Doing Good in the Hood?
The Effects of Neighborhood Concentration on the Educational Attainment of Mexican, Filipino, and Vietnamese Immigrant Youth

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Abstract

A paradox in the immigration literature is that some immigrant youth outperform others even when they belong to underprivileged immigrant communities and attend disadvantageous schools. The neighborhood may an indicator in explaining the educational gap among immigrant children. Ethnographic studies suggest that coethnic neighborhoods may have a positive effect even if neighbors are of low SES. This relationship has not been examined quantitatively or comparatively with other neighborhoods. Using the Children of Immigrants Longitudinal Data in California, I examine the effect of living in a concentrated coethnic neighborhood on the educational attainment of second generation Mexican, Filipino, and Vietnamese youth. The results indicate that coethnic residence has a positive effect on educational attainment for Vietnamese immigrants but not among Mexican and Filipino immigrant youth.

On July 16, 2008, *Los Angeles Times'* published an article entitled, "Trying to bridge the grade divide: why do Asian students generally get higher marks than Latinos." The opening sentence of the article reads, "Eight students walked into a room at Lincoln High School prepared to discuss an issue many people, including some of their teachers, considered taboo."[1] Many voice their discomfort with broad racial generalizations but large educational disparities among Latinos and Asians persist and are of great concern among social science research. This paper explores these disparities by examining the effect of living in a concentrated coethnic neighborhood on the educational attainment of second generation Mexican, Vietnamese, and Filipino youth.

These disparities are even more paradoxical because even family and school factors do not explain the different educational trajectories of Latino and Asian immigrant youth (Fuligni and Witkow 2004; Hao and Bonstead-Bruns 1998; Portes and MacLeod 1996; and Portes and Rumbaut 2001). Kao and Tienda (1995:16) found that family background, such as immigrant parents, is positively associated with educational attainment. Portes and Hao (2004:11924) found that school context, such as school SES, positively affects educational attainment. Similarly, Portes and Rumbaut (2001) and Rumbaut and Portes (2001) found that postmigration contextual factors affect educational attainment (Feliciano 2006:281). Still, none of these factors fully account for ethnic differences. I expand these works to examine the effect of neighborhood concentration on educational attainment. Specifically, I assess (1) whether neighborhood concentration

[1] http://articles.latimes.com/2008/jul/16/local/me-lincoln16

affects the likelihood of educational attainment and (2) do Mexican, Vietnamese, and Filipino children of immigrants experience similar effects on educational attainment by living among coethnics.

Paradox of Disparities in Educational Attainment

Pong and Hao (2007) state that "one of the most puzzling findings in the immigration literature" (207) is that some groups of immigrant youth outperform others even when they belong to underprivileged immigrant communities and attend disadvantageous schools. Thus, socioeconomic factors alone do not account for the academic success of some immigrant youth relative to others of similar socioeconomic backgrounds.

Many contemporary Asian and Latino immigrants, such as Mexicans, Chinese, and Vietnamese, arrive in the U.S. with low SES (Feliciano 2005:852). A majority of Latino groups and some Asian groups are among the poorest of immigrants in the U.S. Using 1990 Census data, Portes and Rumbaut (2001:50) find that Laotians (40.3%) and Cambodians (38.4%) had the highest poverty rates out of sixteen of the largest immigrant groups of the last two decades. Mexicans had the third highest (29.7%) followed by Vietnamese (25.5%). Differences in human capital among first generation immigrant groups have been used to explain ethnic disparities in educational attainment (Portes and MacLeod 1996:270), but educational trends of the second generation do not perfectly reflect aggregate group SES. Thus, group SES differences alone cannot explain the stark divide in educational attainment between Latinos and Asians.

Neighborhood Effects: Coethnic Neighbors

One thing that affects the educational attainment of youth is where they live (Duncan 1994; Dornbusch et al. 1991; Halpern-Felsher et al. 1997; Levanthal and Brooks-Gunn 2003; South et al. 2003; Vartanian and Gleason 1999; Zhou and Bankston 1998). For native born African American youth, the percent of coethnics living in a neighborhood negatively affects educational attainment (Duncan 1994:48; Halpern-Felsher et al. 1997:164). Duncan (1994:48) found that living in a neighborhood with a greater concentration of Blacks negatively affected Blacks' educational attainment. Living in heavily minority or African American neighborhoods weakens the correlation between family characteristics and educational achievement (Dornbusch et al. 1991:563). Ethnically diverse neighborhoods (with a presence of Latino and foreign-born individuals), however, were positively associated with African American males' completed schooling (Halpern-Felsher et al. 1997:164; Levanthal and Brooks-Gunn 2003:318). Thus, for native born Blacks, heavily African American neighborhoods are negatively associated with the educational attainment.

For second generation immigrants, living among coethnic neighbors may negatively or positively affect second generation education. Portes and Zhou (1993) argue that educational disparities among immigrants reflect the social contexts they are embedded in, such as neighborhoods (Pong and Hao 2007:206). A crucial social context is the coethnic community or the "immigrant community's own compatriots" (Portes and Rumbaut 2001:48; Portes and Zhou 1993:83). European studies find that living among coethnic neighbors may negatively impact second generation educational attainment. Gr□nqvist (2006:377) finds that second generation living in a neighborhood with more coethnic members are less likely to graduate high school and college. Similarly, Bygren

and Szulkin (2010) find that, living among a large number of coethnics that are poorly educated will negatively affect the second generation's years of education.

On the other hand, living among coethnic neighbors may positively affect educational attainment. Living among coethnic members other than their parents can provide second-generation youth additional educational resources beyond those available through official assistance programs (Portes and Zhou 1993:86). It can also shape educational attainment by forming high group expectations for the second generation and fostering these expectations through community activities and values (Feliciano 2006:295). Portes and MacLeod (1996:255) argues that one instance of this can occur through immigrant parents relying on "coethnics to reinforce normative expectations vis-à-vis their offspring to supervise their behavior." Children members may also develop collective identities that in turn, shape educational outcomes (Ogbu 1991, 2003). These collective identities and experiences of the racial/ethnic group may be more influential than individual class backgrounds (Feliciano 2006:285). Last, Portes and Rumbaut (2001:108) suggest that the extent of conational support and the level of mutual assistance by conational neighbors influence the adaptation of immigrant youth. Therefore, living among coethnics may explain why some low SES immigrant groups are succeeding academically and others are not (Pong and Hao 2007:207).

Zhou and Bankston's (1998) qualitative study of the Vietnamese in Versailles Village illustrates how low human capital but a tightly knit community can materialize into academic achievement among children. Versailles Village was a deteriorating working-class suburb and most Vietnamese refugees who resettled there were from villages so they were low-skilled, of low SES status, and half of the families were living

below the poverty line. Despite these conditions, the children excelled academically, not because of human or financial capital but because the strong coethnic community they established. Their mode of incorporation as refugees and an intact coethnic community trumped low family SES in shaping the educational attainment of immigrant children. Above and beyond the effect of socioeconomic characteristics, belonging to a coethnic community is beneficial to an immigrant youth's educational attainment.

Some studies have tried to measure the effect of coethnic neighbors as an effect of compatriots helping each other out or providing opportunities. Kroneberg (2008:145) examines the role of community-level variables on the school performance of second generation immigrant youth using two variables: the extent of help received from conationals in the U.S. and the extent to which parents socialize with conationals. However, when specific measures suggested by Portes and Rumbaut (2001) and Zhou and Bankston (1998) are operationalized quantitatively, findings show mixed support. Kroneberg (2008:153) finds that students with parents who socialize with other coethnics have greater school performance but this is only true when the percentage of coethnics is low. This contradicts Zhou and Bankston's (1998) argument that a higher percentage of coethnics is supportive of the academic performance of second generation youth. In addition, Kroneberg (2008:153) finds no relationship between academic performance and help received from conationals.

Thus, immigrant youths' ethnic communities may help account for educational disparities. However, it is unclear whether the effect of immigrant residents is positive as Zhou and Bankston's (1998) study suggests, or negative as stated by European studies (Bygren and Szulkin 2010; Gr□nqvist 2006) and previous findings (Duncan 1994;

Halpern-Felsher et al. 1997) on the native born. Bygren and Szulkin (2010) find that the effect of ethnic neighborhoods is influenced by the educational level of coethnics living in the neighborhood. That is, a high proportion of coethnics with low levels of education will negatively affect second generation education and a high proportion of coethnic with high levels of education will positively shape the second generation's years of education. Ethnographic studies (Gibson 1988; Gibson and Bhachu 1988; Zhou and Bankston 1998) suggest that living among coethnics may positively influence second generation education even when the neighborhood is of low SES. However, this relationship has not been examined quantitatively or comparatively with other ethnic neighborhoods.

Of course neighborhood composition is not the only influence on educational attainment. The effect of neighborhood composition on educational attainment must be examined net of control variables on four levels—1) neighborhood (neighborhood SES), 2) school (2.a) school safety, 2.b) student ethnic composition), 3) family (3.a) parental SES 3.b) parental college expectations, 3.c) two parent household, and 4) individual (4.a) sex 4.b) nativity 4.c) college aspirations 4.d) standardized math test scores.

Neighborhood SES

Brooks-Gunn, Duncan Klebanov and Sealand (1993); Crane (1991); and South et al. (2003) examined neighborhood SES to explain educational attainment (Vartanian and Gleason 1999:22; review in Leventhal and Brooks-Gunn 2000:313). Neighborhood SES has a positive effect on measures of educational attainment such as high school graduation (Brooks-Gunn, Duncan Klebanov and Sealand 1993:370; Crane 1991:1236), college matriculation, and years of schooling completed (Vartanian and Gleason 1999:34;

see review in Levanthal and Brooks-Gunn 2003:317) but it alone does not explain the academic success of some low SES immigrant children (Pong and Hao 2007:207). Pong and Hao (2007:234) found that neighborhood SES was positively associated with the academic performance of immigrant children but not for native born children.

School Context

School context also affects educational attainment. Portes and Hao (2004); Portes and MacLeod (1996); Rumberger and Thomas (2000); and Thornton and Eckland (1980) used school SES or a school's ethnic composition as indicators for school context. While school SES has been widely used to explain educational attainment (Portes and Hao 2004; Portes and MacLeod; Rumberger and Thomas 2000; and Thornton and Eckland 1980), it is not a good predictor when controlled with family SES because the two variables tend to reinforce each other's effects (Portes and Hao 2004:11921). Thus, a school's ethnic composition is a better predictor than school SES in explaining immigrant children's educational attainment. Portes and Hao (2004:11921) argue that coethnic schools may help explain national origin disparities in educational attainment.

Portes and Hao (2004:11921) found that the proportion of coethnic students on educational success is negative for Asian students but positive for Mexican students. Net of family SES, Asian students had consistently high grades and Mexican students had consistently low grades. The positive and negative ethnic effects for Asians and Mexicans respectively are attenuated by more coethnic peers in the school, suggesting that ethnic disparities in educational attainment reflect the coethnic community immigrant children belong to (Portes and Hao 2004:11924-11925). While Portes and Hao

(2004) examined GPA, these findings imply that the advantages or disadvantages immigrant youth obtain from their ethnic communities influence educational attainment.

School SES has no effect on educational attainment for students from advantaged coethnic communities. These resilient effects cannot be explained by first generation human capital because the relative advantage or disadvantage of particular immigrant groups remains even after controlling for parental SES or family background (Portes and MacLeod 1996:270). Thus, school context offers a small explanation but the immigrant communities that students belong to largely influence their educational attainment.

School SES has been widely used to explain educational attainment (Rumberger and Thomas 2000; Thornton and Eckland 1980) but this variable is not a good predictor because first, it tends to capture the same effect as family background. Second, certain immigrant groups have persistently high grades even after controlling for school SES (Portes and MacLeod 1996:270). Therefore, a school's ethnic composition is a better predictor (Portes and Hao 2004). A higher proportion of coethnic students is positively associated with immigrant youth's educational success (Portes and Hao 2004:11924).

Family Background

Parental Socioeconomic Status

Parental education and family income are probably the best predictors of educational attainment (Portes and MacLeod 1996:256) and account for a substantial proportion of educational variation among youth (Duncan 1994; review in Kao and Thompson 2003:431). This relationship is already well documented, in which increasing parental SES and family income, usually combined together in a composite variable/index

(Morales and Saenz 2007:356; Vartanian et al. 2007:171), positively affect educational outcomes (Mare 1980; Portes and MacLeod 1996; review in Kao and Thompson 2003).

Increases in father's occupation, family income, and mother's and father's years of schooling are positively associated with college attendance (Mare 1980:300-301; Duncan 1994:36). The relationship between parental SES and educational outcomes is well-documented (Blau and Duncan 1967; Duncan 1994; Fligstein and Fernandez 1985; Lutz 2007; Mare 1980; Portes and MacLeod 1996) and treated as a given (review in Kao and Thompson 2003:432).

The extent that parental SES and family background affect educational outcomes differs by ethnic group. Portes and Macleod (1996:262) found that net of parental SES, Mexican Americans' educational performance was lower than the average of the entire sample, but Vietnamese American students demonstrated superior academic performance. Vartanian et al. (2007:185) found that among low SES families, Asian American students were three times more likely to complete college than non-Asians.

Thus, individual-level factors such as parental or family SES do not fully account for educational attainment differences across ethnic groups (Feliciano 2006:282). Rumbaut and Portes (2001:xvii) found that even after controlling for virtually every individual-level factor, persistent national origin differences in adaptation outcomes, such as educational attainment, remained. National origin differences reflect the modes of incorporation immigrants were received in, like the coethnic community, and the influence is stronger for some groups than others (Portes and Rumbaut 2001:251).

Vartanian et al. (2007:188) suggests focusing on neighborhood contextual variables to explain ethnic disparities in educational outcomes. A resourceful immigrant

community can negate the detrimental effects of a disadvantaged family background (Feliciano 2006; Portes and MacLeod 1996; Zhou and Bankston 1998). For instance, Portes and MacLeod (1996:262) argue that Vietnamese American students derive an ethnic advantage from membership in their community that is unrelated to the community's socioeconomic background.

Parental Expectations

Higher parental expectations lead to higher educational attainment among minority youth (Goyette & Xie 1999:33; Kao 1995:132; Vartanian et al. 2007:168). Asian students' exceptional academic attainment is largely attributed to their parents' high educational expectations (Goyette & Xie 1999:33; Kao 1995:132; Vartanian et al. 2007:168). Although Asian parents tended to have higher educational expectations, parental expectations had a slightly higher effect for non-Asians (Vartanian et al. 2007:185). This suggests that parental expectations may not translate into high attainment to the same extent for all minority youth.

Two Parent Household

Growing up in a two-parent household is positively associated with educational attainment (Blair and Qian 1998:371; Hirschman 2001:328); it prevents high school attrition among second-generation youth (Portes and Hao 2004:11921; Portes and Rumbaut 2001:255) and increases the likelihood of completing college (Vartanian et al. 2007:168). One explanation is that children growing up in such households have greater economic resources, adult attention, and guidance (Portes and Rumbaut 2001:64).

Parental education or family income are positively associated with and perhaps the best predictors of educational attainment. Higher parental expectations (Goyette & Xie 1999:33; Kao 1995:132; Vartanian et al. 2007:168) and living in a two parent household (Portes and Hao 2004; Portes and Rumbaut 2001) are positive predictors of educational attainment among minority and immigrant youth respectively. Despite a positive association between family background and educational attainment, persisting educational disparities among immigrant youth requires looking beyond the family.

Educational Performance/ Individual Achievement

Educational performance is a crucial indicator for subsequent educational attainment (review in Kao and Thompson 2003:425). Indicators of academic performance include achievement test scores (Goyette and Xie 1999:24) and educational aspirations (review in Kao and Thompson 2003:420-422).

Test Scores

Standardized test scores assess individual achievement (Roscigno 2000:273) and are implemented in all educational levels from elementary school to college entrance (Morales and Saenz 2007:349). Academic test scores have a positive and significant effect on high school retention (White and Glick 2000:681) and college completion (Vartanian et al. 2007:187).

Educational Aspirations

Educational aspirations capture educational goals or future ambitions (Feliciano 2006:285). Educational aspirations have been interpreted as an indicator of one's

eventual educational and occupational attainment (review in Kao and Thompson 2003:422). Higher educational aspirations are positively and significantly related to the probability of obtaining a high school diploma and attending college (South et al. 2003:29-30).

High aspirations do not always translate into high attainment though (Kao and Tienda 1998:363; Schneider and Stevenson 1999). Asian, Black, and Hispanic youth uniformly express high educational aspirations (Kao and Tienda 1998:363), but ethnic differences in educational attainment persist (Zhou and Kim 2006:3). This suggests that educational aspirations serve different functions for different ethnic groups and some groups may not be able to convert their high aspirations into actual high attainment to the extent that others can (Entwistle and Hayduk 1978; Feliciano 2006:285; Kao and Tienda 1998:363; Kao and Thompson 2003:422-423; Schneider and Stevenson 1999). Educational performance, such as standardized test scores and educational aspirations, is positively associated with one's higher education (Vartanian et al 2007:187; White and Glick 2000:681).

Individual Variables

Gender

The effects of gender on educational attainment have been more ambiguous. Since the mid-1960s, U.S. high school graduation rates are virtually equal for men and women aged 25 to 29 (King 2000:3). However, Mickelson (1989:47) argues that recently, women surpassed men in high school and baccalaureate degrees in the U.S.

Findings on immigrant children have also documented the academic success of females over males (Feliciano and Rumbaut 2005:1098). Lopez (2003); Valenzuela (1999); Zhou and Bankston (1998) have attributed the greater academic achievement among females to the gendered treatment of second generation adolescent boys and girls.

Nativity

A child's generational status also affects academic success. Foreign born youth are slightly disadvantaged because of their limited English skills but second generation youth (U.S. born children of foreign-born parents) are in an optimal position to succeed academically (Kao and Tienda 1995:1).

Individual characteristics, like gender and nativity, affect educational attainment. Being female (Feliciano and Rumbaut 2003:1098; Lopez 2003; Valenzuela 1999; Zhou and Bankston 1998) and being U.S. born (rather than foreign-born) of immigrant parents are both positively associated with educational attainment (Kao and Tienda 1995:1).

Hypotheses:

Neighborhood:

1) Immigrant children living among a higher proportion of coethnics will have a higher educational attainment.
2) Immigrant children living in a higher SES neighborhood will have higher educational attainment.

School:

1) Immigrant children perceive their school to be safer will have a higher educational attainment.
2) Immigrant children attending a school with a greater proportion of coethnics will have a higher educational attainment.

Parental:

1) Immigrant children with parents with a higher SES will have a higher educational attainment.
2) Immigrant children with parents who have college expectations will have a higher educational attainment.
3) Immigrant children who live with two biological parents and have parents with college expectations will have a higher educational attainment.

Individual:

1) Immigrant children who are female, foreign born, have college aspirations, and have higher standardized math test scores will have a higher educational attainment.

METHODOLOGY

CILS Sample in Southern California

The data analyzed in this paper is retrieved from the California portion of the Children of Immigrants Longitudinal Study (hereafter CILS), a decade-long longitudinal study on the children of Immigrants in San Diego and Miami. The design of this study necessarily

calls for a nonrandom sample in which respondents are clustered by schools.[2] In the first wave of this study (1991), students between the ages of 14-15, attending 8th or 9th grade were surveyed and interviewed from 17 different schools in the San Diego County. Students were re-interviewed in 1994 when they were approximately 17 or 18 years old. 1990 Census tract-level data was collected on the social and economic characteristics of the San Diego neighborhoods where these respondents grew up. In the last wave of this study (2001-2003), respondents were approximately age 24 to 25 (Feliciano and Rumbaut 2005;Rumbaut 2005). This study focuses on a sample of 1,146 Mexican, Filipino, and Vietnamese children that have at least one parent born abroad. Respondents were included in the sample based on their mother's country of birth. Thus, in this study, children born abroad are considered first generation and those born in the US are considered second generation[3].

Although the third wave of data collection had a retrieval rate of approximately 73 percent of the original sample, sample attrition remains a concern (Feliciano and Rumbaut 2005;Rumbaut 2005). Multiple imputation was performed on all independent variables with missing cases but missing data on the dependent variable could not be imputed.[4] Female respondents who belonged to two-parent families, had higher academic

[2] To account for a nonrandom sample collection, I adjust for standard errors by using robust clustering in my logistic regression models.

[3] I acknowledge that the "second generation" is an ambiguous term that has been defined differently. I adopt Portes and Rumbaut's (2001:23-24) definition of the second generation which refers to US born children with at least on immigrant parent.

[4] I used Full Bayesian Multiple Imputation by Rubin (1987) to impute missing cases on independent variables: school safety, parent's college expectations, parent's SES, neighborhood ethnic composition, individual GPA, and college aspirations and expectations. The first three variables had the largest number of missing cases. In total, 471 missing cases were imputed, changing the total sample size from 675 (Mexican=219;

grade point averages in junior high school, had better English speaking skills, and were previously interviewed in the second wave of the study were more likely to be located and re-interviewed in the final wave of this study (Feliciano and Rumbaut 2005).

Immigrant Communities: Mexican, Filipinos, and Vietnamese in San Diego

The selection of immigrant neighborhoods examined was based on several considerations. First, Mexican, Filipino, and Vietnamese immigrants offer an interesting comparison as they differ in migration histories, average selectivity, and classifications by the U.S. government. Second, there is enough available information about Mexican, Filipinos, and Vietnamese reception in San Diego to "formulate predictions about second generation adaptation" (Portes and MacLeod 1996:259). Third, prior findings indicate that Mexican and Vietnamese nationalities are amongst the groups with the strongest and most resilient effect on academic performance (Portes and Hao 2004:11922). Fourth, being Mexican, Filipino, and Vietnamese have opposite effects on educational attainment where Filipinos and Vietnamese have positive effects while Mexicans have a negative effect. Last, Mexican, Filipinos, and Vietnamese offer a substantial sample for analysis (N=1,146).

Mexican, Filipinos, and Vietnamese are a good comparison because of their different migration selectivity, levels of human capital, and government classification. Using Feliciano's (2005:841) definition, selectivity describes how immigrants differ from non-migrants living in the home country on various indicators including education, SES, etc. As a group, Mexican immigrants are the least selective of the three groups and

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Vietnamese=151; Filipinos=305) to 1146 (Mexican=385; Vietnamese=190; Filipinos=571).

Feliciano (2005:853) found that they had the third lowest socioeconomic status out of a sample of immigrants from 32 different countries. Mexicans have a low average selectivity and a low average socioeconomic status. Thus, they come from countries with low levels of education and are not very highly selective (Feliciano 2005:853). In the U.S., a large proportion of this group works as unskilled/semi-skilled laborers. Their classification by the U.S. government includes unauthorized legal status, legally temporary, and legally permanent (Portes and Rumbaut 2006:21).

Filipino immigrants are the most highly selective of the three. As a group, they are highly selective and also have a high average socioeconomic status. Filipinos are much more highly educated than their coethnics that did not migrate from the origin country and also have high education, occupation statuses or income by American standards (Feliciano 2005:852). Typically, they enter the U.S. legally, whether temporary or permanent. The majority of this group work as skilled workers and professionals, such as physicians, engineers, and nurses (Portes and Rumbaut 2006:20).

Vietnamese immigrants have a high average selectivity but a low average socioeconomic status (Feliciano 2005:852). Thus, they are highly educated relative to non-migrants back home but have low levels of education, occupational statuses or income by American standards (Feliciano 2005:853). Their occupations in the U.S. range from unskilled/semi-skilled laborers to entrepreneurs of legal firms in ethnic enclaves and the general market. Typically, they are classified as refugees or asylees by the U.S. government (Portes and Rumbaut 2006:20).

The selection of Mexicans, Filipinos, and Vietnamese allows me to address why the relationship between coethnic residential concentration and educational attainment

varies by ethnic group? Specifically, why living among coethnics is positively associated with educational attainment for some groups but negatively associated for others? How do factors like group membership and residential concentration affect educational attainment, above and beyond the effect of parental SES?

VARIABLES AND MEASURES

Dependent variable

Educational Attainment

Educational attainment measures the highest level of education obtained by an individual or the completion of a certain educational level (Mare 1980; Duncan 1994; Warren 1996). Educational attainment has been examined in various ways, including a continuous variable or the number of years of schooling an individual completed (Duncan 1994; Warren 1996). Others (Alexander and Eckland 1975:466, 470; Fligstein and Fernandez 1985:324; Gottfredson 1981:555; Rong and Grant 1992:629; Sewell, Haller & Ohlendorf 1970:1017; Sewell & Shah 1967:8) examined educational categories; this can range from "some high school" to "Ph.D." (Alexander and Eckland 1975:466) or observe a particular educational outcome, such as high school attrition (McNall, Dunnigan and Martimer 1994:53) or graduating high school (Astone and McLanahan 1991:312-313).

Measuring educational attainment continuously, such as "years of school completed" may not be well suited for certain immigrant populations as the transferability of educational credentials from foreign institutions to the U.S. educational system is not well understood (Warren 1996:146). For instance, the number of years to complete a bachelor's or graduate degree is not standardized across countries. Thus,

measuring an individual's total years of schooling completed may be misleading if the years of schooling in a foreign institution are understood using the American educational system.

A second limitation with this operationalization is that it can confound the effects of the independent variables. For instance, measuring an individual's years of schooling may confound the effects on making a specific transition, say from 12 to 13 years of schooling (transition from high school to college) with other schooling transitions (i.e. transition from elementary school to junior high) (Mare 1980:295). Instead, Warren (1996:146) examined year-to-year transitions from 9th grade to 12th grade to analyze whether a person at each particular school level continues to the next level. Warren (1996:146) observed the odds of completing year X of high school, among those old enough to have completed year X of high school. This focuses on achieving specific year-to-year educational transitions rather than absolute number of years completed.

Alexander and Eckland (1975:466, 470); Fligstein and Fernandez (1985:324); Gottfredson (1981:555); Rong and Grant (1992:629); Sewell, Haller & Ohlendorf (1970:1017); and Sewell & Shah (1967:8) measured educational attainment categorically. Categories may be substantively meaningful, ranging from "some high school" to "Ph.D." (Alexander and Eckland 1975: 466) or observe a few categories, such as "no college" to "college graduate" (Sewell and Shah 1967:8). One disadvantage of this operationalization is that it may confound effects or overlook other considerable educational distinctions, particularly if educational categories are broad.

In this study, one's highest level of educational attainment is measured in the third wave, as an ordinal variable with three categories: less than high school, high school graduate, and college graduate or higher.[5] [6]

Key Independent Variable

Ethnic Residential Concentration

The key independent variable is residential concentration in an ethnic neighborhood. This paper regards each Census tract as a neighborhood, with a total of 115 neighborhoods. Using the 1990 U.S. Census variables at the neighborhood tract level, the percent same national origin per tract, I constructed residential concentration categorically. The categories for all three groups vary because of the varying range of coethnics living in a neighborhood. For instance, the concentration of Mexican coethnics living in a neighborhood range from 1 percent to 90 percent. Therefore, I constructed Mexican neighborhoods in 3 categories: high (21-90%), medium, (6-20%), and low (1-5%). Filipino and Vietnamese neighborhoods were constructed using the same method. Filipino neighborhoods are organized in 3 categories: medium (23-75%), some (13-22%), and low (0-12%). Vietnamese neighborhoods are comprised of 3 categories: medium (8-15%), low (1-7%), and none (0). I expect that neighborhood effects differ across the

[5] Educational attainment in the third wave suffered from the sample attrition problem mentioned in the text, greatly reducing the sample size. However, final educational attainment wasn't imputed at all because imputing missing data on the dependent variable only inflates the sample size by creating more cases that have the same relationships as the cases with complete data. Rather, I imputed predictor variables with missing data. Thus, educational attainment in wave 3 was predicted using the independent variables with imputed data from waves 1 and 2.

[6] Due to data limitations of the survey, highest degree completed was used to measure educational attainment instead of years of schooling.

three groups so it is applicable that the three groups have different neighborhood concentration thresholds as well.[7]

Neighborhood SES

Neighborhood SES is operationalized using two 1990 U.S. Census variable at the neighborhood tract level, homeownership and income. The two variables were standardized, summed together, and then averaged. Neighborhood SES ranges from 0 to 1 where a value of 1 represents a neighborhood with the highest SES.

School Variables

An index for school safety is used as a control for school context. Following the criterion adopted by Portes and Rumbaut (2001) I use a school safety index, a 4-point standardized scale that is comprised of 4 variables[8]: "I don't feel safe at this school"; "There are many gangs in school"; "Fights occur between different racial or ethnic groups"; and "Disruptions by other students get in the way of my learning." I reversed the order of this variable so the higher the score, the safer the school. This variable is important because Portes and Rumbaut (2001:203) found that after Laotian and Cambodian students, Vietnamese students were the most likely to report unsafe school conditions in the San Diego area.

Family Background

[7] In separate analyses, I tried operationalizing neighborhood concentration in different ways but inconclusive results lead me to choose the current operationalization.

[8] A factor analysis indicated that the four variables load highly onto each other, accounting for 96 percent of the variance.

Following the criterion used by Portes and Rumbaut (2001), parental SES is a standardized unit weighted sum comprised of father and mother's education, occupational status and home ownership in 1992. This variable ranges from -2.00 to +2.00 and is statistically well-behaved as it proves to be more reliable than when measured independently (Portes and Rumbaut 2001:138). Living with natural parents is a dichotomous variable measuring whether individuals lived with both biological parents. The reference group represents any other living arrangement where respondents did not live with his/her two biological parents. Parental expectations are also powerful in shaping the educational expectations and trajectories of children (Feliciano 2005). I include a dichotomous variable for parental college expectations, with the reference group being parents who expect their child to obtain less than a college degree.

Individual Variables

Individual demographic controls such as sex, age, and generational status were added to the model. Sex is an important control as Feliciano and Rumbaut (2005) found that among immigrant groups, educational trajectories are often gendered where females are tend to be more scholastically successful than their male counterparts. Generational status is a dichotomous variable that examines the effect of individuals who are foreign born or U.S. natives.

Individual Achievement/ Aspirations Variables

Achievement indicators include a respondent's percentile on 1991 Stanford Achievement Tests (standardized math tests).[9] Educational aspiration is a dichotomous variable for those who aspired to a college degree or more during the first wave of the study. The reference category corresponds to respondents who aspired to less than a college degree.

RESULTS

Table 1 presents the bivariate statistics for Mexicans, Filipinos, and Vietnamese, based on the complete imputed data set. There is a clear gap in educational mobility with an overwhelming majority of the Mexican sample (82 percent) obtaining a high school degree as their terminal degree, compared with 71 percent of Filipinos and 54 percent of the Vietnamese. Educational disparities are even starker when comparing college degrees—approximately 27 percent of Filipino students and 42 percent of Vietnamese students are college graduates compared with 9 percent of Mexicans. The low levels of attainment by Mexican students is unsurprising given their lower standardized math test scores (10.13% in the top quartile) compared with Filipinos (37.48%) and Vietnamese (41.58%) students. However, the lower levels of college graduation by Filipinos is surprising given that they have the same average standardized math test scores as Vietnamese students.

Interestingly, aspirations for obtaining at least a college degree are uniformly high for Mexicans (78 percent), Filipinos (96 percent), and Vietnamese (95 percent). Filipinos tend to have overly optimistic educational aspirations given their actual educational attainment and tend to be more optimistic than their parents. Approximately 91 percent of

[9] I also tried adding standardized English test scores to the model but the two are highly correlated.

Filipino parents expect their child to obtain at least a college degree compared with 96 percent of Filipino students. Similarly, Mexican students tend to be more optimistic than their parents with only 54 percent of Mexican parents expecting a college degree from their child compared with 77 percent of Mexican students. Vietnamese students seem to be more optimistic about their own educational aspirations than their parents. Approximately 88 percent of Vietnamese parents expect their child to obtain at least a college degree compared with 95 percent of Vietnamese students.

There are also noteworthy differences in neighborhood composition among the three populations. Mexicans and Filipinos tend to live in neighborhoods with a much higher proportion of coethnics than the Vietnamese. Mexican youth live in neighborhoods that range from 1 percent coethnic to a high of 90 percent. Filipino neighborhoods range from less than 1 percent coethnic to a high of 75% coethnic. The range of coethnic concentration is drastically lower for the Vietnamese, ranging from less than 1 percent to a high of 15 percent. Filipinos live in neighborhoods with the highest SES, followed by Vietnamese and Mexican immigrant youth.

INSERT TABLE 1 ABOUT HERE

Table 2 presents the correlations between educational attainment and conational support variables for Mexican, Filipino, and Vietnamese parents. The correlations are uniformly low across all three groups and approximately half of the variables show a negative correlation with educational attainment. The correlations range from -.19 to 0.14. These findings show that the level of conational support that parents have has little correlation with the educational attainment of their children.

INSERT TABLE 2 ABOUT HERE

Ordinal Logistic Regressions

How does living among coethnics vary for Mexicans, Filipinos, and Vietnamese?

Mexican neighborhoods

Ordinal logistic regression requires that the proportional odds assumption or the assumption of parallel lines to hold for the technique to be valid. I tested the proportional odds assumptions that the effects of the independent variables were constant across the levels, for all three models (Mexicans, Filipinos, and Vietnamese). The assumption of parallel lines (i.e., that the proportional odds did not significantly vary across categories) was met for all three models.

Table 3 presents the odds ratios of obtaining less than a high school degree, a high school degree, or graduating from college among Mexican children of immigrants estimated by ordinal logistic regression. The odds ratios give the odds that are associated with a unit change in the independent variable of being in a lower outcome category of the dependent variable compared to a higher outcome category. In the first column of Table 3, Model 1 presents the bivariate relationship between the percent of Mexicans in a neighborhood and educational attainment. An odds ratio of .14 shows that living in a highly concentrated (20-90%) Mexican neighborhood significantly (p-value=.006) decreases the odds of obtaining higher educational attainment. Mexican students living in neighborhoods that are 20-90% coethnic decrease the odds of obtaining higher educational attainment by 86% (1-.14=86*100). Model 2 adds neighborhood SES, school safety, parental college expectations, sex, nativity, and individual college aspirations to

the equation. Net of these other variables, living in a neighborhood with a high concentration (20-90%) of Mexicans decreases the odds of educational attainment by 82 percent (1-.18=82*100). The addition of these variables decreases somewhat the negative effect of living in a highly concentrated Mexican neighborhood on educational attainment in Model 1, and this effect becomes only borderline significant, with a p-value of .046. Two of these variables in Model 2 are statistically significant. Students with parents who expect them to obtain at least a college degree increase their odds of obtaining the next level of education by 2.7 times more than students who do not have parents with such expectations (p-value=.006). Mexican students who have college aspirations increase their odds of higher educational attainment by nearly 4 times (p-value=.000).

In Model 3, I add the two variables, parental SES and the respondent's math test scores, that take up the negative effect of the neighborhood on educational attainment. Once these variables are included in the equation, the effect of neighborhood on educational attainment becomes statistically insignificant. Students with parents who belong to a higher SES background nearly double their odds of higher educational attainment. Net of controls, students with parents who have college expectations increased their odds of educational attainment by 2.2 times. Students with higher standardized math test scores increase their odds of educational attainment by 1.7 times, net of controls.

INSERT TABLE 3 ABOUT HERE

Filipino neighborhoods

Table 4 presents the odds ratios for an ordered logit model of educational attainment among Filipino children of immigrants. The first column of Table 4, Model 1, shows the bivariate relationship between percent Filipinos living in a neighborhood and educational attainment. Model 1 shows a positive and significant (p-value=.006) relationship between living in a neighborhood with a medium concentration (23-75%) of Filipino coethnics and obtaining higher levels of educational attainment. Living in a neighborhood that is 23-75% Filipino increases one's odds of educational attainment by 1.49 times.

In Model 2, I add the following variables to the equation: school safety, parental college expectations, and individual level variables (gender, nativity, and college aspirations). Model 2 shows that net of controls, living in a medium concentrated Filipino neighborhood still has a positive and significant (p-value= .015) relationship with obtaining a higher education. Net of these variables, Filipino immigrant youth living with a medium concentration of coethnic neighbors increases their odds of educational attainment by 1.46 times more than students who do not live in such neighborhoods. Filipino students attending safer schools increase their odds of obtaining the next level of education by more than 1.59 times, net of school safety, parental college expectations, and individual level variables (female, foreign-born, and college aspirations) (p-value=.000). Being female rather than male increases the odds of obtaining higher education by 2.1 times (p-value= .000).

In Model 3, I include the three variables, parental SES, neighborhood SES, and standardized math test scores, that take up the positive neighborhood effect on educational attainment. Once these variables are included in the equation, the percent of Filipino residents in the neighborhood is no longer statistically significant. Filipino

immigrant children living in higher SES neighborhoods, in comparison to those living in lower SES neighborhoods, increase their odds of educational attainment by 4.32 times more than Filipino students (p=.01). Filipino students with higher SES parents increase their odds of educational attainment by more than 2 times. This finding is significant at the .001 level (p-value=.000). Last, net of the variables, Filipino students with higher standardized math test scores increase their odds of obtaining a higher level of educational attainment by 2.37 times more than those with lower standardized math test scores (p-value=.000).

INSERT TABLE 4 ABOUT HERE

Vietnamese Neighborhoods

Table 5 presents the ordinal logistic regression results predicting educational attainment among Vietnamese children of immigrants. The first column of Table 5, Model 1 presents the bivariate relationship between the percent Vietnamese living in a neighborhood and educational attainment, showing no significant effect of the percentage of coethnic neighbors on the educational attainment of Vietnamese immigrant youth. In Model 2, I add neighborhood SES, parental characteristics (parental SES and parental college expectations), and individual characteristics (nativity, college aspirations, and standardized math test scores) to the equation. Net of controls, the relationship between Vietnamese neighborhood concentration and educational attainment is still statistically insignificant. However, two variables in Model 2 are statistically significant: college aspirations and standardized math test scores. Vietnamese immigrant children who aspire to college increase their odds of educational attainment by 7.23 times more than students

who do not have college aspirations (p-value=.000). Similarly, students with higher standardized math tests increase their odds of educational attainment by 1.85 times (p-value=.001).

In Model 3, I add two additional variables to the equation, school safety and gender, that increase the effect of the neighborhood on educational attainment. These variables increase the p-value of living in a medium concentrated (8-15%) Vietnamese neighborhood to statistical significance at the .05 level (p=.035). Model 3 shows that living in a neighborhood with 8-15% Vietnamese neighbors increases one's odds of higher educational attainment by 1.6 times more than youth who did not live in these neighborhoods. Net of the other variables, living in a low concentrated (1-7% Vietnamese) neighborhood is borderline significant (p-value=.083). For Vietnamese students, attending a safer school increases a student's odds of educational attainment by 1.7 times (p-value=.023). Female students increase their odds of educational attainment by 2.9 times more than their male counterparts, net of controls (p-value=.005).

One aim of the paper is to describe what predictors explain away the positive effect of the coethnic effect on educational attainment. While similar predictors (parental SES and math scores) account for the positive association between education and % coethnic for Mexican and Filipino immigrant children, this is not true for Vietnamese immigrant children. Rather, for Vietnamese immigrant children, school safety and female explains away the positive association between education and % coethnic. Thus, the modeling sequence for the Vietnamese case is presented differently to illustrate the decreasing effect of coethnic neighbors with the inclusion of school safety and female.

INSERT TABLE 5 ABOUT HERE

DISCUSSION

A puzzling finding among second generation youth is that some immigrant youth outperform others even when they are of disadvantaged backgrounds (Pong and Hao 2007). I examine neighborhood coethnic concentration as an explanation, net of other controls. This paper finds that for Mexican and Filipino immigrant children, coethnic neighborhood concentration is not a strong predictor of educational attainment. There is some evidence that living in a coethnic neighborhood increases the educational attainment for Vietnamese immigrant children though.

The bivariate regression results suggest that living among coethnics has different effects on educational attainment depending on the group. For instance, living in a densely Mexican neighborhood leads to lower levels of education than if they did not live in such neighborhoods whereas living in a concentrated Filipino or Vietnamese neighborhood leads to higher levels of education than those who do not live in such concentrated neighborhoods. However, once other variables, namely SES and other achievement markers (college aspirations and standardized math test scores) are added to the models for Mexican and Filipino immigrant children, the respective negative and positive effect associated with living among other coethnics is insignificant. The addition of other variables to the model also alters the bivariate relationship between educational attainment and percent coethnics for Vietnamese. Net of controls, the effect of living among Vietnamese coethnics is enhanced by school safety and gender.

The bivariate relationship between Mexican neighborhoods and educational attainment shows that living in a Mexican neighborhood has a negative effect on educational attainment (Table 3). However, the negative effect associated with a Mexican

neighborhood is explained by parental SES and standardized math scores. While it appears that living in a concentrated Mexican coethnic neighborhood has a negative effect on educational attainment, this is explained by a high proportion of low SES families (mean=-.66) residing in low SES (mean=0.25) Mexican neighborhoods. Once this is controlled for, the negative effect of coethnic residence disappears. Respondents growing up in concentrated Mexican neighborhoods are as likely as those living in non-concentrated neighborhoods to obtain higher levels of educational attainment, so long as their parents of moderate SES and they perform well on standardized math tests.

Among Filipinos, the bivariate relationship shows that coethnic concentration is positively correlated with educational attainment in which living among Filipino neighbors greatly increases the likelihood of obtaining higher educational attainment (Table 4). The positive effect of living among Filipinos is explained by neighborhood SES, parental SES, and standardized math test scores. While the bivariate relationship suggests that living among Filipino coethnics is positively associated with educational attainment, this is explained by a large number of high SES families (mean=.33) living in high SES neighborhoods (mean=.51). This is contrasted by the high number of low SES families (mean=-.66) living in low SES neighborhoods (mean=.25) that explain the seemingly negative association between educational attainments and neighborhood concentration among Mexican youth.

The bivariate relationship between educational attainment and Vietnamese neighborhoods shows that living among coethnics has no effect on the educational attainment of Vietnamese immigrant children. However, net of controls, living among Vietnamese coethnics is positively associated with educational attainment but this is

strongly enhanced by school safety and gender. While this was not a very robust finding, there is still evidence that the Vietnamese neighborhood is significant and positively associated with educational attainment at the .05 level. Acting as enhancer variables, the presence of school safety and gender increase the predictive validity of the neighborhood on educational attainment.

School safety is negatively associated with the percent of Vietnamese in a neighborhood so it appears that the more Vietnamese students in a school, the less safe the school is. Vietnamese students are more likely to attend unsafe schools but these schools may be more unsafe by virtue of the fact that they reflect the low SES and moderate minority population in the neighborhoods these students live in. Model 3 controls for school safety showing that at every level of school safety, the percent of Vietnamese in the neighborhood is positively associated with educational attainment. Originally, the positive neighborhood effect on educational attainment is confounded but this disappears when I control for the artifact that there is a negative relationship between schools and the neighborhood. Without controlling for school safety (or the negative effect that Vietnamese are enrolled in bad schools and educational attainment), there is a confounding effect between educational attainment and the Vietnamese neighborhood (this positive effect is washed out by the model). There is something about the quality of school that neighborhood SES doesn't control for. Thus, the negative association between percent Vietnamese in a neighborhood and school safety is a statistical artifact.

Female is also negatively associated with the percent Vietnamese in the neighborhood. The negative association between females and the percent Vietnamese in the neighborhood can be the result of two things: a statistical artifact or a moving process

where parents with daughters may be more likely to move out of a highly Vietnamese neighborhood. Caution is exercised when interpreting this result as it is a borderline effect. Nonetheless, being female is positively associated with school safety and educational attainment. Females are more likely to obtain higher levels of education at every level of school safety. Thus, controlling for the negative association between females and percent Vietnamese reveals the positive association between percent Vietnamese and education attainment.

The findings of this paper are consistent with Zhou and Bankston's (1998) qualitative study in showing that some disadvantaged immigrant groups, like the Vietnamese, can still achieve high educational attainment. Despite their low parental SES (mean=-.28) and the low SES neighborhoods (mean=0.40) they reside in, 54.21% of Vietnamese youth obtain a high school degree and 41.05% obtain a college degree, the highest number of baccalaureate degrees in the sample. This paper finds evidence that their academic success is related to living among other coethnics, corroborated by the positive association between living among a higher proportion of Vietnamese neighbors (8-15%) and the educational attainment of second generation youth. The weak finding among the Vietnamese limits how confident I am about the association between Vietnamese neighborhoods and educational attainment.

The findings of this study suggest that living among coethnics is a possible factor affecting the gap in educational attainment across different immigrant groups. Although it is beyond the scope of this paper to examine *why* the living among coethnics has a positive affect on education, the literature suggests two reasons.

For Mexicans and Filipinos, the findings of this paper emphasize structural conditions that work through the neighborhood to predict the educational attainment of the two groups. The findings on Mexican and Filipino youth are consistent with Duncan (1994); Fligstein and Fernandez 1985; Lutz 2007; Mare (1980); Portes and MacLeod (1996; review in Kao and Thompson 2003) in emphasizing the importance of parental SES to explain educational attainment. Parental SES continues to shape the educational attainment of Mexican youth even as other variables are factored in (Mare 1980; Portes and MacLeod 1996; review and Kao and Thompson 2003). The findings on Filipino youth are consistent with the findings that neighborhood SES is positively associated with educational attainment (Pong and Hao 2007; Vartanian and Gleason 1999:34; and see review by Levanthal and Brooks-Gunn 2003:317;). The findings on Mexican and Vietnamese are in contrast to Levanthal and Brooks-Gunn (2003:317) and Vartanian and Gleason (1999:34), showing that neighborhood SES is not significantly associated with educational attainment. One reason for the difference in findings is that Levanthal and Brooks-Gunn (2003) and Vartanian and Gleason (1999) examined the effects of neighborhood SES on the educational attainment of native born black and white youth. As suggested by Pong and Hao (2007:234) neighborhood SES has different effects on the academic success of native born and immigrant youth.

In addition to examining the effect of coethnic residence on educational attainment, I also examined the effects of other variables on educational attainment at the neighborhood, school, and individual level. While neighborhood SES is theorized to be positively associated with educational attainment among native children (Brooks-Gunn, Duncan, Klebanov, and Sealand 1993; Crane 1991; review in Levanthal and Brooks-

Gunn 2000; Vartanian and Gleason 1999) and immigrant youth (Pong and Hao 2007:234), this finding was consistent only among the Filipinos (Table 4). For the Mexican (Table 2) and Vietnamese (Table 3), neighborhood SES had no effect on educational attainment. One reason for the divergence in literature is that neighborhood SES may also have a differential influence across immigrant subpopulations. Pong and Hao (2007:234) found that there is a positive association between neighborhood SES and academic performance among immigrant children but not among native born children. However, Pong and Hao (2007) do not examine how the association between neighborhood SES and educational attainment also differs across immigrant subpopulations as well (Pong and Hao 2007:226).

School variables did not have the expected positive effect on educational attainment as found by Portes and Hao (2004). The percent of coethnic students in the school did not have an effect on any of the three groups, net of the other variables, notably percent coethnics in the neighborhood.[10] This may be because there is no significantly different effect of coethnics in the school from coethnics in the neighborhood.

Attending a safe school had no significant effect on the educational attainment of Mexican immigrant children (Table 2), net of controls. However, attending a safe school was a moderate and strong predictor of educational attainment for Filipinos and Vietnamese students, respectively (Tables 3 and Table 4). Filipino and Vietnamese immigrant students attending safe schools were more likely to have higher levels of educational attainment. This may be because for Mexican students, there are really

[10] This variable was excluded from the final analysis because it was statistically insignificant.

neighborhoods where Mexicans are a huge majority (with the highest proportion being 90% Mexican). This is really not true for Vietnamese where the highest proportion coethnic was 15% Vietnamese).

Parental variables were strong predictors of educational attainment among Mexican youth; having higher SES parents or ones with college expectations led to a higher educational attainment (Duncan 1994; Fligstein and Fernandez 1985; Lutz 2007; Mare 1980; Portes and MacLeod 1996; review in Kao and Thompson 2003). Among Filipinos, having a higher parental SES remained a resilient predictor of educational attainment but in contrast to the literature (Goyette & Xie 1999; Kao 1995; Vartanian et al. 2007), having parents with college expectations was insignificant. Similarly, among the Vietnamese (Table 4), parental variables had no effect on educational attainment, net of other controls, suggesting that other factors trumped parents' influence on educational attainment. This builds on the works of Pong and Hao (200:234) and Feliciano (2006:295), showing that educational attainment of immigrant children may depend more on the influence of positive adult role models than on the resources or class backgrounds of immigrant parents.

Individual academic achievement, such as college aspirations and standardized math test scores, remained strong predictors of educational attainment for all groups, net of controls. Having college aspirations (Feliciano 2006; South et al. 2003 and see review in Kao and Thompson 2003) and higher standardized math test scores (White and Glick 2000; Vartanian et al. 2007) led to higher educational attainment. Among Mexicans and Filipinos, standardized math test scores are consistent with the literature (Vartanian et al. 2007:187; White and Glick 2000:681); performing well on standardized math test scores

led to higher educational attainment. Similarly, results indicating that females tend to outperform males is in line with Feliciano and Rumbaut (2003); Lopez (2003); Mickelson (1989); Valenzuela (1999); and Zhou and Bankston (1998).

CONCLUSION

To date, there is no study that quantitatively assesses the percent of immigrant coethnics in a neighborhood and the educational attainment of their children. The findings for the Vietnamese support Zhou and Bankston's (1997) finding that living among a higher number of coethnics is positively associated with the educational attainment of immigrant youth. This is true net of parental and neighborhood SES factors. This suggests that one's residence is a possible reason for the gap in educational attainment across immigrant groups, net of SES factors.

This study also highlights a structural argument showing that for some immigrant groups, particularly Mexicans and Filipinos, educational attainment is not explained by one's residence but from other structural considerations. Structural influences are present in socioeconomic factors and achievement markers such as standardized tests scores. The significance of socioeconomic factors highlights the extraordinary role socioeconomic conditions play for some groups.

The findings of this study suggest that policy needs to examine contextual effects on educational attainment, not just individual factors. Also, greater attention needs to be paid to how factors differ across subpopulations, particularly how different groups may respond differently to different resources. For instance, why socioeconomic indicators play a predominant role for select groups only and not others.

Table 1: Bivariate Statistics of Mexican, Vietnamese, and Filipino Children of Immigrants in San Diego, 1992-2003

	Mexicans	Filipinos	Vietnamese
Dependent Variable			
Educational Attainment			
HS Dropout	9.09	1.93	4.74
HS Graduate	82.34	70.93	54.21
College+	8.57	27.15	41.05
Neighborhood Characteristics			
Low (1-5%)/Low (0-12%)/None (0)	3.9	25.04	4.37
Medium (6-20%)/Some (13-22%)/Low (1-7%)	29.87	27.50	72.68
High (20-90%)/Medium (23-75%)/Medium (8-15%)	66.23	47.46	22.95
Neighborhood SES	0.26	0.51	0.40
School Characteristics			
Safety Index	2.63	2.49	2.40
Parental Characteristics			
Parental SES	-0.61	0.33	-0.28
2 parents at home	61.3	78.46	75.26
Parental Expectations			
< College	45.84	9.14	12.05
College+	54.16	90.86	87.95
Individual Characteristics			
Sex			
Female	54.81	52.19	50
Male	45.19	47.81	50.00
Age			
13	22.08	23.29	23.16
14	45.45	47.46	38.95
15	27.01	26.62	34.21
16	5.45	2.63	3.68
Generation			
US born	64.42	57.62	19.47
Foreign born	35.58	42.38	80.53
Standardized math scores			
Bottom quartile (0-24%)	42.08	12.08	13.16
2nd quartile (25-49%)	29.61	21.72	18.95
3rd quartile (50-74%)	18.18	28.72	26.32
Top quartile (75-99%)	10.13	37.48	41.58
Aspirations			
< College	22.39	4.03	4.74
College+	77.61	95.97	95.26
N	(385)	(571)	(190)

Table 2. Correlation between Education Attainment and Conational Support Variables for Mexican, Filipino, and Vietnamese Parents

	Mexican	Filipino	Vietnamese
# Relatives in the U.S. when you arrived	-0.11	-0.01	0.14
Help from relatives in the U.S.	-0.10	0.01	0.10
# Friends in the U.S. when you arrived	0.16	0.02	-0.05
Help from friends in the U.S.	0.18	0.00	-0.02
Socialize with compatriots	-0.03	-0.07	-0.01
Socialize with Asians	-0.01	-0.07	-0.06
Compatriots help each other	0.01	-0.05	-0.03
Important to KIT with compatriots	0.00	-0.05	-0.03
Important to KIT a lot with compatriots	0.00	-0.06	0.04
Important for child to know about home country	-0.01	0.00	0.07
Close community of friends from home country	-0.02	0.09	0.12
Compatriots are supportive of each other	-0.09	-0.02	-0.15
If needed a loan prefer to borrow from compatriots	-0.03	-0.02	-0.10
Adult role models in neighborhood	0.01	0.03	0.02
Neighbors have similar ways of raising kids	0.00	0.16	0.08
Neighbors would inform each other of opportunities	0.00	0.04	0.01
Neighbors would intervene if…			
...a fight was in front of your house & someone was getting beaten up	0.09	0.02	-0.19
...someone were trying to sell drugs to your children	0.07	0.00	-0.09
...your kids were getting into trouble	0.06	-0.03	-0.06

Table 3: Odds Ratios for an Ordered Logit Model of Educational Attainment for Mexican Children of immigrants, 2003 (N= 385)

	Model 1		Model 2		Model 3	
	Odds Ratio	p	Odds Ratio	p	Odds Ratio	p
Substantive Variables						
Neighborhood						
% Mexican						
High (20-90%)	0.14	0.006	0.18	0.046	0.28	0.150
Medium (6-20%) (ref: low (1-5%))	0.33	0.117	0.36	0.175	0.51	0.392
Neighborhood SES			0.86	0.864	0.50	0.418
School						
Safety Index			1.05	0.776	1.02	0.918
Parental						

Parental SES			1.84	0.007
Parents Expect College	2.66	0.006	2.23	0.025
Individual				
Female	1.08	0.796	1.15	0.651
Foreign-born	0.75	0.431	0.88	0.717
Aspire to College	3.98	0.000	3.08	0.000
Math Scores			1.65	0.000

Table 4: Odds Ratios for an Ordered Logit Model of Educational Attainment
For Filipino Children of immigrants, 2003 (N= 571)

	Model 1		Model 2		Model 3	
	Odds Ratio	p	Odds Ratio	p	Odds Ratio	P
Substantive Variables						
Neighborhood						
% Filipino						
Medium (23-75%)	1.49	0.006	1.46	0.015	1.19	0.515
Some (13-22%)	0.90	0.604	0.89	0.608	0.59	0.177
(ref: low (0-12%))						
Neighborhood SES					4.32	0.010
School						
Safety Index			1.59	0.000	1.39	0.000
Parental						
Parental SES					2.31	0.000
Parents Expect College			2.56	0.136	1.80	0.253
Individual						
Female			2.10	0.000	2.03	0.000
Foreign-born			0.95	0.760	1.24	0.158
(ref: US born)						
Aspire to College			3.09	0.066	1.04	0.923
Math Scores					2.37	0.000

Table 5: Odds Ratios for an Ordered Logit Model of Educational Attainment
for Vietnamese Children of immigrants, 2003 (N= 190)

	Model 1		Model 2		Model 3	
	Odds Ratio	p	Odds Ratio	p	Odds Ratio	p
Substantive Variables						
Neighborhood						
% Vietnamese						
Med (8-15%)	1.07	0.884	2.36	0.121	4.90	0.035
Low (1-7%)	1.01	0.988	1.64	0.346	3.30	0.083
(Ref: none (0))						
Neighborhood SES			1.31	0.711	1.61	0.490
School						
Safety Index					1.71	0.023
Parental						
Parental SES			1.27	0.422	1.19	0.569
Parents Expect College			1.64	0.558	1.80	0.492
Individual						
Female					2.90	0.005
Foreign-born			1.13	0.777	1.21	0.670
(ref: US born)						
Aspire to College			7.23	0.000	5.30	0.001
Math Scores			1.85	0.001	1.68	0.012

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