

Immigration Status and Children's Mental Health

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Abstract: Although over five million children in the United States have at least one undocumented immigrant parent, very little research explores the ways in which being undocumented or having undocumented parents affects children's health and well-being. I examine the relationship between parents' and children's immigration status and children's mental health, utilizing one of the only population-based datasets to inquire about immigrants' precise legal status. I investigate whether the mental health advantage attributed to foreign-born children and children of immigrants in prior research extends to those with undocumented immigrant parents. I find that among Latino families in Los Angeles County, mental health, measured as externalizing, internalizing, and overall behavioral problems, is worse among undocumented immigrant children than among similar children of natives. Mother's mental health, mothers' age at migration, and family socioeconomic status are all significantly associated with children's mental health. The relationship between immigration status and children's mental health is greater for older children than for young children, but does not vary meaningfully by neighborhood context.

Introduction

Recent policy changes, media coverage, and concerted organizing efforts by pro-migrant groups have combined to raise national attention to the fates of children of undocumented immigrants, born in the United States as US citizens, or brought to the country by their parents at young ages. There are currently an estimated 5.5 million children age 0 to 17 in the country who have at least one undocumented immigrant parent, about 1 million of whom are themselves undocumented (Passel and Cohn 2011). There are an additional estimated 1 million youth age 18 to 30 who entered the United States before the age of 16 who are currently undocumented immigrants (Batalova and Mittelstadt 2012). Until the past several years, there has been very little research on the well-being of children of undocumented immigrants. Scholars have now turned their attention to the difficult transition that undocumented youth make from the relatively protected state of childhood to experiencing the full brunt of their undocumented status as young adults in the United States (Gonzales 2011), and have started to study the cognitive repercussions of having undocumented parents for very young children (Yoshikawa 2011). Despite these initial investigations, the well-being of undocumented children and children of undocumented immigrants remains understudied (Suarez-Orozco et al. 2011). In this paper, I focus on the mental health of children of immigrants, shedding light on the association between having undocumented immigrant parents or being an undocumented immigrant and children's internalizing and externalizing behavioral outcomes. Past research on children of immigrants' mental health has often pointed to a mental health advantage for foreign-born children, but given the particular stressors faced by children with undocumented parents and children who are themselves undocumented, this immigrant mental health advantage may not apply to children of undocumented immigrants.

Children's mental health affects children's, parents', and teachers' quality of life, of course, but also has important implications for inequality trends in the country, as poor mental health in childhood affects children's school performance (Currie and Stabile 2007) and is associated with poorer economic and educational outcomes in early adulthood (Currie et al. 2010; McLeod and Shanahan 1993; Turney and McLanahan 2012). Differences in childhood mental health by immigration status could exacerbate trends in later economic inequalities along lines of immigration status, even for children born in the country or for immigrant children who obtain legal status in the United States. As federal policymakers consider options for revising the country's visa allocation system and/or creating a path to legal status for some undocumented immigrants, they should consider the full range of implications of having a large undocumented immigrant population for the well-being of the country as a whole. Understanding

the mental health consequences of undocumented status on children is an important part of this full understanding.

In this paper I make use of one of the only population-based, representative datasets that asks immigrants directly about their immigration status, in order to directly observe the relationship between immigration status and children's behavioral outcomes. I use the Los Angeles Family and Neighborhood Survey (L.A. FANS), to look at the overall, externalizing, and internalizing behavioral problems of children, and at several behavioral problem subscales. The L.A. FANS is representative of Los Angeles County, and asks parents whether they and their children have US citizenship, lawful permanent resident status, or (for adults) another type of legal visa, leaving an identifiable undocumented immigrant population. Prior research on the mental health of children of immigrants has been unable to investigate whether trends that hold true for children of immigrants overall hold true for those with undocumented parents or who are themselves undocumented. I take on this task, asking: 1) How does parents' and children's legal status affect children's mental health? 2) What parental or household factors mediate between parents' immigration status and children's mental health? 3) What neighborhood characteristics mediate the relationship between immigration status and children's mental health? 4) Are the effects of immigration status on mental health more severe for older children? and 5) Does living in an immigrant-heavy neighborhood protect children against the impact of immigration status on mental health, or exacerbate such effects?

Literature review

Mental health of children of immigrants. Prior literature generally finds that foreign-born children have a mental health advantage over US-born children, and that children of immigrants have a mental health advantage over children of natives. One study shows that foreign-born adolescents overall – of all immigration statuses from all world regions – experience less depression and more positive well-being than US-born children who share their racial/ethnic background and socioeconomic status. In this study, lower levels of depression but not greater positive well-being seem to be explained by greater religiosity, protective family connections, and social support of immigrant children (Harker 2001). On the other hand, an older exploration found that foreign-born minority children experience poorer mental health – lower self-efficacy and greater feelings of being unpopular or alienated at school -- than native white children of the same ethnic group (Kao 1999). Looking specifically at behavioral outcomes, data from the Early Childhood Longitudinal Survey – Kindergarten sample (ECLS-K), with a nationally representative sample, shows that children from immigrant Asian and Latino families had

fewer teacher-reported externalizing and internalizing problems than native white children (Crosnoe 2006), while data from a sample of young children in large US cities (the Fragile Families and Child Wellbeing Study) found that children born in the United States to foreign-born mothers have lower parent-reported externalizing problems than children born to US-born mothers, but have higher rates of internalizing behaviors (Jackson, Kiernan, and McLanahan 2012).

Existing research on immigration status and mental health. There is little research on the mental health implications of undocumented status. Evidence from a small sample of immigrant youth in North Carolina suggests that undocumented children experience higher anxiety than those who have legal status, while experiences of discrimination are more closely associated with levels of depression than is children's legal status (Potochnick and Perreira 2010). Research on undocumented immigrant young adults shows strong threats to mental health as youth learn the full implications of their undocumented status, struggle to meet educational and work goals, and resign themselves to their severely proscribed opportunities in the United States (Gonzales 2011). Even children who are themselves US citizens may face threats to mental health because of their parents' legal status. In interviews, children in immigrant families in Ohio and New Jersey sometimes expressed fear that their families would be split apart by deportation, whether or not the children were undocumented (Dreby 2012). A study of very young US-born children of immigrants in New York City, on the other hand, found that children's behavioral problems did not vary meaningfully between children in Mexican, generally undocumented families, children in Dominican, generally documented families, or children in native, citizen African American families (Yoshikawa 2011). Yet a clear understanding of how parents' and children's immigration status affects children's mental health, in a large, population-based sample, has not been conducted. My study goes beyond this current work by investigating the implications of parents' immigration status as well as the implications of children's own immigration status on children age 3 to 17, using a population-based sample drawn from one of the largest concentrations of undocumented Latino immigrants in the country.

Fears, socioeconomic status, and neighborhoods of undocumented immigrants. There are numerous reasons why having undocumented immigrant parents or being an undocumented immigrant could threaten children's mental health. Undocumented immigrants and their families face a very real, very scary threat of deportation and/or family separation. Over 390,000 undocumented immigrants were deported in fiscal year 2011 (Office of Immigration Statistics 2012), including 46,486 parents of US citizen children in the first six months of 2011 (US Immigration and Customs Enforcement 2012). In addition, an estimated 5,100 children were in the foster care system in 2011 because their parents had

been detained or deported (Applied Research Center 2011). Such trends were not so severe in 2000-2001, when the data I analyze were collected, but there were still over 180,000 immigrants deported per year in 1999-2001 (Office of Immigration Statistics 2012). Undocumented immigrant children may have migrated to the United States at a very early age and few memories of their “home” countries, and sometimes have limited proficiency in their native language. Many undocumented immigrant families left their home countries due to violence, political instability, or severe poverty. Therefore, the thought of being deported to sending countries is often very anxiety-provoking. Whether or not children are undocumented themselves or whether or not they are aware of their own or their parents’ undocumented status, whatever stress and anxiety their parents experience due to their families immigration status can affect children’s well-being, since parental mental health affects children’s mental health outcomes (Meadows, McLanahan, and Brooks-Gunn 2007).

The implications of immigration status may be particularly severe for undocumented immigrant teens. Ethnographic accounts and qualitative interviews suggest that the full implications of lacking legal status hit when youth find themselves unable to apply for a driver’s permit and unable to work after-school or summer job as their peers do, and learn about the strong barriers they face to higher education and stable, well-compensated employment. Lacking a driver’s license can also create immediate social embarrassments for unauthorized teens because they must depend on friends for rides, have trouble going to R-rated movies or bars and clubs, cannot join school trips across the US border, and often invent lies to explain their nonparticipation. Some teens mention that they feel ashamed of their legal status, while others express great jealousy of siblings and friends who are able to pick the college of their choice and apply for scholarships and financial aid (Abrego and Gonzales 2010; Cebulko 2008; Gonzales 2011; Thorpe 2009).

In addition to the direct threats from undocumented status to mental health, being undocumented is also, of course, highly correlated with experiences of poverty in the United States, which can in turn affect mental health. Undocumented parents and teens lack work authorization, and so must take jobs off the books in the informal economy, or use false or stolen documents to obtain employment. Such jobs are generally found in lower-paying, less-desirable, less-flexible occupations. Parents often also work multiple jobs to cover basic costs of living. Parents’ work situations and low incomes could affect children’s mental health in several ways. First, substantial evidence has shown that children who live in poverty exhibit greater behavioral problems, and a longitudinal study of children’s experiences with poverty demonstrated a causal relationship, with increases in income leading to decreases in children’s externalizing behavior (Dearing, McCartney, and Taylor 2006). Both current

poverty and long-term poverty seem to affect children's mental health, with associations between long-term poverty and internalizing behavioral problems, and between current poverty and externalizing behavioral problems (McLeod and Shanahan 1993).

Second, the greater poverty experienced by undocumented families may lead to less-supportive living situations. Doubling up to save on rent can lead to overcrowded households, which have been tied to children's physical manifestations of stress and to behavioral problems (Yoshikawa 2011). On the other hand, children with foreign-born parents are more likely than children of natives to grow up in two-parent families, which are protective of children's mental health (Landale, Thomas, and Hook 2011). Undocumented families may also change residence more often, due to difficulties paying rent, the need to find lower-cost, likely less-well-maintained, rental units, or due to weaker negotiating power with landlords. To the extent that such moves disrupt children's daily patterns, friendships, or force them to change schools, frequent moves could have a negative impact on children's emotional well-being. Undocumented immigrant parents' undesirable work situations may also affect their parenting behaviors. Research shows that parents with less self-direction and autonomy at work report to less-responsive parenting techniques, which in-turn, affect children's well-being (Greenberger, O'Neil, and Nagel 1994; Yoshikawa 2011).

Low incomes can also lead families to live in poorer, less-stable, more heavily immigrant neighborhoods, with important implications for children's mental health. Adolescents who live in poor neighborhoods have higher rates of internalizing and externalizing mental health problems, an associated mediated at least in part by exposure to neighborhood hazards such as gang and drug activity (Aneshensel and Sucoff 1996). Evidence from the Moving to Opportunity experiment, which offered randomly selected families in public or subsidized housing in poor neighborhoods in five cities a voucher to move to a low-poverty neighborhood, showed that moving from poor to a less poor neighborhood reduced arrests and improved mental health for female youth, but increased non-violent arrests and risky behavior for male youth (Kling, Ludwig, and Katz 2005; Kling, Liebman, and Katz 2007). Residence in neighborhoods with higher turnover could lead to weaker networks of information and support, lessening parents' knowledge of and access to public and private resources to support their children. This could be particularly true if families live in neighborhoods without many other parents.

Children's residence in neighborhoods with high concentrations of other immigrants could also have protective or deleterious consequences for their mental health. On the one hand, ethnic and immigrant communities could protect against racial or ethnic discrimination, provide strong information networks, or provide access to employment or micro-loans or other material assistance from co-ethnics

that can insulate against poverty (Portes and Rumbaut 2006; Portes and Sensenbrenner 1993). Neighbors who are also undocumented immigrants can share useful information on how to navigate official systems, and on what types of government services are safe and not safe to access. On the other hand, if such immigrant neighborhoods have low levels of English speaking ability and are linguistically isolated, information networks may not extend to useful resources outside the immigrant community. Immigrant enclaves can also be resource-poor, leading to concentrations of poverty and disadvantage (Menjívar 2000).

Hypotheses

Based on this existing evidence, I expect to find the following:

1) *How does parents' and children's legal status affect children's mental health?*

H1) Unlike children of immigrants overall, children in mixed-status families and children in undocumented families will have worse mental health outcomes than children in native families. That is, I expect that parental immigration status and children's own immigration status will both be associated with children's mental health.

2) *What parental or household factors mediate between parents' immigration status and children's mental health?*

H2) Household poverty, residential instability, overcrowding, and mothers' mental health will mediate some of the relationship between immigration status and children's mental health.

3) *What neighborhood characteristics mediate the relationship between immigration status and children's mental health?*

H3) Neighborhood poverty, residential turnover, and neighborhood threats to safety (gangs and drugs) will explain some of the negative association between undocumented status and children's mental health.

4) *Are the effects of immigration status on mental health more severe for older children? Does living in an immigrant-heavy neighborhood protect children against the impact of immigration status on mental health, or exacerbate such effects?*

H4) Being in an undocumented immigrant family will have a more negative impact on mental health for older children than for younger children, but age will not matter for children in legal immigrant or mixed-status families.

H5) Residence in a highly immigrant neighborhood will serve as a protective factor for children's mental health, lessening the relationship between immigration status and poorer mental health for children.

Methods

Data. The Los Angeles Family and Neighborhood Survey (L.A. FANS) is a survey of households in a stratified random sample of census tracts in Los Angeles County. The first wave of the survey, which I analyze here, was conducted in 2000-2001. I use the first wave of the survey, rather than the second, conducted in 2006-2008, because the sample of children of immigrants is substantially larger in the first wave of the survey. The second wave included a sample that was a mix of follow-up with wave 1 respondents, whether or not they moved out of Los Angeles County, and a cross-sectional sample of Los Angeles County. There was substantial attrition of the child sample between waves 1 and 2, in addition, some children aged out of the behavioral measures, which were only taken for children age 3 to 17. The utility of a panel dataset is impeded by the fact that only a handful of children experienced a change in their own or their parents' immigration status between wave 1 and wave 2, making true longitudinal analysis impossible. The cross-sectional sample in wave 2 is relatively small, and only contains 34 children who can be identified as living in undocumented families. Focusing on the first wave of the survey provides a larger, more-useful sample of the county.

The L.A. FANS survey oversampled households with children and in poor or very poor neighborhoods. In each household, one randomly selected adult was interviewed. In all households with children, the primary caregiver, usually the mother, was also interviewed, whether or not the primary caregiver was the randomly selected adult. Parents provided information on one randomly selected child, and if any siblings lived in the household, on one randomly selected sibling. Therefore, some households have information on one child in the household and others have information on two children in the household. Children age 9 and older were also interviewed directly. Interviews were conducted in-person in English, Spanish, or a combination of English and Spanish. Ultimately 3,085 households were interviewed. The overall response rates for sampled and eligible respondents were 85 percent for randomly selected adults, 89 percent for primary caregivers, 87 percent for randomly selected children, and 86 percent for child respondents (Peterson et al. 2004). Undocumented immigrants from California are clearly not representative of all undocumented immigrants in the United States, but it is a good site for such a study. California has more undocumented immigrants than any other state, about 2.6 million (Passel and Cohn 2011). In 2004, over 1 in 10 school-aged children in

California had an undocumented immigrant parent (Fortuny, Capps, and Passel 2007). California's undocumented population is heavily concentrated in the Los Angeles area -- estimates from both 2001 and 2008 suggest that just over 900,000 undocumented immigrants resided in Los Angeles County (Hill and Johnson 2011).

Importantly, L.A. FANS asks parents about whether they have a temporary visa or refugee status, a green card for legal permanent residence, or US citizenship, and asks parents whether children have a green card for legal permanent residence or US citizenship. Because the survey was conducted only in English and Spanish, I exclude Asian immigrants and focus my analysis on families with roots in Latin America, picking families in which parents define themselves as Latino and were born in the United States, Mexico, Central America, or other Latin American countries. I assign children into four types of immigrant families. Children in "native families" are those who are US-born and whose parents are US-born. Children in "legal immigrant" families have parents who have a green card or valid visa and children who are US-born or have a green card. Most children in this category are US born. "Mixed-status" families are those in which parents are undocumented (no green card or visa) and children are US-born or legal immigrants. Finally, "undocumented" families are those in which parents and children are undocumented. I use comparisons between children in mixed status families and children in either native or legal immigrant families a test of the impact of *parents'* immigration status on children's mental health. I use comparisons between children in undocumented immigrant families and children in mixed-status families as a test of the impact of *children's* immigration status on children's mental health. There are 3,864 children in the roster file. Of these 3,062 had valid interviews collecting parental characteristics and parents' reports of children's behavior. Selecting only children in families with Latin American origins reduced this sample to 1,932, and after selecting only children who could be identified as residing in one of these four types of immigrant families, selecting only children age 3 to 17, for whom the behavioral questions were asked, and selecting children whose parents answered behavioral questions, my analytic sample is 1,556. I use the Amelia program, written by James Honaker, Anne Joseph, Gary King, Kenneth Scheve, and Naunihal Singh at Harvard to multiply impute missing data in my independent variables.

Dependent variables. I explore nine scales of children's parent-reported behavior problems. Parents were asked about 28 different types of children's behavioral problems for children age 3 to 17, and were asked to list whether each behavioral problem was often true for the child (2), sometimes true (1), or never true (0), utilizing child behavior checklist developed by Achenbach, a widely-used tool for assessing children's behavior (Achenbach and Edelbrock 1981). Behavioral subscales were generated to

align with those included in the National Longitudinal Survey of Youth (NLSY). Each behavioral scale is made up of the mean of parents' answers to the individual behaviors that make up that scale, so the scales range from zero to two. Because the distribution of these scales was right skewed, I took the natural log of each scale, to get closer to a normal distribution. I examine three broad behavioral scales: 1) overall – a scale made up of all behaviors measured; 2) externalizing, which measures misbehaving, acting out, and displaying anger; 3) internalizing, which measures anxiety, depression, and clinginess; and six behavioral sub-scales: 1) antisocial, measuring misbehavior and disobedience; 2) anxious/depressed; 3) hyperactive, measuring symptoms of attention deficit and hyperactivity; 4) headstrong, measuring whether the child has a temper or is argumentative; 5) dependent, measuring whether the child is clingy or demanding attention; and 6) peer, measuring whether the child has difficulty getting along with other children.

Independent variables: Controls. To control for other factors that might vary among children in different types of immigrant families and that affect child mental health, I first control for several child, family, and neighborhood-level factors before exploring my hypothesized mediators. First, I control for children's age and gender, and the language of the parental interview. Broad evidence suggests that behavioral problems are greater for younger than older children, and that mental health problems tend to be expressed as externalizing behaviors in boys, but as internalizing behaviors in girls (Crijnen, Achenbach, and Verhulst 1997). Exploration of this dataset reveals that parents answering behavioral problem questions in Spanish tend to report greater behavioral problems than parents reporting in English. Because this measure is significantly correlated with reports of children's behavioral problems, while a measure of whether the family speaks only Spanish at home is not, I conclude that these language differences may be related to translation issues in the behavioral scales, rather than to real behavioral differences by mother's level of assimilation or English speaking ability. Therefore, I control for language of interview in all analyses.

I next control for household composition, including the number of siblings, whether the child lives with two parents, with their mother and step-dad, with a single mother, or in another type of family composition, and mother's age. Long-standing research has shown that children in two-parent families have better mental health than children with step-parents or one-parent families (Dawson 1991; Amato 2005). I next control for the highest educational attainment of an adult in the household (less than high school, high school, or some college or more). Finally, I control for immigration factors: Whether the child's mother lived in the United States at age 14, how many years the mother has lived in

the country (less than five, five to 10, 10-19, or 20 or more), and whether the child's family traces their origins to Central or South America versus Mexico.

Independent variables: Mediators. After controlling for these basic features, I explore which family and neighborhood characteristics mediate any remaining relationship between immigration status and children's mental health. I look at the role of family socioeconomic status by controlling for economic circumstances that may be affected by parents' immigration status. I control for household income, using the log of household income in order to transform this measure to have a more normal distribution. I also include a measure of the household is overcrowded (measured as more than two people per bedroom in the house), whether the family changed residence at all in the prior two years, and a scale created by averaging six measures of the interviewer's assessment of the interior environment of the child's home, such as whether the visible part of the home is clean, well-lit, safe for kids, etc.

I hypothesize that parents' poorer mental health, due to their undocumented immigrant status, could negatively impact the mental health of children in mixed-status or undocumented immigrant families. I explore this mechanism by controlling for various measures of mothers' mental health and social support. I first include a binary indicator of whether the mother experienced two week stretches of depression or loss of interest in the past 12 months. I control for mothers' sense of control over life, or self-efficacy, as measured by a weighted scale (weighted using principal components analysis) of mothers' answers to the seven-question Pearlin Self-Efficacy scale. To measure mothers' social support, I include a binary indicator of whether mothers say they have any source of emergency childcare should they need it, whether they say they have someone they could ask for money in an emergency situation, how often the mother reports seeing friends or family (once a week or more, a few times a month, once a month, a few times a year, or once a year or less), and whether mothers attend church at least monthly.

I include a variety of measures of parenting quality and mothers' feelings about parenting. I first control for mother's reports of aggravation from parenting, based on questions drawn from the Child Development Supplement of the Panel Study of Income Dynamics. In the L.A. FANS, these questions are asked with a 5-point Likert scale of responses. The questions are phrased as 1) "Being a parent is harder than I thought it would be," 2) "I feel trapped by my responsibilities as a parent," 3) "I find that taking care of my [child/children] is much more work than pleasure," and 4) "I often feel tired, worn out, or exhausted from raising a family." I take the mean of the four items to create my parenting aggravation scale. I control for whether mothers report that they have consumed five or more alcoholic beverages at

a time in the past month, which is the standard definition of binge drinking. I also control for older children's (age 9 and older) reports of family conflict. There are six questions in the L.A. FANS that ask children about how their family settles arguments, whether they 1) fight a lot, 2) lose their tempers, 3) throw things, 4) calmly discuss problems, 5) say mean things to each other, or 6) hit each other. Children reported whether each behavior was true, sometimes true, or not true. I took the average of each child's reports on these six measures to create the family conflict scale. I include these measures of family conflict because immigrant parents may employ harsher parenting techniques than US-born parents because of cultural differences imported from their home countries or because undocumented immigrant parents may experience more controlling work situations, which have been shown to lead to harsher parenting (Yoshikawa 2011). I include this measure also because the quality of relationships between immigrant parents and their US-born immigrant children may be affected by processes of dissonant acculturation, in which children become more assimilated to the US context than their immigrant parents, leading to role reversal between parents and children, a potential breakdown of parental authority, and sometimes increased family conflict as parents and children renegotiate their roles (Portes and Rumbaut 2001). Such processes are likely not experienced to the same extent by native Latino families.

Finally, in order to account for differences in the neighborhoods experienced by children in different types of immigrant families, I control for several measures of neighborhood characteristics, reported by older children, and from tract-level census data from the 2000 census. I include child-level reports of neighborhood quality from children age 11 and older, measuring whether they 1) feel safe in the neighborhood, 2) feel safe at school, 3) whether there are gangs in their neighborhood or school, 4) whether someone had tried to rob them in the last year, 5) whether someone had offered or sold them drugs in the last year, and 6) whether they saw someone get shot or were shot at in the past year. Children could respond no, sometimes, or yes to the questions about neighborhood and school safety. I created a binary measure coded as 1 if children answered yes, and 0 if children answered sometimes or no. I also include two measures asked of all children age 9 and older: whether they know most adults in the neighborhood, and whether they know most kids in the neighborhood. For the questions on knowing kids and adults in the neighborhood, children were asked, "How many of the [adults or grown-ups / kids and teens] in your neighborhood do you know? Would you say you know most, some, or none of them?" I created a binary indicator equal to 1 for each measure if children answered "most" to the corresponding question.

I also merge on census data describing the census tract in which children reside. I create several factors of neighborhood characteristics, using revised versions of scales that were provided in the L.A. FANS data. First, I control for neighborhood poverty, which is a weighted scale, weighted using principal components analysis, of the share of individuals in the tract who live below the poverty line, the median household income in the tract in 1999, and the share of households headed by women with children. Next I control for the immigrant concentration in the neighborhood, which is a weighted scale of 1) the share of adults in the tract who are Spanish speakers, 2) the non-citizen share of the population, 3) the foreign-born share of the population, 4) the share of the population that is a recent immigrant, defined as someone who entered the United States to live after 1995, 5) the share of adults in the tract who are English only speakers, and 6) the share of adults who speak English very well. I also control for the share of households in the neighborhood that have children in them. The residential instability scale is a weighted scale of 1) the share of people in the tract who are living in the same residence as in 1995, 2) the share of residences that are owner occupied, 3) the share of households that are in multi-unit buildings, and 4) the share of households made up of non-family living arrangements. Finally, I control for the ethnic and racial composition of the neighborhood, including the share of the neighborhood that is Latino, non-Hispanic white, non-Hispanic black, and Asian or other. I combine the share Asian with the share from other races and ethnicities because the Latino families in my sample tend to live in census tracts with a very low Asian share of the tract population.

Finally, to explore whether the effect of immigration status on children's mental health varies by age, I include interaction terms between immigration status and age 8 to 11 and immigration status and age 12 or older. To explore whether residence in an immigrant enclave protects against the negative impacts of undocumented immigrant status, I include an interaction effect between immigration status and the neighborhood immigration scale.

Analytic strategy. After looking at descriptive statistics of the analytic sample, my first set of analyses examine whether there is any relationship between parents' or children's immigration status and children's behavioral problems. I use ordinary least squares regression models, with a random intercept at the household level to adjust standard errors to account for similarities between siblings. I also ran models with both family and neighborhood-level random effects, but the neighborhood level accounted for very little of the variation between children, and the coefficients and standard errors were nearly identical between the models with and without neighborhood random effects. I examine each behavioral scale and sub-scale separately. In addition to immigration status, I control here for my children's age, children's gender, and the language of the interview. Then, I continue my exploration of

the relationship between legal status and children's mental health, focusing on the internalizing and externalizing behavioral scales, adding in blocks of controls to investigate how family and neighborhood factors shape the relationship between immigration status and mental health. After adding in my control variables, I explore the role of family socioeconomic status, mothers' social support and mental health, parenting factors, and finally, neighborhood characteristics in shaping children's mental health. I investigate whether each block of controls mediates the relationship between immigration status and children's mental health. For all models, I use ordinary least squares models, in the log scale, with a household random effect.

Results

Descriptives: How do family and neighborhood districts vary by immigration status? Appendix 1 shows mean values and percentages for the variables used in my analysis, for the sample overall and by family immigration status. We see first that children in any type of immigrant family, whether legal immigrants, mixed-status, or undocumented, show greater overall and internalizing behavioral problems, while children in mixed-status and undocumented immigrants show greater externalizing behavioral problems than children in native families. Children in immigrant families also show greater behavioral problems on many of the behavioral problem subscales. Looking at differences among children in different types of immigrant families, we see that children in mixed-status or undocumented immigrant families also have significantly higher behavioral problems than children in legal immigrant families.

There are a number of notable differences in the families and neighborhoods in which children are raised, by immigration status. Children in immigrant families live in poorer homes than children in native families, with lower family incomes and higher rates of overcrowding. About 82 percent of children in undocumented immigrant and 77 percent of children in mixed-status families live in an overcrowded household. Incomes are lower in mixed-status and undocumented immigrant families than in legal immigrant families. Maternal depression is higher in legal immigrant families than in native families, while mothers' self-efficacy is lower in immigrant families than in native families, and is particularly low in mixed-status families. Nearly all mothers in mixed-status and undocumented immigrants gave their interviews in Spanish, compared to 79 percent of mothers in legal immigrant families, and 6 percent of mothers in native families. Parental education is low in immigrant families, and particularly in mixed-status and undocumented immigrant families. Twenty-one percent of children in legal immigrant families have a mother who was in the United States at age 14, compared to 11

percent in mixed-status families, and 3 percent in undocumented immigrant families. Children in immigrant families, and particularly in mixed-status and undocumented immigrant families live in neighborhoods that are poorer, have higher concentrations of immigrants, have more households with kids, and have lower residential stability (greater turnover of residents). They also live in neighborhoods that have higher shares of Latino residents, and lower shares of white residents and residents from other races or ethnicities.

Regression: How does immigration status affect children's mental health? First, I explore how immigration status is correlated with children's mental health, setting aside all of these family and neighborhood differences. Table 1 shows the associations between parents' and children's immigration status, and the nine mental health outcomes, controlling only for child-level measures (age and gender) and the language of interview. Generally, we see that children with foreign-born parents have more behavioral problems, but that this is particularly true for children who are themselves undocumented. The mean overall behavioral index is 56 percent higher for children in mixed-status families compared to children with native parents, while the overall index is 89 percent higher for children in undocumented families. For the internalizing subscale, all children of immigrants have higher behavioral problems than children in native families, regardless of their parents' immigration status, while for the externalizing subscale, only children in undocumented immigrant families have higher behavioral problems. Differences between children in different types of immigrant families are not significant.

Looking next at behavioral problem subscales shows that children in immigrant families (of all types) also have significantly higher behavioral problems on the anxiety/depression subscale, while children in undocumented immigrant families also have higher behavioral problems on the hyperactivity subscale, when compared to children in native families. Looking at differences between children in different types of immigrant families shows that there are no significant differences by parents' or children's immigration status.

Do family characteristics explain these differences? I next add in my control variables and then explore whether family-level characteristics such as family socioeconomic status, mother's mental health and social support, or parenting factors explain the relationship between immigration and legal status and children's mental health. Table 2 shows these results for the overall, internalizing, and externalizing subscales. Looking first at the overall behavioral scale, I find that after controlling for the family immigration background, children in mixed-status families have similar overall mental health to children in native families, while children in undocumented immigrant families still have significantly higher overall behavioral problems. Controlling for family socioeconomic status explains very little of

these greater behavioral problems, while controlling for mother's mental health actually increases the gap between the overall behavioral problems of children in undocumented immigrant families as compared to children in native families. Controlling for parenting factors further strengthens the relationship. With all household level controls, children in undocumented families have 86 percent higher behavioral problems than children in native families. Mother's mental health – both depression and self-efficacy – are significantly related to children's overall behavioral problems.

Looking next at the internalizing behavioral scale, I find again that controlling for family immigration background – specifically, whether mothers were in the United States at age 14, explains the greater internalizing behavioral problems of children in legal immigrant and mixed-status families, while children in undocumented immigrant families continue to have greater externalizing problems than children in native families. Controlling for family socioeconomic status fully mediates the relationship between being in an undocumented immigrant family and greater internalizing problems, but once I add a control for mothers' mental health, the relationship reappears. Parenting factors do not explain the greater internalizing mental health problems of children in undocumented immigrant families. With all family-level controls, children in undocumented immigrant families have 92 percent higher internalizing problem behaviors than children in native families. Mothers' duration of residence in the United States and mothers' mental health are significantly correlated with children's internalizing behavioral problems, as is mothers' aggravation with parenting.

I find a similar story for externalizing problems. Here, only children in undocumented immigrant families had significantly higher behavioral problems in my initial model. Controlling for immigration factors – specifically, whether mothers were in the United States at age 14 – explains a portion of these higher behavioral problems. Family socioeconomic status mediates a part of undocumented immigrant children's greater externalizing problems, while controlling for mother's mental health increases the gap in behavior between children in undocumented immigrant and native families. After including all family-level factors, children in undocumented immigrant families have 82 percent higher externalizing problems compared to children in native families. Again, mothers' duration in the United States, maternal mental health, and maternal aggravation with parenting show significant correlations with children's mental health, while other individual mediating factors do not. While for overall and internalizing behavioral problems, there were not significant differences between children in undocumented immigrant families versus children in mixed-status families, for externalizing behavioral problems, children in undocumented immigrant families have significantly higher externalizing problems

compared to children in mixed-status families, once I control for family income. This gap persists after controlling for mothers' mental health and parenting factors.

Two of the subscales had shown significant differences in children's mental health by parental immigration status or children's immigration status. Children in any type of immigrant family showed greater anxiety / depression behavioral problems than children in native families. After I control for mother's duration in the United States, however, these associations are no longer significant. Children in undocumented immigrant families showed greater hyperactivity behavioral problems than children in native families. Again, this association goes away once controlling for mothers' residence in the United States at age 14. Finally, the headstrong scale shows that children in undocumented immigrant families have significantly higher problems on this scale than children in mixed-status families, after controlling for family socioeconomic status, even though the gap between children in undocumented immigrant families and children in native families is not significant on this scale. This gap is not explained by mothers' mental health or parenting factors.

How do neighborhood contexts mediate the relationship between immigration status and mental health? Next I explore whether observed differences in neighborhood context explain any of the remaining differences in children's mental health by immigration status. Models 8 of table 2 show these relationships. Neighborhood factors slightly attenuate the relationship between being in an undocumented immigrant family and having higher overall, internalizing, and externalizing behavioral problems. Living in a neighborhood with more families with children is associated with significantly lower overall behavioral problems, while living in a more stable neighborhood is, surprisingly, associated with slightly higher overall behavioral problems. None of the individual neighborhood factors show a significant relationship with internalizing or with externalizing behavioral problems.

Does the role of immigration status vary by children's age, or by neighborhood context? Table 3 explores whether older children, who are more likely to be aware of the implications of their own immigration status, are more negatively impacted by their immigration status. These models, with the full set of controls, show that the relationship between being in a legal immigrant family and overall behavioral problems is stronger for older children, age 12 to 17, than for young children, under age 8. The same holds true for the relationship between being in an undocumented immigrant family and greater overall behavioral problems. I expected the latter relationship, but did not expect that age would affect the relationship between being in a legal immigrant family and mental health. For internalizing behavioral problems, I see more support for my hypothesis: The relationship between being an undocumented immigrant and higher internalizing behavioral problems is stronger for older

children than for younger children. However, for externalizing behavioral problems, the only significant age interaction shows that being in a legal immigration family is more associated with higher externalizing problems for older children than for younger children, which I would not have expected.

The neighborhood interactions do not show the expected story that immigrant neighborhoods insulate against the negative effects of undocumented immigrant status. Instead, they show that children in legal immigrant families have higher overall and internalizing behavioral problems if they live in neighborhoods with higher immigrant concentrations than if they live in more integrated neighborhoods. If anything, immigrant neighborhoods carry a disadvantage, at least for children in legal immigrant families.

Summary and Conclusions

Summary. While prior research has suggested that children of immigrants and foreign-born children have superior mental health outcomes to children of US natives, no systematic analysis has shown whether or not this story holds for children with undocumented immigrant parents. I find that among children in Latino families in Los Angeles County, those in undocumented immigrant families, that is, those who are themselves undocumented immigrants, have greater internalizing, externalizing, and overall behavior problems compared to children in native families, and greater externalizing and headstrong behavioral problems than children in mixed-status families. Older children appear to be somewhat more affected by their immigration status than younger children, while limited evidence suggests that living in immigrant enclaves may exacerbate the impact of having immigrant parents on children's mental health.

Children in immigrant families, and particularly in mixed-status and undocumented families grow up in conditions of greater poverty, with less well educated parents, lower incomes, more household overcrowding, and with mothers who report lower self-efficacy. They also grow up in poorer, less stable, and more ethnically segregated neighborhoods. Controlling for household factors, I find that part of the greater behavioral problems of undocumented children are explained by lower family income, but significant differences persist. Neighborhood factors do not shape children's mental health very strongly, though children who grow up around more other children show lower overall behavioral problems.

These results confirm some of my hypotheses, while contradicting others. I expected to find that both parents' and children's immigration status affected children's mental health, but these results suggest children's own immigration status shapes mental health while parents' immigration status does

not. I expected that family incomes, maternal mental health, household overcrowding, and changing residences more often would explain lower mental health of children in immigrant families. Lower family incomes in immigrant households do indeed explain some of the poorer mental health of undocumented immigrant children, but my other hypothesized mediators did not seem to operate as expected. I expected that the association between living in an undocumented family and poorer mental health would be stronger for older versus younger children. This was true, but age also affected the association between being in a legal immigrant family and mental health, which I did not expect. Finally, I expected that residence in a highly-immigrant neighborhood would lessen the association between undocumented immigrations status and poorer mental health, but instead I found that legal immigrants had poorer mental health when they lived in more highly immigrant neighborhoods than when they lived in more integrated neighborhoods.

Limitations. Because I use cross-sectional data, the associations between legal status and mental health observed here are descriptive, and I cannot make causal claims. However, despite the cross-sectional nature of this analysis, the rich detail contained in the survey allows me to control for a wide variety of factors that might differ between parents who were and were not able to obtain legal status in the United States. A second potential concern is that foreign-born parents may assess mental health problems differently than native parents, or hold a different mental standard of “normal” behavior for children. I do not believe that is a problem for my study. In the second wave of L.A. FANS, respondents are asked to rate the mental health of hypothetical people described in short vignettes. Using these questions, and categorizing families in the same way as I have done here, I find that parents in legal immigrant and mixed-status families tend to rate hypothetical mental health conditions as less problematic than native parents, while parents in undocumented families rate them similarly to native parents. This suggests that if anything, the associations I find here are lower bound estimates of the association between immigration status and children’s mental health.

An additional limitation is that I compare undocumented immigrant children to US-born children in mixed-status families as a way to disentangle the independent impacts of *parents’* immigration status and *children’s* immigration status. However, there are additional differences between children in mixed-status and undocumented immigrant families that I cannot account for using these data. Undocumented immigrant children have, unlike their US-born peers in mixed-status families, experienced an international move and separation from family and friends in the home country and the home country cultural and physical environment. Some undocumented immigrant children moved at such a young age that they have no memories of their “home” country, but others have memories of grandparents, aunts

and uncles, or even siblings or other family members left behind, who they are unable to visit because of their legal status. Some children have also experienced stressful or violent situations in their home country or during the migration process that were not experienced by US-born children (Potochnick and Perreira 2010). This study of about 250 immigrant youth in North Carolina suggests that stressful migration events are correlated with greater anxiety problems up to five years past migration, but that time past migration may mitigate the effect of stressful migration on anxiety (Potochnick and Perreira 2010). Such family separation and traumatic migration experiences could be considered an inherent part of the undocumented immigrant experience rather than omitted variables, but my inability to control for such things inhibits my ability to make claims about the impact of the experience of *residing* in the United States as an undocumented immigrant on children's mental health.

Conclusions. These data suggest that there are direct and indirect consequences of immigration status on children's mental health. Children with undocumented immigrant parents experience not only the anxiety and fear of potential detection and deportation, but also greater poverty and poorer neighborhood contexts than children in legal immigrant or native families. Family socioeconomic status is strongly associated with children internalizing and externalizing behavioral problems, and maternal mental health is particularly important for children's mental health. While I would have expected that parental mental health was lowest in mixed-status and undocumented immigrant families, all foreign-born mothers report low self-efficacy. Whether due to immigration status problems or due to the stresses experienced by all immigrant parents, working to address the mental health and social support needs of immigrant parents could have strong protective effects for their children. Further, as immigrant mothers' duration of residence in the United States has strong implications for children's mental health, working with new immigrant mothers to connect them to resources to support their assimilation and familiarization with the US context and with resources for supporting their children could assist in protecting child well-being. Yet these findings suggest that children who are themselves undocumented may still experience negative mental health consequences, no matter how healthy and supportive their mothers. As long as the country maintains a population of millions of children affected by the immigration status of their family members or of themselves, researchers must continue to examine how immigration status is affecting children's well-being, and continue to investigate factors open to policy intervention that could protect the well-being of this sizable subset of the US child population.

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Table 1. Association between legal status and mental health for children in Latino families in Los Angeles County, 2000-2001

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)	
	Overall		Internalizing		Externalizing		Antisocial		Anxiety / Depression		Hyper		Headstrong		Dependent		Peer	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Immigration status (ref=Native)																		
Legal immigrant	0.249	(0.144)	0.398*	(0.196)	0.163	(0.174)	-0.173	(0.283)	0.489*	(0.231)	-0.016	(0.265)	-0.113	(0.267)	0.311	(0.269)	0.097	(0.277)
Mixed status	0.446*	(0.173)	0.603*	(0.236)	0.375	(0.210)	0.169	(0.341)	0.813**	(0.280)	0.384	(0.320)	0.095	(0.322)	0.349	(0.323)	0.255	(0.334)
Undocumented	0.639***	(0.192)	0.722**	(0.262)	0.706**	(0.233)	0.416	(0.379)	0.848**	(0.316)	0.805*	(0.357)	0.633	(0.359)	0.697	(0.357)	0.080	(0.374)
Controls																		
Age	-0.028**	(0.009)	-0.024	(0.012)	-0.045***	(0.011)	-0.010	(0.018)	0.013	(0.015)	-0.084***	(0.017)	-0.025	(0.018)	-0.128***	(0.017)	0.073***	(0.018)
Female (ref=male)	-0.207**	(0.067)	-0.071	(0.095)	-0.330***	(0.085)	-0.667***	(0.139)	0.044	(0.119)	-0.606***	(0.135)	-0.292*	(0.136)	0.190	(0.126)	-0.005	(0.140)
Interview in Spanish	0.432***	(0.125)	1.399***	(0.170)	0.246	(0.151)	-0.087	(0.246)	1.016***	(0.202)	0.839***	(0.231)	0.032	(0.232)	1.639***	(0.233)	0.632**	(0.241)
Constant	-1.712***	(0.128)	-3.116***	(0.177)	-1.433***	(0.158)	-3.154***	(0.256)	-3.372***	(0.213)	-2.239***	(0.243)	-1.936***	(0.245)	-2.530***	(0.240)	-6.270***	(0.253)
N	1556		1556		1556		1556		1556		1556		1556		1556		1556	

Notes: Standard errors in parentheses.

* p<0.05 ** p<0.01 *** p<0.001

Source: Author's analysis of L.A. FANS wave 1 data.

Table 2. Associations between legal status and three behavioral outcomes, with family and neighborhood mediating factors, for children in Latino families in Los Angeles County in 2000-2001

	Overall behavioral problems															
	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Immigration status (ref = Native)																
Legal immigrant	0.249	(0.144)	0.262	(0.145)	0.249	(0.146)	0.220	(0.163)	0.234	(0.163)	0.223	(0.157)	0.235	(0.156)	0.233	(0.157)
Mixed status	0.446*	(0.173)	0.420*	(0.174)	0.389*	(0.176)	0.389	(0.199)	0.387	(0.200)	0.342	(0.195)	0.353	(0.193)	0.343	(0.194)
Undocumented	0.639***	(0.192)	0.605**	(0.194)	0.576**	(0.195)	0.585**	(0.226)	0.576*	(0.228)	0.610**	(0.221)	0.622**	(0.220)	0.597**	(0.221)
Controls																
Age, gender, interview language	Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Family structure	No		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Parental education	No		No		Yes		Yes		Yes		Yes		Yes		Yes	
Immigration factors	No		No		No		Yes		Yes		Yes		Yes		Yes	
Mediators																
Family socioeconomic status	No		No		No		No		Yes		Yes		Yes		Yes	
Mental health and social support	No		No		No		No		No		Yes		Yes		Yes	
Parenting factors	No		No		No		No		No		No		Yes		Yes	
Neighborhood factors	No		No		No		No		No		No		No		Yes	
Constant	-1.712***	(0.128)	-1.681***	(0.224)	-1.508***	(0.250)	-1.246***	(0.361)	-1.539***	(0.405)	-1.652***	(0.464)	-2.249***	(0.482)	-1.385*	(0.603)
N	1556		1556		1556		1556		1556		1556		1556		1556	
	Internalizing behavioral problems															
	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Immigration status (ref = Native)																
Legal immigrant	0.398*	(0.196)	0.426*	(0.197)	0.407*	(0.199)	0.286	(0.221)	0.294	(0.221)	0.285	(0.216)	0.300	(0.215)	0.277	(0.215)
Mixed status	0.603*	(0.236)	0.616**	(0.237)	0.571*	(0.240)	0.478	(0.270)	0.452	(0.271)	0.417	(0.266)	0.431	(0.264)	0.392	(0.265)
Undocumented	0.722**	(0.262)	0.749**	(0.264)	0.707**	(0.266)	0.630*	(0.307)	0.584	(0.310)	0.637*	(0.304)	0.650*	(0.302)	0.616*	(0.303)
Controls																
Age, gender, interview language	Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Family structure	No		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Parental education	No		No		Yes		Yes		Yes		Yes		Yes		Yes	
Immigration factors	No		No		No		Yes		Yes		Yes		Yes		Yes	
Mediators																
Family socioeconomic status	No		No		No		No		Yes		Yes		Yes		Yes	
Mental health and social support	No		No		No		No		No		Yes		Yes		Yes	
Parenting factors	No		No		No		No		No		No		Yes		Yes	
Neighborhood factors	No		No		No		No		No		No		No		Yes	
Constant	-3.116***	(0.177)	-3.332***	(0.305)	-3.077***	(0.339)	-2.614***	(0.493)	-2.894***	(0.553)	-3.308***	(0.641)	-4.077***	(0.664)	-3.007***	(0.827)
N	1556		1556		1556		1556		1556		1556		1556		1556	
	Externalizing behavioral problems															
	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Immigration status (ref = Native)																
Legal immigrant	0.163	(0.174)	0.183	(0.176)	0.179	(0.177)	0.081	(0.196)	0.089	(0.196)	0.078	(0.191)	0.090	(0.189)	0.113	(0.190)
Mixed status	0.375	(0.210)	0.332	(0.211)	0.316	(0.213)	0.241	(0.239)	0.239	(0.241)	0.190	(0.235)	0.199	(0.233)	0.208	(0.234)
Undocumented	0.706**	(0.233)	0.648**	(0.236)	0.630**	(0.237)	0.553*	(0.274)	0.545*	(0.276)	0.590*	(0.269)	0.600*	(0.267)	0.590*	(0.268)
Controls																
Age, gender, interview language	Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Family structure	No		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Parental education	No		No		Yes		Yes		Yes		Yes		Yes		Yes	
Immigration factors	No		No		No		Yes		Yes		Yes		Yes		Yes	
Mediators																
Family socioeconomic status	No		No		No		No		Yes		Yes		Yes		Yes	
Mental health and social support	No		No		No		No		No		Yes		Yes		Yes	
Parenting factors	No		No		No		No		No		No		Yes		Yes	
Neighborhood factors	No		No		No		No		No		No		No		Yes	
Constant	-1.433***	(0.158)	-1.290***	(0.271)	-1.177***	(0.302)	-0.628	(0.435)	-0.841	(0.489)	-0.900	(0.562)	-1.665**	(0.582)	-0.856	(0.728)
N	1556		1556		1556		1556		1556		1556		1556		1556	

Notes: Standard errors in parentheses.

* p<0.05 ** p<0.01 *** p<0.001

Source: Author's analysis of L.A. FANS wave 1 data.

Table 3. Associations between legal status and three behavioral outcomes, with family and neighborhood mediating factors, for children in Latino families in Los Angeles County in 2000-2001

	Overall behavioral problems				Internalizing behavioral problems				Externalizing behavioral problems			
	(1)		(2)		(3)		(4)		(5)		(6)	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Immigration status (ref = Native)												
Legal immigrant	0.109	(0.182)	0.195	(0.159)	0.191	(0.252)	0.544*	(0.232)	-0.031	(0.223)	0.168	(0.205)
Mixed status	0.239	(0.215)	0.321	(0.195)	0.283	(0.296)	0.670*	(0.280)	0.135	(0.263)	0.332	(0.248)
Undocumented	0.253	(0.301)	0.601**	(0.230)	0.037	(0.418)	0.883**	(0.326)	0.237	(0.372)	0.691*	(0.289)
Age interactions												
Legal immigrant * Age 8-11	-0.072	(0.144)			-0.138	(0.204)			-0.048	(0.182)		
Legal immigrant * Age 12-17	0.488*	(0.199)			0.439	(0.281)			0.536*	(0.250)		
Mixed-status * Age 8-11	0.042	(0.187)			0.147	(0.267)			-0.119	(0.238)		
Mixed-status * Age 12-17	0.150	(0.311)			-0.123	(0.439)			0.324	(0.391)		
Undocumented * Age 8-11	0.288	(0.292)			0.606	(0.415)			0.354	(0.370)		
Undocumented * Age 12-17	0.662*	(0.308)			0.952*	(0.435)			0.666	(0.386)		
Neighborhood interactions												
Legal immigrant * neighborhood immigration factor			0.299*	(0.152)			0.201**	(0.064)			0.056	(0.057)
Mixed-status * neighborhood immigration factor			0.221	(0.494)			0.126	(0.087)			-0.066	(0.077)
Undocumented * neighborhood immigration factor			0.142	(0.259)			0.148	(0.108)			-0.026	(0.096)
Controls												
Age, gender, interview language	Yes		Yes		Yes		Yes		Yes		Yes	
Family structure	Yes		Yes		Yes		Yes		Yes		Yes	
Parental education	Yes		Yes		Yes		Yes		Yes		Yes	
Immigration factors	Yes		Yes		Yes		Yes		Yes		Yes	
Mediators												
Family socioeconomic status	Yes		Yes		Yes		Yes		Yes		Yes	
Mental health and social support	Yes		Yes		Yes		Yes		Yes		Yes	
Parenting factors	Yes		Yes		Yes		Yes		Yes		Yes	
Neighborhood factors	Yes		Yes		Yes		Yes		Yes		Yes	
Constant	-1.148	(0.619)	-1.353*	(0.606)	-2.678**	(0.848)	-3.124***	(0.827)	-0.651	(0.749)	-0.849	(0.729)
N	1556		1556		1556		1556		1556		1556	

Notes: Standard errors in parentheses.

* p<0.05 ** p<0.01 *** p<0.001

Source: Author's analysis of L.A. FANS wave 1 data.

Appendix 1. Description of children's family and neighborhood contexts, by immigration status, for children in Latino families in Los Angeles County, 2000-2001

	All Families		Native		Legal immigrant		Mixed status		Undocumented	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Behavioral outcomes										
Overall	-1.49	0.04	-2.04	0.12	-1.52	0.05	-1.14	0.06	-1.05	0.06
Internalizing	-1.99	0.05	-3.28	0.16	-1.92	0.07	-1.35	0.09	-1.26	0.11
Externalizing	-1.61	0.05	-1.99	0.13	-1.69	0.06	-1.29	0.09	-1.14	0.09
Antisocial	-3.66	0.07	-3.61	0.17	-3.83	0.10	-3.41	0.16	-3.38	0.23
Anxious / depressed	-2.02	0.06	-3.20	0.17	-1.95	0.09	-1.46	0.12	-1.37	0.16
Hyper	-2.58	0.07	-3.28	0.18	-2.73	0.10	-1.95	0.14	-1.76	0.19
Headstrong	-2.28	0.07	-2.33	0.17	-2.42	0.10	-2.12	0.16	-1.74	0.19
Dependent	-2.17	0.07	-3.49	0.19	-2.13	0.10	-1.36	0.14	-1.54	0.20
Trouble getting along with peers	-5.07	0.07	-5.58	0.15	-5.01	0.10	-4.92	0.17	-4.75	0.24
Family socioeconomic status										
Logged family income	9.49	0.09	10.60	0.12	9.69	0.12	8.82	0.25	7.88	0.46
Overcrowded house	0.58	0.01	0.35	0.03	0.54	0.02	0.77	0.02	0.82	0.03
Changed residence last 2 years	0.26	0.01	0.25	0.03	0.18	0.01	0.34	0.03	0.49	0.04
Household environment	0.32	0.00	0.32	0.01	0.31	0.01	0.34	0.01	0.33	0.01
Mother's mental health and social support										
Mother experienced depression	0.36	0.01	0.27	0.03	0.39	0.02	0.38	0.03	0.31	0.04
Mother's self efficacy scale	-0.02	0.04	0.74	0.09	-0.09	0.06	-0.56	0.09	-0.02	0.12
Has source of emergency childcare	0.94	0.01	0.94	0.01	0.93	0.01	0.96	0.01	0.91	0.02
Has source of emergency money	0.90	0.01	0.92	0.02	0.88	0.01	0.92	0.02	0.90	0.02
How often sees friends/relatives										
Once a week or more	0.31	0.01	0.37	0.03	0.29	0.02	0.30	0.03	0.31	0.04
Two-three times a month	0.22	0.01	0.28	0.03	0.21	0.01	0.20	0.02	0.21	0.03
Once a month	0.15	0.01	0.18	0.02	0.14	0.01	0.12	0.02	0.15	0.03
Few times a year	0.24	0.01	0.14	0.02	0.27	0.02	0.27	0.03	0.23	0.03
Once a year	0.08	0.01	0.03	0.01	0.09	0.01	0.11	0.02	0.10	0.02
Mother goes to church at least monthly	0.67	0.01	0.55	0.03	0.72	0.02	0.64	0.03	0.71	0.04
Parenting factors										
Parenting stress scale	2.49	0.02	2.50	0.04	2.48	0.03	2.52	0.05	2.42	0.07
Parent binge drank in last month	0.05	0.01	0.12	0.02	0.04	0.01	0.04	0.01	0.02	0.01
Family conflict scale (age 9 and older)	2.60	0.02	2.62	0.04	2.61	0.02	2.65	0.05	2.53	0.05
Neighborhood factors										
Feel safe in neighborhood (age 11 and older)	0.49	0.02	0.48	0.05	0.50	0.03	0.35	0.07	0.53	0.05
Feel safe at school (age 11 and older)	0.59	0.02	0.67	0.05	0.58	0.03	0.41	0.07	0.63	0.05
Gangs in neighborhood (age 11 and older)	0.53	0.02	0.49	0.05	0.54	0.03	0.43	0.07	0.60	0.05
Got robbed in neighborhood (age 11 and older)	0.34	0.02	0.33	0.05	0.34	0.03	0.26	0.06	0.36	0.05
Offered drugs in neighborhood (age 11 and older)	0.14	0.01	0.21	0.04	0.13	0.02	0.10	0.04	0.14	0.04
Saw someone shot in neighborhood (age 11 and older)	0.10	0.01	0.11	0.03	0.09	0.02	0.08	0.04	0.11	0.03
Knows adults in neighborhood (age 9 and older)	0.34	0.02	0.31	0.04	0.36	0.02	0.39	0.05	0.27	0.04
Knows kids in neighborhood (age 9 and older)	0.45	0.02	0.44	0.04	0.46	0.02	0.44	0.05	0.42	0.05
Neighborhood poverty factor	-0.04	0.04	-1.19	0.10	0.01	0.05	0.50	0.08	0.67	0.10
Neighborhood immigrant factor	-0.03	0.06	-1.67	0.15	0.10	0.08	0.68	0.10	0.91	0.13
Share of households with kids	0.50	0.00	0.46	0.01	0.51	0.00	0.53	0.01	0.53	0.01
Neighborhood stability factor	0.03	0.04	0.78	0.09	0.03	0.06	-0.34	0.10	-0.55	0.12
Neighborhood ethnic composition										
Latino	0.70	0.01	0.59	0.02	0.71	0.01	0.73	0.01	0.75	0.01
White	0.13	0.00	0.21	0.01	0.12	0.01	0.08	0.01	0.08	0.01
Black	0.08	0.00	0.06	0.00	0.08	0.00	0.09	0.01	0.08	0.01
Asian and other	0.10	0.00	0.13	0.01	0.09	0.00	0.09	0.01	0.08	0.01
Controls										
Basic										
Age	9.26	0.11	9.00	0.25	9.82	0.15	7.20	0.19	10.75	0.32
Female	0.49	0.01	0.51	0.03	0.49	0.02	0.49	0.03	0.46	0.04
Interview in Spanish	0.71	0.01	0.06	0.01	0.79	0.01	0.96	0.01	0.99	0.01
Family structure										
Number of siblings in household	1.67	0.03	1.41	0.06	1.65	0.05	1.77	0.07	2.03	0.11
Family structure										
Two biological parents	0.66	0.01	0.54	0.03	0.70	0.02	0.66	0.03	0.68	0.04
Biological mom, stepdad	0.07	0.01	0.09	0.02	0.06	0.01	0.07	0.02	0.06	0.02
Single mom	0.23	0.01	0.31	0.03	0.21	0.01	0.24	0.03	0.22	0.03
Other	0.04	0.00	0.06	0.01	0.03	0.01	0.03	0.01	0.04	0.02
Mother's age	35.70	0.20	34.49	0.48	37.98	0.28	31.78	0.31	34.00	0.57
Parental education										
Highest parental education										
Less than high school	0.51	0.01	0.13	0.02	0.55	0.02	0.70	0.03	0.67	0.04
High school	0.22	0.01	0.30	0.03	0.23	0.01	0.18	0.02	0.16	0.03
Some college or more	0.26	0.01	0.57	0.03	0.22	0.01	0.12	0.02	0.17	0.03
Immigration factors										
Mom in US at age 14	0.32	0.01	0.98	0.01	0.21	0.01	0.11	0.02	0.03	0.01
Mother's country of birth										
United States	0.18	0.01	1.00	.	0.00	.	0.00	.	0.00	.
Mexico	0.61	0.01	0.00	.	0.70	0.02	0.81	0.02	0.92	0.02
Other Latin America	0.20	0.01	0.00	.	0.30	0.02	0.19	0.02	0.08	0.02
Mother's years in the United States										
Less than five, or native	0.05	0.01	1.00	.	0.02	0.01	0.06	0.01	0.30	0.04
Five to nine	0.11	0.01	0.00	0.00	0.06	0.01	0.25	0.02	0.31	0.04
Ten to 19	0.36	0.01	0.00	0.00	0.41	0.02	0.60	0.03	0.34	0.04
20 or more	0.47	0.01	0.00	0.00	0.51	0.02	0.09	0.02	0.05	0.02
N	1556		287		799		303		166	

Note: Shaded numbers indicate mean is significantly different than the mean for children in native families.

Numbers in bold indicate mean is significantly different than the mean for children in mixed-status families.

Source: Author's analysis of L.A. FANS wave 1 data.