely reacting to the demands of the school, while parents with greater amounts of social capital, better education, and more resources might make more intensive efforts, involving engagement with how the school is providing an education for their children. Meanwhile, the strand of the literature that suggests that forms of parental engagement are much more diverse than first described might lead to the hypothesis that Hispanic parental engagement may take alternative forms.

Our first research objective is to explore the hypothesis that the various forms of parental effort to support their children's schooling differ in fundamental ways, rather than being arrayed along a continuum from minimal involvement to active engagement. Our second research objective is to examine the relationships between parental and household characteristics and the forms of participation. With respect to this second objective, the literature leads us to investigate two hypotheses: first, that the parents with the greatest resources (both in terms of time and income) and knowledge about the process of education in the United States will be most likely to exert efforts on behalf of their children's education, regardless of the form the effort takes, and second, that recent immigrants from a Spanish-language culture face special challenges and that their efforts on behalf of their children's education will significantly differ from the efforts of non-Hispanic parents.

Lawrence, Massachusetts, and initiatives to increase parental participation

Lawrence, Massachusetts, is a midsized city with a population of about 76,000 at the time of the 2010 census. The history of many midsized cities in Massachusetts is one of initial manufacturing success followed by decades of economic decline. Lawrence is typical. Its population peaked in 1920 at 94,000, when its factories manufacturing worsted woolen cloth employed about 20,000 people. As the industry declined, Lawrence's population fell, and by 1980 it had lost one-third of its peak population. An influx of immigrants since that time has fueled population growth. In 1980, the share of residents born outside of the United States was 15 percent. By about 2010, the share was up to 37 percent, which is well above the average of 20 percent for all of Massachusetts's postindustrial "Gateway" cities.[2] Hispanics comprise three-quarters of the population in Lawrence, the largest percentage of all the Gateway cities. As of the 2010 census, 40 percent of the population claimed origins in the Dominican Republic.

Lawrence faces many challenges associated with low educational attainment among its adult population. At one-third, the share of residents 25 years and older without a high school diploma is well above the Gateway city average of one-fifth. Median family income in Lawrence was only $34,000, which was the lowest among Gateway cities and less than three-fifths of the Gateway cities' average. Performance on standardized state tests of educational achievement has been weak. Tenth-grade achievement in English was the lowest among the Gateway cities in 2013, and only 44 percent of students were classified as "advanced" or "proficient" in math.

Poor performance on standardized tests was among the factors that led to the Lawrence public school system being placed under state receivership in 2011. That move also spurred district leadership and nongovernmental organizations in the city to partner in creating new initiatives to support the participation of community stakeholders in the school reform efforts. One such effort is Community Education Circles (CEC). Led by a local nonprofit, Lawrence Community Works, CEC encourages parents of schoolchildren to get to know each other, identify problems at their children's school that could be remedied, and develop a strategy to address the problem they rank as most important.[3]

Data used in the analysis

As part of the effort to evaluate the effectiveness of the CEC, researchers from Clark University and the Regional & Community Outreach and Research Departments of the Federal Reserve Bank of Boston developed the survey that furnished our core dataset. They worked in close consultation with partners from the Lawrence Public Schools and Lawrence Community Works. The "parent and family involvement" module of the 2003 National Household Educational Survey (NHES) provided the survey questions relevant

[2] Gateway cities are designated by statute and are cities facing long-standing social and economic challenges, usually as a result of the difficult adjustment from their former status as centers of a thriving manufacturing sector.

[3] Lawrence Community Works has formed a partnership with the Lawrence Public Schools to develop and implement the CEC initiative. Funding for the project came from a grant from the Kellogg Foundation.

to parental interactions with the school community. We added another set of questions to elicit information about whether parents felt or perceived a sense of community with other parents because of their child's enrollment in the Lawrence Public Schools. Standard assessments of perceptions of neighborhood community (see Peterson, Speer, & 2008) provided the basic structure of these questions, which were then adjusted to reference the parental community. Additional questions provided by the staff of Lawrence Community Works focused on measures of shared contacts and friendships among the parents. Well-known studies, such as the Panel Study of Income Dynamics, provided the basis for the questions on household demographic, economic, and social circumstances.

The survey team mailed a first round of the CES survey to 1,824 parents of children attending kindergarten through grade three in seven Lawrence public schools in November 2014. The survey team followed an administration protocol modified from Dillman's tailored design method (see Dillman, Smyth, and Christian 2009). The initial survey packet included an invitation letter, surveys in English and Spanish, consent forms for participation in the survey and to allow the Lawrence Public Schools to release selected data on participants' children to the research team, and a promise of a $10 incentive to those returning the completed survey.[4] About two weeks after that the first mailing, the survey team sent a reminder postcard and then made bilingual follow-up calls to parents. In February 2015, the survey team sent new survey packets with a second invitation letter and copy of the survey instrument to all nonrespondents from the first round. Research assistants made bilingual reminder phone calls to a portion of the targeted respondents. The survey team also sent a second round of surveys to 800 parents of children in two additional schools in the spring of 2015. This group of parents received reminder postcards, but there were no follow-up telephone calls. All told, 479 parents returned the survey along with the completed consent and release forms required to enroll them in the study. The response rate of about 18 percent compares favorably with other surveys of similar populations.

Table 1 provides information on the economic and social backgrounds of the respondents, with comparisons with census and Lawrence Public Schools data. Consistent with American Community Survey (ACS) results for 2011–2015, one-third of participating parents were married. Two-thirds would be classified by the census as heading single-parent households, but of those, 8 percent were cohabiting, reducing the number of single parents slightly to approximately three-fifths. Thirty-six percent of parents reporting having a child five years or younger in the household.

The comparisons with published data suggest that the parents responding to the survey differed the most from the general Lawrence population in terms of education and employment. The survey participants were slightly better educated than the Lawrence population as a whole. Among the respondents, only about

[4] The letter informed parents about the purpose of the study, that participation was optional, and assured them that if they did participate, all their answers would remain confidential. Data protection and confidentiality protocols have been implemented. They include storage of original survey material in locked cabinets in passkey-protected offices at the Federal Reserve Bank of Boston and placing machine-readable data on the Federal Reserve Bank of Boston's secure server.

one-quarter had not achieved a high school diploma or GED, which was significantly below the ACS results for Lawrence. One-third had a high school diploma or GED. At the other extreme, about 25 percent had some college, and another 10 percent had a bachelor's degree. These shares were much higher than the percentages for Lawrence as a whole. The percentage of respondents that was employed was also significantly higher than the city ACS average. The unemployment rate for respondents was also marginally higher than the city ACS average, but a lower percentage of respondents were outside the labor force but not unemployed. (The survey broke this category down into stay-at-home parents, those who are either disabled or retired, and full-time students.)

The other measure of economic standing in the dataset is whether or not the Lawrence Public Schools classified the student's family as economically disadvantaged at the time that the parent completed the survey. The family was classified as economically disadvantaged if the household was enrolled in or receiving benefits from the Supplemental Nutrition Assistance Program (SNAP), Medicaid (under MassHealth), Temporary Assistance for Needy Families (TANF), or providing foster care. As of 2015, eligibility for the assistance programs implied an upper income limit of about $31,000 for a family of four, which is a bit less than the $35,000 median household income reported by the census for Lawrence in 2011–2015.[5] In participating schools, between 54 and 75 percent of all families of kindergarteners were classed as economically disadvantaged. That figure was 71 percent for families of kindergarteners in our survey. Finally, the ACS's percentage of children whose first language was English (29.6) was just a bit below the percentages reported for the schools included in the CEC survey.

The first step in our analysis of the CEC survey compared the responses of the Lawrence parents with the results of the 2012 NHES for parents of children in kindergarten through third grade. Panel A of Table 2 presents these comparative tabulations. We note that our tabulations reflect the wider range of potential responses to survey questions than do the tabulations in the 2012 NHES parental-involvement module, which only asked whether a parent did or did not participate in the specified activity. The CEC survey allowed parents to register varying degrees of responses, either in terms of frequency or in terms of the extent to which they agreed or disagreed with a statement. The greater variation among parental responses was useful in the empirical analysis discussed below.[6] Panels B and C of Table 2 provide the tabulations of the sense-of-community questions, for which no analogues were available in the national survey.

The survey questions in Panel A asked parents about participation in the school community along a continuum bounded by low involvement at one end and high engagement at the other. The first five

[5] The information on the classification of economically disadvantaged and the approximate upper income for this group is from a communication with the Lawrence Public Schools.

[6] The CEC survey offered three alternatives for participation levels: never participated, participated once, and participated two or more times. If parents participated two or more times, they were asked to enter the number of times. Actual responses included a number, a range, and comments such as "siempre" (always). To preserve the variety among the coded responses and to ensure that the nonnumeric responses were also included, the responses to the involvement questions were coded into four categories of frequency: none, one, two, and three or more.

questions focus on attendance at general school events, parent-teacher conferences, and events at which their child might perform. In addition, the questions ask whether the parent contacted the school or child's teacher or met with a school counselor. As the comparison between the CEC Survey and the NHES (USA) results suggests, Lawrence parents matched national participation rates in their attendance at general school meetings, but were a bit less likely to attend parent-teacher meetings, and were far less likely to attend school or class events or meet with a school counselor.[7] A little over one-quarter of parents contacted the school or the child's teacher. The next three questions focus on engagement and ask about volunteering in the classroom and participation or leadership in activities aimed at improving the school that the child attends. Only the question on volunteering appears in the NHES. Almost three-quarters of Lawrence parents have volunteered as least once, which is well above the 50 percent participation rate found in the national survey. The responses to the questions on attending events to improve the school and on taking on a leadership role suggest that a small minority (perhaps 10 to 20 percent) exhibited a relatively high level of participation in these activities.

The questions relating to sense of the classroom community and the tabulated results are found in Panels B and C of Table 2.[8] The questions in Panel B asked parents to assess the attitudes of other parents. Panel C focused on parental attitudes.[9] Parents agreed most strongly with the statement that all parents as a group could help solve a classroom problem (almost two-thirds). They agreed almost as strongly that parents are helpful to each other. These strong responses were striking, given that 40 percent of the parents apparently did not (personally) know most of the other parents. Finally, the results in Panel C indicate that most parents agreed on the necessity of a sense of community, although only one-quarter felt that such a community existed.

Methodology: exploratory factor analysis and a MIMIC model

As discussed above, the traditional model of parental involvement places low levels of involvement and high amounts of parental engagement at the opposite ends of a spectrum (Goodall and Montgomery 2014). Our analysis examines whether parental responses in the CEC survey are consistent with this view. In addition, we would like to know whether the sense of a community among parents of children enrolled in the Lawrence Public Schools—or lack of one—is in some way related to more traditional notions of parental involvement and engagement. We used exploratory factor analysis to distill parental responses to all 15 survey questions concerning their participation in the school community into a more manageable set of

[7] Our tabulation of the 2012 NHES included only the parents of children attending kindergarten through the third grade in public schools, which is a population that is roughly comparable to the Lawrence parents.
[8] No comparable data from nationwide surveys are available for comparison.
[9] Our tabulation excludes two questions in the CEC survey: "Very few other parents know me" and "I have almost no influence over what goes on in my child's classroom." The inconsistency of responses to the first question and the more straightforward "I know most of the parents" are addressed in the exploratory factor analysis. The second question does not bear directly on actions a parent may undertake to be involved or engaged. It also does not bear directly on a sense of community.

continuous parent-specific characteristics (or latent variables) that summarize the cross-parent variation in responses. Coefficients for each question (known as factor loadings) indicate the degree to which the latent variable(s) for a parent capture the variation in responses. Our exploratory factor analysis uncovered three latent variables, which we term involvement, engagement, and community.

The second stage of our analysis employed multiple-cause, multiple-indicator (MIMIC) models to investigate which household characteristics most strongly influenced the value of the parent's latent variables.[10] Figure 1 illustrates the basic logic of our approach for involvement and engagement.[11] The MIMIC model yields two sets of coefficients. The first set (indicated by red arrows) can be interpreted as factor loadings. The second set provides an estimate of the impact of various household characteristics (x_1, x_2, and x_3) on the latent variables (captured by green arrows). Finally, the model provides estimates of the covariance between the latent variables (Cov(Involvement, Engagement)) that remain after we have accounted for the impact of household characteristics.

Results of exploratory factor analysis

Our exploratory factor analysis included all 15 questions potentially bearing on parental participation in the school community. The analysis estimated four factors (latent variables) that accounted for the variation observed among the responses to the CEC survey questions.[12] Table 3 reports the results of this estimation. We grouped the questions according to their original source. The seven questions based on the NHES are in the first section of the table. The remaining eight questions on the sense of parental community follow. As the results suggest, the factor loadings on the questions align with our three factors of community, engagement, involvement, along with a fourth, unknown factor. The fourth factor affects responses to a question about parental beliefs about other parents and parental beliefs about their potential to influence the classroom. Since neither of those questions references actual behavior or choices, we decided to focus on the other three dimensions.

Fundamentally, the results of the factor analysis suggest that rather than lying along a single dimension (and aligning with one factor or latent variable), parental participation in the school community is best described by three dimensions. The first two factors (involvement and engagement) influence primarily responses to the standard questions used in the NHES survey. Engagement accounts for about 39 percent of

[10] Krishnakumar and Chávez-Juárez (2015)provide a helpful guide to the class of models that allows for this kind of estimation.
[11] A statistical-methods appendix available from the authors provides more detail on the distributional assumptions underlying our model and the assumptions underlying the use of quasi-maximum likelihood methods to estimate the coefficients of the MIMIC model.
[12] To simplify interpretation of the data description, we employed the varimax rotation, which simplifies the structure of the latent variables and the interpretation of the ways in which survey responses contribute to the factors. The rotation ensures that the factor loadings (the contribution of any one factor to a question) are maximized. The loadings for any particular factor will be concentrated on one set of questions to the exclusion of the others, for which the factor-loading coefficient will tend toward zero.

the variation among the answers to all 15 questions. It has the strongest impact on the extent to which a parent was highly engaged in the form of serving in a coordinating or leading role in the child's school. The factor had a somewhat smaller impact on attending events focused on improving the school and volunteering in the classroom. It had a modest impact on whether the parent attended a school event because of the child.

The latent factor involvement most strongly influenced attendance at parent-teacher conferences and at general school meetings (such as report card nights). It also influenced parent-initiated contact with the school or teacher and attendance at school events. Finally, the community factor was as important as engagement in accounting for responses to the survey questions.[13] It had little impact on the engagement- and involvement-oriented questions, but a very strong influence on the responses to the questions about the sense of community.

Community had the strongest impact on whether the respondent agreed that parents watch out for each other and help each other out. Close behind were its influences on how well parents knew each other, whether parents could solve problems together, and whether they agreed about what their children should get from the schools they attended.

Overall, our exploratory factor analysis supports a key result: a description of parental participation in the school community requires a multidimensional perspective. Levels of participation in activities that directly involve the parent's child, such as a parent-teacher conference, are not necessarily the same as levels of engagement in parent activities that require time and effort to contribute to the classroom or to conversations about school policy itself. In addition, adherence (or lack of adherence) to the idea of a school community does not strongly predict the extent of the parents' direct involvement in school-sponsored activities. This result is supportive of the critiques of the standard models of engagement. A one-dimensional continuum of parental activity is not consistent with the CES survey results.

Accounting for differing dimensions of parental participation: the MIMIC model

The exploratory factor analysis supports our hypothesis that parental activity within the school community is multidimensional. The extensive literature on parental activity suggests several groups of household characteristics that may matter. We organized the characteristics in our dataset into three groups: those relating to household structure, those relating to education and economic standing, and those relating to language and immigration/migration.

The household structure variables focused on the marital or partnership status of the survey respondent, whether or not the respondent headed the household, and the presence of very young or young

[13] Proportions will not necessarily add up to one. The factor analysis extracted additional factors from survey responses that we have not shown. These factors were weakly negatively correlated with the survey responses and thus contributed a negative proportion of the overall explanatory power of the analysis.

children in the household.[14] The controls for economic standing included educational attainment, employment status, and whether or not the family of the respondent was classified as economically disadvantaged. As for language and immigration/migration status, our measures define three groups of parents. The base group for analysis is an English-speaking parent with a child who also speaks English. The mixed-language families constitute the second group, where either the child or the parent is identified as a Spanish speaker. The third group is families with a child who was born in the Dominican Republic or another Spanish-speaking area (Puerto Rico or Central America).[15]

A standard perspective, such as the Hoover-Dempsey et al. (2005) model, expects that economically disadvantaged families and those outside the labor market will be less likely to be engaged because of the absence of resources and the stress that poverty places on them. The standard perspective also expects those with limited education to be less likely to display either engagement or involvement, based on the belief that parents with higher levels of education have both a better understanding of the process of education and possess the skills to negotiate the educational system.[16] Limited English-language skills could diminish the ability of the parent to bring these skills to bear in the context of a school system dominated by English speakers. Limited English language skills and/or immigration status could also serve as markers of how culturally distant the parent is from the dominant Anglo culture, which has also shaped the American system of schooling.

The American schooling system has certain expectations about how parents will be involved and engaged in the schooling of their child, but as noted earlier, parents from Spanish-speaking cultures may have opposing ideas about parental involvement. The data on language and immigration background should help us gain a more clear understanding of Hispanic parents' views. Finally, it may be the case that Lawrence's diversity, with its mix of residents whose families have been there for generations, second-generation parents, and newly arrived immigrants, poses a substantial barrier to a sense of community among parents.

Rather than just analyze the influence of household characteristics on the latent factors identified in the analysis above, we employ the richer MIMIC model, which allows for joint estimation of the three latent variables that stand in for attitudes toward involvement, engagement, and community and the impact of the characteristics of the survey respondents on the latent variables. MIMIC's more complex modeling structure also allows us to test whether the latent factors share some commonalities or are essentially distinct from

[14] Because of the relatively small share of responses that related to a second parent, we have not included those data in our empirical investigation *except* where the data on the second parent allowed us to better establish the marital/household arrangements of the first parent.

[15] Respondents were asked to self-report their primary language and language skills, but these data were not available for all participants. Instead, we used the language chosen by the respondent to complete the survey to characterize the parent's primary language and the Lawrence Public School's assessment of the first language of the child. We surmised that the 27 percent of parents with a child born outside of the continental United States in a Spanish-speaking territory or country would have even stronger Spanish-language skills. All of these parents responded to the survey using the Spanish-language version, and their children were all classified as having a first language of Spanish.

[16] This set of skills is called parental efficacy.

each other. To the extent that the response of latent factors to household characteristics is similar or latent factors are uncorrelated, we would argue that a three-dimensional view of parental participation is more appropriate than viewing participation along a single spectrum.

Our analysis of the CEC survey data estimated MIMIC models in two steps. In the first step, we created a separate model for each of the three latent factors identified in the exploratory factor analysis. In the second step, we examined pairwise joint models of two latent factors each. The pairwise models allowed us to see whether there were strong (or weak) interactions between any pair of latent factors once the influence of household characteristics had been accounted for. Computational limitations restricted our estimation to pairwise estimation.

Specification of the MIMIC model and results

Our specification of the MIMIC models used ordered logit to model the factor loadings on the survey responses. The ordered logit estimation also estimated "cut points" for each level of response in the survey. As noted above and summarized in Table 1, the potential predictors (household characteristics) of the latent variables involvement, engagement, and community were derived from the CEC survey and administrative data available from the Lawrence Public Schools. To better understand the pattern of influences, we used the same group of household characteristics as predictors of all of the latent variables. Other household-level characteristics available from the survey, such as patterns of employment, the length of a parent's commute, or household financial security, added little to the explanatory power of our analysis.

Initially, we estimated a single-factor MIMIC model for each dimension of participation. Tables 4 and 5 report those results. Table 4 shows the importance of each latent variable (each of the three dimensions of participation) for the responses to the survey questions (the factor loadings), and Table 5 provides the estimates of the impact of household characteristics on the latent variables. For each latent variable in Table 4, the factor loadings represent the log odds ratios and are expressed relative to the factor loading of the base survey question that received the highest factor loading. The standard errors on all of the factor loadings suggest that the latent variables account for a significant amount of the variation in the survey responses. For the four involvement questions, the factor loadings are similar to those reported for the exploratory factor analysis. Involvement shows the greatest influence on reported parental participation in parent-teacher conferences, followed by "attend general school meetings." Since the coefficients on the survey responses are log odds ratios, the estimated importance of this latent variable for the responses about attending general meetings is about three-quarters of its importance for the odds of attending parent-teacher conferences. The factor loading on "contact the school or teacher" is about one-half the loading onto the base question, which means that families that contact the school or teacher on a regular basis may not be the same subset of the population as families that regularly attends parent-teacher conferences. By comparison, the factor loadings on the responses to the three engagement dimension survey questions are relatively close

together: a parent or family that is likely to take on a leadership role (the base question) will also volunteer more frequently to help out in school-related activities and will attend more events aimed at improving the school. Engagement is also strongly correlated with the likelihood a parent will attend events that involve his or her child, but correlation is about half as strong as for the other responses.

Community is most strongly correlated with parental responses to the statement that parents "watch out for each other and help each other out" (the base question). The community variable has a somewhat weaker correlation with the responses to the other statements. Nonetheless, the strong results measured with very small errors suggest that the community dimension significantly captures the variation in responses to a whole complex of questions about a sense of community. Having strong ties to a school community may translate into greater sense of empowerment among parents and have the potential to serve as a valuable resource for parents.

The coefficients presented in Table 5 are the estimated impact of household structure, education and economic standing, and language and immigration/migration on the three latent variables. Overall, the various aspects of household structure have only a weak association with involvement. Surprisingly, the education variables also have a limited impact. Nor do language or status as a recent immigrant have a strong influence on involvement. This result is inconsistent with the emphasis in the literature on parental efficacy as an important influence. The strong result that economically disadvantaged parents are much less likely to be involved than other parents is consistent with earlier findings reported in the literature, which emphasize the constraints imposed by limited income and poverty. Finally, stay-at-home mothers were also much less likely to be involved than parents with other relationship statuses.

Similarly, only a few of the household characteristics were strongly associated with engagement. Widowed and separated parents were more likely to be engaged than other parents. Having children under three in the home does limit engagement, possibly because having small children restricts the ability of a parent to attend meetings and events. Parents who responded to the Spanish-language version of survey were also less likely to be engaged. Surprisingly, neither education nor economic status influenced engagement. Finally, the sharp reduction in engagement among parents of children in first grade and above is consistent with the literature, but this effect does not carry over to involvement. Overall, household characteristics that influenced involvement did not have an impact on engagement, and vice versa. This result is consistent with the inference that these sets of activities constitute separate dimensions of parental participation.

Recall that the latent variable community edged out engagement as the variable with the greatest explanatory power in our exploratory factor analysis. In contrast to involvement and engagement, community is strongly influenced by several household characteristics. A large number of young children in the family substantially reduced the sense of community. Perhaps not surprisingly, higher levels of educational attainment also substantially reduced the sense of community, given that the community is one

in which over four-fifths of the respondents lack a formal postsecondary degree. Mixed-language households in which both Spanish and English were spoken had a much stronger sense of community than English-only households, and households that were monolingual Spanish had an even stronger sense of community. Families with a child born in the Dominican Republic—the dominant immigrant group in Lawrence—had the strongest identification with the community of parents. As was the case with involvement, the sense of community was lower for parents of older children (second- and third-graders).

To test for the presence of strong relationships among the dimensions of involvement, engagement, and community, we estimated three additional models of pairs of the latent factors. The results are found in Table 6. To the extent that unmeasured household characteristics influence both latent variables in any pair, the paired models should provide more precision in the estimate of the impact of household characteristics.[17] In addition, the pairwise models allow us to see whether the latent factors are strongly associated with each other or whether they are truly separate dimensions of parental participation.

Model 1 pairs involvement and engagement, Model 2 pairs involvement and community, and Model 3 pairs engagement and community. Since the factor loadings on the individual survey questions are virtually the same as those presented in Table 4, we focus our discussion on the impact of household characteristics.

The results for the covariance of involvement and engagement (Model 1) and the implied correlation coefficient presented in last rows of Table 6 suggest that once household characteristics are taken into account, there is still a positive and significant association between involvement and engagement of about 0.68. By contrast, the results for Models 2 (involvement and community) and 3 (engagement and community) indicate that no significant relationships exist between the community dimension and the other dimensions.

The pairwise models show even more clearly than the single-factor models that household characteristics exert very different influences on involvement than they do on engagement. Single parents are much less likely to be involved than married parents. Parents with a strong association with Spanish-language culture (particularly parents of children born in the Dominican Republic) are also much less likely to be involved. Neither variable has a strong association with engagement. When involvement and engagement are paired with community (columns 3 and 5), the results for the household characteristics do not change.

Although the MIMIC model estimates presented in Table 6 offer evidence of three unique dimensions of parental participation, sorting out how parental characteristics influence survey responses can be challenging. Note that the MIMIC model illustrated in Figure 1 channels all the impact of parental characteristics into one of three parent-specific latent variables. The latent variables in turn are correlated with various degrees of survey responses. Tables 7 and 8 illustrate these impacts with a focus on two survey

[17] Essentially, allowing for covariance among the latent factors can increase the efficiency of estimation.

questions: one for involvement and one for community. Table 7 focuses on the impact of economic standing and language/immigration on the predicted frequency of attending parent-teacher conferences, and the two panels of Table 8 focus on the question of the extent to which parents are willing to help each other out. The tables provide the actual distribution of responses across all possible categories of answers and then present the (marginal) impact of the relevant household characteristic on the probability that a parent's response falls into that category. The predicted impacts hold all other household characteristics at the sample averages. The p-values on the estimated marginal impacts are for a test of the null hypothesis that the impact of the characteristic is zero.

Consider first the results in Table 7. The marginal effects indicate that an economically disadvantaged household is much less likely to participate in parent-teacher conferences. About 19 percent reported not attending any parent-teacher conferences; an economically disadvantaged household would be an additional 6.5 percent (or one-third) more likely not attend a conference over the school year. Almost one-third of respondents reported attending three or more conferences in a year; that share would fall to about one-fifth for the economically disadvantaged. The marginal effects for families with Spanish-speaking parents or children are of similar magnitudes and would predict lower rates of participation; however, they are mostly measured with error. The one exception is for recent immigrants from the Dominican Republic whose child was born there. The predicted increase in nonparticipation is over 8 percent, or almost one-half higher than for the sample as a whole. The share of economically disadvantaged households in this group is one-quarter higher than overall, which suggests that economically disadvantaged households who are recent immigrants from the Dominican Republic experience markedly lower rates of participation.

The estimates in Table 8 focus on the sense of community. In Panel A, the marginal effects assess the impact of language and immigration on whether or not parents watch out for each other and help each other out. Panel B examines the impact of educational attainment on responses to this question. The predicted probability that parents who speak Spanish will disagree with the statement that they help each other out is extremely small.[18] Contrariwise, about 20 percent of parents strongly agreed that they help each other out; the predicted probability for strongly agreeing with this sentiment is three-fifths higher for most households where the parent speaks Spanish and more than twice as high for families with a child born in the Dominican Republic.

The impacts in Panel B almost mirror those in Panel A. The better-educated respondents to the CEC survey were one-half to twice as likely to strongly disagree with the statement that parents will help each other and much less likely to strongly agree with that statement. We suspect that some of this response may be a reflection of the fact that those with strong English-language skills are much more likely to have attained some kind of degree beyond high school. But the MIMIC model estimation results in Table 6

[18] The sum of the marginal effects is between –15 and –23, which would substantially reduce or even cancel out the 20 percent of respondents who disagreed with the statement that parents help each other out.

suggest the education effect is present even after controlling for language and immigration. Indeed, the proportion of Spanish-speaking respondents with postsecondary degrees (associate's, bachelor's or master's) is a bit higher (18 percent) than the proportion among English-speaking households (17 percent). To summarize these results: the one-half of survey respondents with a parent speaking Spanish and who lack a formal postsecondary degree strongly identify with the parental community, whereas the one-seventh of English-speaking parents who also hold a postsecondary degree are somewhat less likely to strongly identify with the parental community; the remainder of parents fall somewhere in between.

Conclusions and policy implications

Our study of the material provided by the CES contributes valuable insights into parental involvement in children's school success. Rather than confirming a continuum-of-involvement hypothesis, our analysis identified three separate dimensions along which parents interact with the school community. Surprisingly, a sense of community among parents had the largest influence on survey responses. What we term involvement is relatively high among Lawrence parents and includes most school-initiated activities that bear directly on the individual child. Involvement would appear to conform most closely to standard "scripts" of how a parent should participate in a child's schooling. The engagement dimension is distinguishable from involvement. In contrast to involvement, where parents expend effort on behalf of their own children, engagement encompasses parents' efforts to serve and influence school practices overall. Engagement nonetheless correlates with involvement, once we have accounted for the influence of parent and child characteristics. Finally, the correlation of community with either involvement or engagement is weak, which suggests that community is most clearly separable from the other two.

Our analysis of MIMIC models suggests both agreement and disagreement with widely held beliefs about what is likely to influence the participation of a largely Hispanic community of parents composed primarily of first- and second-generation immigrants. In accordance with expectations, life context does matter. Lower-income households and stay-at-home parents were much less likely to participate in the standard scripts of parental involvement. Parents of children born in the Dominican Republic (most likely the most recent immigrants in our survey) also exhibited lower rates of participation. At the same time, the education of a parent had no discernible influence on participation, either in the standard forms of involvement or in the leadership roles implied by engagement. Notably, the usual tendency for participation to fall off with the age of the child is not present in results concerning involvement. Finally, other life circumstances, including the presence of very young children in the household, influenced engagement—but not involvement. Overall, the evidence is weakest for an important role for parental efficacy or role construction.

Perhaps the most intriguing result of our study is the suggestion that parents who do not follow the traditional script for involvement with the schools may nonetheless be supportive of their child's education

to the extent that their identification with a cultural community of parents strengthens the kinds of supports they can receive from other parents. It appears that the nexus of identification was with other parents (and their children) who share the Spanish language, perhaps origins in the Dominican Republic, and who are, for the most part, less educated than the English-speaking minority. Further research could involve asking parents about the ways in which identification with other parents leads to actions that are supportive of their children's education.

It is true that the Lawrence school system is majority Hispanic, with a high concentration of Dominican immigrants. Community may play a different role in school engagement in school systems with lower concentrations of such groups. However, it is also possible that a similar dynamic will be observed in other school systems with a large percentage of Spanish-language speakers (or speakers of another language) or immigrants from a particular country or region.

In viewing parental engagement among parents in the Lawrence Public Schools as a multidimensional concept, we learned a few interesting things that may have broader applicability. First, we have identified two risk factors—difficult economic circumstances and a family's status as recent immigrants—which can be barriers to interactions between the parent and the school and that bear most directly on the educational experience of the child. In the extreme, these risk factors can lead to virtually no participation in the most basic of interactions: the parent-teacher conference. Schools may wish to design outreach efforts that are particularly tailored to these two particular groups.

In addition, although parents' engagement apparently diminished after kindergarten, which is consistent with previous studies, involvement did not. This suggests that if researchers take a multidimensional view, they may find that parents continue to put effort toward their children's school success as the child progresses through school, but along a dimension other than engagement. This recognition might lead to different kinds of efforts to engage parents of older schoolchildren. Of course, we would caution against generalizing about continued involvement in later grades, especially grades 7–12, when peer and structured extracurricular activities can have a greater influence in the child's relationship with the school.

While this analysis focuses on three dimensions, it also suggests the possibility that there are other dimensions that have yet to be considered or identified. Many effective forms of engagement may be possible throughout a child's school career. For example, anecdotally, some parents employ the strategy of "making oneself known" to the teachers, principal, school counselors, and other school staff. In this form of engagement, a parent signals to the institutional actors that he or she is actively monitoring the child's schooling and wants to be informed if school-related issues arise.

Our analysis deepens our understanding both of Lawrence Public School parents and makes us consider the possibility that economic status is a less dominant factor in parental efforts to participate than previously thought. The assumption that economic circumstances drive participation comes mainly from

anecdotal and basic administrative data. Because our survey collected detailed information from parents that was further supplemented by administrative data, we had a more fine-grained view of parents. Our data included both indicators of a parent's economic status and details on their family status, primary language, and some direct and indirect evidence on their place of origin. This allowed us to test how a variety of parental characteristics intersected with participation. We found that for this sample, not only were parental efforts not driven primarily by economic variables, but that the importance of variables that influence economic status differed depending on the dimension of participation under consideration. For example, married parents were more likely to put their efforts towards involvement, while separated or widowed parents were more likely to put their energies into activities that qualify as engagement. We found that activities and attitudes that center on the school parent community depended mostly on cultural variables. While we cannot speculate as to why these patterns of parental effort emerged, they do suggest that there are many pieces to the puzzle of parental participation. The results also suggest that the conclusion that Hispanic parents are less involved in their children's schooling is in part due to a narrow definition of what parental participation entails. Our study suggests that participation is a multidimensional concept, that factors beyond socioeconomic status drive all forms of participation, and that family context and cultural status also influence the level and form of parental effort. Much work is needed to connect the efforts parents make to help their children succeed in school and actual school success.

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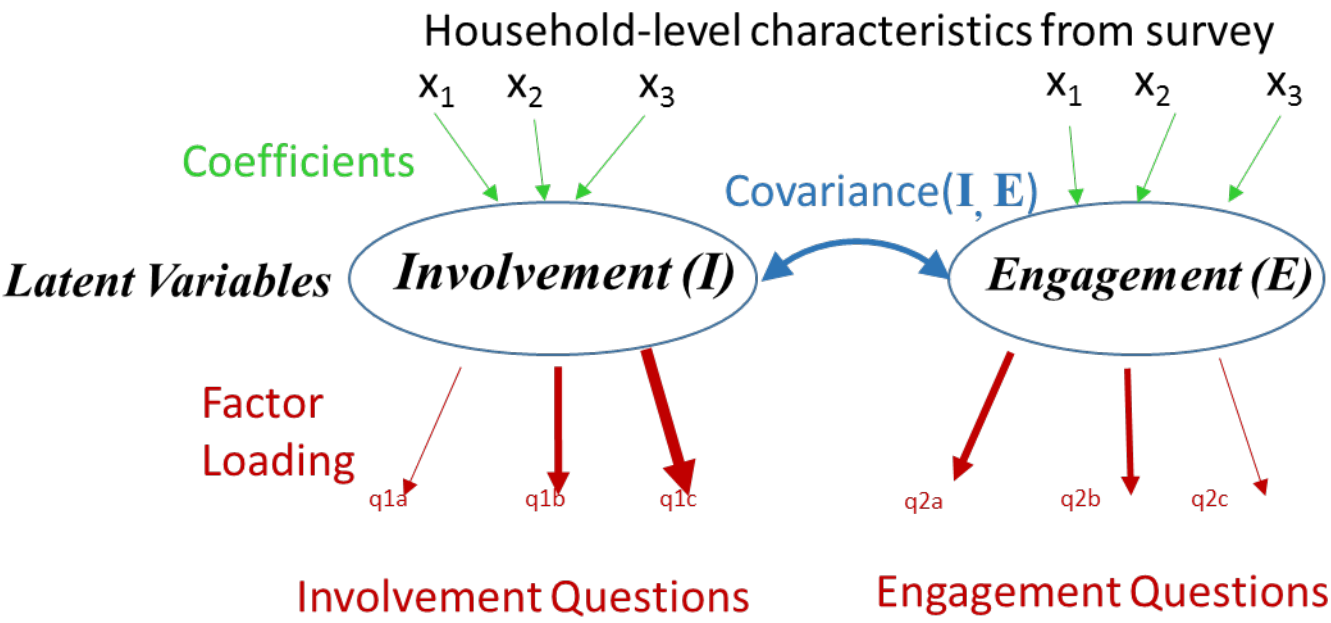
Figure 1. Structure of the multiple-indicator, multiple-cause (MIMIC) model: influences on the latent factors involvement and engagement



Source: Please see the discussion in the text. The questions qa1 and so forth are the responses to the questions in the survey. The responses are modeled as ordered logit. The factor loadings, the variance-covariance matrix of the factors, and the coefficients and their standard errors on the household-level correlates are estimated using the gsem (generalized structural modeling) procedure in STATA with quasi-maximum likelihood estimation.

Table 1. Economic and social characteristics of the survey sample

Household structure	American Community Survey	CES Survey	
Household status	Mean	Mean	Standard Deviation
Married	0.35	0.349	0.277
Cohabiting		0.0767	0.424
Single		0.430	0.337
Divorced	0.64	0.056	0.455
Widowed		0.009	0.329
Separated		0.079	0.411
Respondent not household head		0.214	0.048
Number of children under 3		0.242	0.178
Number of children aged 3–5		0.123	0.376
Education and economic standing			
Less than a high school diploma	0.315	0.260***	0.406
High school diploma or GED	0.337	0.314	0.434
Some college	0.181	0.247***	0.454
Associate's degree	0.054	0.056	0.201
Bachelor's degree	0.077	0.105***	0.189
Master's degree	0.037	0.019***	0.048
Employed	0.560	0.656***	0.390
Unemployed	0.084	0.098	0.239
Full-time student		0.033	0.436
Stay-at-home parent	0.355	0.130	0.400
Retired or disabled		0.084	0.247
Economically disadvantaged kindergarteners	0.54–0.75†	0.709	0.266
Language of responding parent and child; immigration/migration status			
Survey in English; child's first language is English	0.330†	0.235	0.455
Survey in Spanish; child's first language is English		0.061	0.477
Survey in English; child's first language is Spanish		0.186	0.496
Survey in Spanish; child's first language is Spanish		0.253	0.230
Child born in the Dominican Republic; first language Spanish	0.670†	0.200	0.096
Child immigrant or migrant; first language Spanish		0.065	0.270
Grade of child			
Kindergarten		0.170	0.439
First grade		0.207	0.465
Second grade		0.251	0.431
Third grade		0.288	0.230
Fourth grade		0.042	0.306
Fifth grade and above		0.041	0.135

†Lawrence Public Schools
***$p < 0.01$

Source: American Community Survey for 2011–2015; Lawrence Public Schools data for schools serving participating parents.

Note: The data on children’s language refers to all children in the school whose first language was English or “other” in 2016–17.

Table 2. Study survey responses

Panel A: CEC survey responses compared with the NHES: involvement in the child's school

Question	N Lawrence	USA: percentage responding yes	Lawrence: percentage responding yes	Lawrence: number of times in current school year		
				once	twice	three or more
Involvement						
Attended a general school meeting such as an open house, a back-to-school meeting, a report card night, or a meeting of a parent-teacher organization?	428	87.5	91.6	25.5	16.6	49.5
Attended a regularly scheduled parent-teacher conference	428	88.5	81.1	32.2	18.7	30.1
Attended a school or class event, such as a play or performance, because of your child	408	81.0	47.1	26.5	9.3	11.3
Contacted the school or your child's teacher†	413		28.3	15.7	4.1	8.5
Met with a school counselor concerning your child†	423		74.9	28.8	17.5	28.6
Engagement						
Served as a volunteer in your child's classroom	421	53.4	71.3	32.3	16.2	22.8
Attended events to improve or help your child's school†	420		52.9	29.3	11.2	12.4
Served in a coordinating or leadership role in events aimed at improving your child's school†	418		29.4	19.9	4.5	5.0

† These questions are not included in the 2012 NHES.

Panel B: Parental views of engagement with other parents (CEC survey only)

Respondent's view of engagement with other parents	N	Strongly disagree	Disagree	In the middle	Agree	Strongly agree
I know most of the parents of other students	422	16.3	24.4	27.3	17.3	14.7

in my child's classroom.						
The parents of other students in my child's classroom and I want the same things from the classroom.	423	7.8	11.1	34.4	26.1	20.6
If there is a problem in the classroom, the parents can help get it solved.	430	5.9	9.0	21.1	34.2	29.7
Parents in the classroom watch out for each other and help each other out when they can.	422	8.8	11.2	28.3	29.8	21.9

Panel C: Parental views about community (CEC Survey only)

How important is it for the parent to feel a sense of community with the parents of other students?	N	Not important	Somewhat important	Very important
	438	2.1	18.9	79.0
Considering the parents of others in the child's school, does the parent feel a weak, in-between, or strong sense of community?	N	Weak sense	In-between	Strong sense
	428	25.5	48.4	26.2

Source: NHES for 2012 for the United States and tabulations of Lawrence CEC survey.

Table 3. Results of exploratory factor analysis of 15 CEC survey questions

	Community	Engagement	Involvement	Unknown
Attend general school **meetings**	0.104	0.208	**0.578**	–0.081
Attend **parent-teacher conferences**	0.067	0.313	**0.638**	0.039
Contact the school or teacher	0.035	0.256	**0.363**	0.111
Attend a **school event** because of the child	–0.059	**0.413**	**0.414**	–0.015
Serve as **voluntee**r	0.067	**0.683**	0.180	–0.031
Attend **events to improve school**	0.073	**0.685**	0.292	–0.057
Serve in a **coordinating or leadership role**	0.113	**0.747**	0.057	–0.027
I **know most of the parents** of other students in my child's classroom	**0.581**	0.151	0.093	0.218
Other parents and I **want the same things** from the classroom	**0.622**	0.123	0.149	0.222
If there is a **problem**, parents can help get it **solved**	**0.683**	–0.035	–0.001	–0.089
Parents watch out for each other and **help each other out**	**0.803**	0.074	0.003	–0.053
Importance of sharing a **sense of community** with other parents	**0.317**	0.100	–0.076	–0.002
Feeling of a **sense of community**	**0.389**	0.153	0.031	–0.150
Very **few parents know** me	0.014	–0.110	0.061	**0.450**
I have almost no influence over what goes on in my child's classroom	0.058	–0.172	–0.107	**0.473**
Proportion	0.42	0.39	0.24	0.11

Source: Authors' exploratory factor analysis.

Table 4. Factor loadings from single-factor MIMIC models

	Involvement (1)	Engagement (2)	Community (3)
Attend general school **meetings**	0.694**		
	(0.281)		
Attend **parent-teacher conferences**	1		
	(0)		
Attend a **school event** because of the child	0.398***	0.402***	
	(0.146)	(0.124)	
Contact the school because of the child	0.343***		
	(0.0946)		
Serve in a **coordinating or leadership role**		1	
		0	
Serve as **voluntee**r		0.797***	
		(0.212)	
Attend **events to improve school**		0.893***	
		(0.243)	
Parents watch out for each other and **help each other out**			1
			(0)
I **know most of the parents** of other students in my child's classroom			0.347***
			(0.0941)
Other parents and I **want the same things** from the classroom			0.376***
			(0.105)
If there is a **problem**, parents can help get it **solved**			0.499***
			(0.117)
Importance of sharing a **sense of community** with other parents			0.206***
			(0.0599)
Feeling of a **sense of community**			0.212***
			(0.0515)

***p < 0.01, **p < 0.05, *p < 0.1
Source: Authors' estimation of single-factor MIMIC models.
Notes: Standard error of the coefficient is in parentheses. The coefficient is the factor loading for the respective survey question on the latent variable listed at the head of the column relative to the question with a factor loading of 1.

Table 5. The impact of household characteristics on involvement, engagement, and community: single-factor MIMIC models

Household Characteristics	Involvement (1)	Engagement (2)	Community (3)
Household structure			
Single	–0.787	–0.156	–0.568
	(0.495)	(0.478)	(0.626)
Divorced	0.302	0.647	–1.061
	(0.783)	(0.907)	(1.043)
Widowed	2.316	3.595*	2.627
	(2.425)	(1.881)	(3.728)
Separated	–0.157	1.419**	0.866
	(0.616)	(0.638)	(1.066)
Cohabiting	0.0540	0.853	0.378
	(0.677)	(0.672)	(0.919)
Household head	0.288	0.629	0.163
	(0.452)	(0.506)	(0.600)
Number of children under 3	–0.176	–0.915**	–1.132**
	(0.388)	(0.429)	(0.531)
Number of children aged 3–5	–0.141	–0.890	–1.709**
	(0.652)	(0.625)	(0.862)
Education and economic standing			
High school diploma or GED	0.242	0.859	–0.444
	(0.480)	(0.535)	(0.611)
Some college	0.392	0.567	–0.865
	(0.545)	(0.556)	(0.674)
Associate’s degree	0.156	–0.123	–3.246**
	(0.788)	(0.760)	(1.433)
Bachelor’s degree	–0.174	0.650	–1.451
	(0.632)	(0.671)	(0.944)
Master’s degree	1.992	2.042	–2.787*
	(1.296)	(1.595)	(1.466)
Unemployed	1.243	1.052	0.492
	(0.766)	(0.717)	(0.804)
Full-time student	–0.633	–1.729	–0.476
	(1.063)	(1.359)	(1.247)
Stay-at-home parent	–1.004**	–0.630	–0.746
	(0.497)	(0.597)	(0.776)
Retired or disabled	–0.356	0.0920	–1.674*
	(0.576)	(0.700)	(0.868)
Economically disadvantaged	–0.844*	0.114	–0.185
	(0.451)	(0.413)	(0.565)
Language and immigration/migration status			

Survey in English; child's first language is English	–0.895	0.603	1.701**
	(0.559)	(0.566)	(0.834)
Survey in Spanish; child's first language is English	–1.051	–1.810**	2.271**
	(0.792)	(0.786)	(1.108)
Survey in Spanish; child's first language is Spanish	–0.461	–0.443	2.528***
	(0.508)	(0.476)	(0.835)
Survey in Spanish; child's first language is Spanish and child was born in the Dominican Republic	–1.069	-0.657	3.849***
	(0.578)	(0.557)	(1.201)
Survey in Spanish; child's first language is Spanish and child was born in a Spanish-speaking territory or country	0.0197	0.561	1.772
	(0.876)	(0.841)	(1.315)
First grade	–0.959	–2.384**	–1.040
	(0.884)	(0.986)	(0.809)
Second grade	0.163	–2.182**	–1.476*
	(0.661)	(0.901)	(0.813)
Third grade	–0.889	–2.787***	–1.693**
	(0.807)	(0.952)	(0.839)
Variance of factor	6.502	7.010	15.01
	(3.292)	(2.981)	(6.212)
Observations	357	354	360

***p < 0.01, **p < 0.05, *p < 0.1

Source: Authors' estimation of MIMIC models for each dimension.

Notes: Standard error of the coefficient is in parentheses. The base case for the analysis is an employed, married parent of a kindergartener without a high school degree who is a household head. The child is born in the continental United States. Both the first parent and the child speak English.

Table 6. The impact of household characteristics on involvement, engagement, and community: two-factor MIMIC models

	Model 1		Model 2		Model 3	
Variable	Involvement	Engagement	Involvement	Community	Engagement	Community
	(1)	(2)	(3)	(4)	(5)	(6)
Single	–0.805*	–0.0346	–0.803	–0.565	–0.139	–0.580
	(0.446)	(0.130)	(0.505)	(0.612)	(0.476)	(0.614)
Divorced	0.276	0.154	0.295	–1.045	0.642	–1.053
	(0.774)	(0.261)	(0.791)	(1.017)	(0.902)	(1.021)
Widowed	1.886	0.952	2.418	2.673	3.602*	2.590
	(2.133)	(0.583)	(2.534)	(3.735)	(1.890)	(3.678)
Separated	–0.326	0.409*	–0.174	0.846	1.400**	0.841
	(0.582)	(0.219)	(0.628)	(1.049)	(0.639)	(1.051)
Cohabiting	–0.0172	0.227	0.0524	0.342	0.857	0.346
	(0.646)	(0.202)	(0.685)	(0.899)	(0.672)	(0.901)
Household head	0.283	0.160	0.279	0.126	0.621	0.139
	(0.431)	(0.133)	(0.458)	(0.589)	(0.505)	(0.589)
Number of children under 3	–0.145	–0.265**	–0.179	–1.112**	–0.899**	–1.109**
	(0.361)	(0.131)	(0.392)	(0.521)	(0.426)	(0.522)
Number of children aged 3–5	–0.0543	–0.245	–0.139	–1.667**	–0.902	–1.685**
	(0.622)	(0.198)	(0.660)	(0.849)	(0.625)	(0.852)
High school diploma or GED	0.166	0.215	0.245	–0.442	0.842	–0.443
	(0.454)	(0.180)	(0.486)	(0.601)	(0.532)	(0.602)
Some college	0.304	0.124	0.379	–0.866	0.541	–0.865
	(0.519)	(0.180)	(0.553)	(0.664)	(0.556)	(0.665)
Associate’s degree	0.0824	–0.0656	0.170	–3.194**	–0.165	–3.209**
	(0.745)	(0.224)	(0.800)	(1.398)	(0.766)	(1.404)
Bachelor’s degree	–0.272	0.169	–0.186	–1.425	0.663	–1.433
	(0.582)	(0.196)	(0.641)	(0.923)	(0.667)	(0.928)
Master’s degree	1.822	0.512	1.997	–2.748*	2.046	–2.749*
	(1.209)	(0.464)	(1.311)	(1.432)	(1.583)	(1.435)
Unemployed	1.133	0.279	1.254	0.469	1.085	0.479
	(0.699)	(0.203)	(0.777)	(0.792)	(0.712)	(0.789)

Full-time student	–0.376	–0.439	–0.633	–0.526	–1.772	–0.484
	(1.069)	(0.410)	(1.078)	(1.220)	(1.370)	(1.218)
Stay-at-home parent	–1.025**	–0.143	–1.016**	–0.714	–0.645	–0.725
	(0.460)	(0.174)	(0.504)	(0.763)	(0.596)	(0.766)
Retired or disabled	–0.344	0.0630	–0.364	–1.657*	0.0954	–1.632*
	(0.546)	(0.183)	(0.582)	(0.850)	(0.695)	(0.855)
Economically disadvantaged	–0.866**	0.0525	–0.850*	–0.192	0.119	–0.193
	(0.411)	(0.112)	(0.458)	(0.556)	(0.412)	(0.557)
Survey in English; child's first language is Spanish	–0.905*	0.197	–0.912	1.658**	0.603	1.671**
	(0.505)	(0.155)	(0.569)	(0.813)	(0.567)	(0.816)
Survey in Spanish; child's first language is English	–0.812	–0.444	–1.041	2.228**	–1.753**	2.253**
	(0.742)	(0.284)	(0.799)	(1.094)	(0.775)	(1.095)
Survey in Spanish; child's first language is Spanish	–0.426	–0.0860	–0.460	2.472***	–0.433	2.476***
	(0.467)	(0.143)	(0.515)	(0.818)	(0.476)	(0.818)
Child born in the Dominican Republic	–0.903*	–0.130	–1.070*	3.753***	-0.653	3.757***
	(0.532)	(0.181)	(0.587)	(1.175)	(0.556)	(1.176)
Child born in another Spanish-speaking territory or country	0.0423	0.190	0.00996	1.697	0.539	1.735
	(0.824)	(0.228)	(0.884)	(1.297)	(0.840)	(1.294)
First grade	–0.724	–0.684**	–0.983	–1.045	–2.372**	–1.045
	(0.812)	(0.289)	(0.899)	(0.801)	(0.987)	(0.802)
Second grade	0.300	–0.649**	0.154	–1.465*	–2.173**	–1.475*
	(0.625)	(0.267)	(0.670)	(0.800)	(0.902)	(0.801)
Third grade	–0.630	–0.793**	–0.911	–1.672**	–2.760***	–1.687**
	(0.739)	(0.319)	(0.820)	(0.826)	(0.949)	(0.828)

Test of small children (χ^2 with DF = 4)	4.78		7.66		14.5	
Test of language/identification (χ^2 with DF = 10)	11.61		19.20		24.06	
Variance of factor	5.709**	0.516	6.676*	14.40**	6.937**	14.45**
	(2.438)	(0.341)	(3.428)	(5.867)	(2.935)	(5.872)
Covariance	1.153**		1.258		1.357	
	(0.481)		(0.876)		(0.819)	
Correlation coefficient (r)	0.676		0.127		0.136	
N	358	358	365	365	365	365

***p < 0.01, **p < 0.05, *p < 0.1

Source: Authors' estimation of MIMIC models with two latent variables, as indicated.

Notes: Standard error of the coefficient is in parentheses. The base case for the analysis is an employed single parent of a kindergartener without a high school degree who is a household head. The child is born in the continental United States. Both the first parent and the child speak English.

Table 7. Marginal Influence of parent characteristics on the probability of various levels of involvement

	Number of parent-teacher conferences attended during Past Year			
Characteristic	None	One	Two	Three or More
CES Survey	**18.90**	**32.20**	**18.70**	**30.10**
Economic status or language/immigration status	Marginal impact of language/immigration on probability of a response			
Economically disadvantaged	6.59***	3.71***	1.65***	–8.65***
	(3.13)	(1.81)	(0.80)	(4.11)
Survey English/child's first language is Spanish	6.91*	4.25*	–1.68	–9.47**
	(4.15)	(2.43)	(1.11)	(5.44)
Survey Spanish/child's first language is English	8.02	4.69	–2.01	–10.69
	(6.71)	(3.00)	(1.96)	(7.69)
Survey Spanish/child's first language is Spanish				
Child born in continental United States	3.27	2.37	–0.69	–4.95
	(3.50)	(2.56)	(0.78)	(5.31)
Child born in Dominican Republic	8.27***	4.78**	–2.09**	–10.97***
	(4.20)	(2.43)	(1.20)	(5.40)

***p < 0.01, **p < 0.05

Source: Results of Estimation of MIMIC model for involvement and community (Model 2) reported in Table 6.
Notes: The estimates in the table show the predicted impact of the characteristic on the probability that the response falls into the given category. The standard error of the estimate is in parentheses. The p-values are for the test of the null hypothesis that the marginal impact of the characteristic is zero. For more information, see the text.

Table 8. Marginal influence of parent characteristics on various levels of a sense of community

Panel A: Influence of language and immigration status

	Response to the statement "Parents watch out for each other and **help each other out**"				
Variable	Strongly Disagree	Disagree	Middle Opinion	Agree	Strongly Agree
CES Survey	**9.06**	**11.99**	**29.24**	**29.82**	**19.88**
Language/Immigration status	Marginal impact of language/immigration status on probability of a response				
Survey English/child's first language is Spanish	–8.16*** (3.45)	–3.70** (2.01)	–3.18 (2.14)	6.16*** (2.66)	8.88 (6.15)
Survey Spanish/child's first language is English	–10.1*** (3.80)	–5.40 (3.33)	–5.20 (3.56)	8.28** (3.56)	12.5** (6.17)
Parent Spanish/child's first language is Spanish					
Child born in continental United States	–10.77*** (3.14)	–6.11*** (2.34)	–6.00*** (2.13)	8.99*** (2.47)	13.89*** (3.74)
Child born in Dominican Republic	–13.49*** (3.26)	–10.10*** (2.69)	–10.40*** (2.66)	10.99*** (2.30)	23.00*** (5.79)

***p < 0.01, **p < 0.05

Panel B: Influence of educational attainment

	Response to statement "Parents watch out for each other and **help each other out**"				
	Strongly Disagree	Disagree	Middle Opinion	Agree	Strongly Agree
CES Survey	**9.06**	**11.99**	**29.24**	**29.82**	**19.88**
Level of education	Marginal impact of education on probability of a response				
High school diploma/GED	1.31 (1.79)	1.26 (1.74)	1.43 (1.97)	1.06 (1.45)	–2.93 (4.05)
College, no degree	2.75 (2.19)	2.43 (1.88)	2.68 (2.10)	2.32 (1.87)	5.55 (4.30)
Associate's	14.46***	8.28***	5.04***	–10.78***	–16.99***

	(7.37)	(3.11)	(2.08)	(4.70)	(5.26)
Bachelor's	5.03	3.95	4.10**	–4.25	–8.82**
	(3.52)	(2.49)	(2.35)	(2.91)	(5.33)
Master's	11.70	7.19***	5.39***	–9.07**	–15.21***
	(7.44)	(3.53)	(1.88)	(4.75)	(6.21)

***p < 0.01, **p < 0.05

Source: Results of estimation of MIMIC model for engagement and community (Model 3) reported in Table 6.
Notes: The estimates in the table show the predicted impact of the characteristic on the probability that the response falls into the given category. The standard error of the estimate is in parentheses. The p-values are for the test of the null hypothesis that the marginal impact of the characteristic is zero. For more information, see the text.