Disparities in the Educational Success of Immigrants: An Assessment of the Immigrant Effect for Asians and Latinos

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This study employs nationally representative data to determine how immigrants from the largest immigrant groups within the United States (i.e., Asians and Latinos) compare to whites on a wide range of educational outcomes. The authors also examine the extent to which socioeconomic background and immigrant characteristics explain racial/ethnic difference in academic outcomes. In addition, this study includes analyses that omit whites and compare immigrants to their nonimmigrant counterparts. Previous studies typically use whites as a basis for comparison, which the authors argue may not be appropriate for isolating the immigrant effect on scholastic outcomes. Findings show Asian immigrants have better educational outcomes than whites, which is accounted for by their immigrant characteristics. In contrast, Mexican and Puerto Rican immigrants have lower educational outcomes than whites, most of which is explained by socioeconomic background. Furthermore, findings illustrate the importance of employing the proper reference group for immigration scholars.

Keywords: educational attainment; achievement gap; immigrant adaptation; Asian; Latino; assimilation

Understanding the ways that immigrants assimilate into U.S. society has long been of central concern to sociology (Thomas and Znaniecki 1918-1920/1996; Gordon 1964; Park 1950; Warner and Srole 1945/1976), and recently immigration scholars have focused on exploring the degree to which immigrant characteristics and socioeconomic factors affect the assimilation process for U.S. immigrants (Portes and Rumbaut 1996, 2001, 2005; Alba and Nee 1997, 2003; Waldinger 2001). Marked changes in the demographic composition of immigrants since the Immigration Act of 1965—which resulted in greatly increased immigration from

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Latin America and Asia—in addition to shifts in the structure of the U.S. labor force since the mid-1970s (Danziger and Gottschalk 1995; Morris and Western 1999) have revealed great variability in assimilation outcomes for immigrants (Portes and Rumbaut 1996, 2001, 2005). Stark differences in socioeconomic attainment between Latino and Asian immigrants (Schoeni, McCarthy, and Vernez 1996; Vernez and Abrahamse 1996) have led researchers to explore the causes for such discrepancies. Given the magnitude of socioeconomic differences between Latino and Asian immigrants and the substantial increase in their respective populations—which combined will make up one-fifth of the U.S. population by 2010 (U.S. Census Bureau 2004)—explanations for different modes of assimilation for Asians and Latinos is vitally important, for academics and policy makers alike.

Investigating the effect of socioeconomic and cultural factors on the academic outcomes of the children of immigrants is a particularly effective means of assessing the mode of assimilation immigrant families are experiencing across generations. Past research has already demonstrated a clear connection between parental socioeconomic background and children's academic, occupational, and economic attainment (Blau and Duncan 1967; Sewell and Hauser 1975; Featherman and Hauser 1978). With respect to immigrants, a number of studies have shown that differences in academic outcomes between whites and Latinos account in part for disparate levels of wages, job skills, and labor market participation across groups (Bean and Tienda 1987; Borjas 1982). Atop other approaches that prioritize socioeconomic factors in explaining different socioeconomic outcomes among immigrants, Alejandro Portes and his colleagues have advanced an explanatory framework that emphasizes the influence of cultural practices on immigrant socioeconomic attainment (Portes and Zhou 1993; Portes and Rumbaut 1996; Portes and Fernández-Kelly 2008 [this volume]). This approach stresses that the retention of the language and cultural habits that originate in immigrants' home cultures enables immigrant children to perform well academically, even amid disadvantageous circumstances (Portes and Zhou 1993; Zhou and Bankston 1994; Portes and Fernández-Kelly 2008).

Although it is clear that both socioeconomic factors and immigrant characteristics affect the educational attainment of children of immigrants, few studies

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assess the implications immigrant characteristics have for racial/ethnic differences on a wide range of academic outcomes for immigrant youth from the largest immigrant groups within the United States. This study aims to fill this gap. Furthermore, this study contributes to the literature by using nationally representative data and novel analytical approaches to add precision to findings on immigrant effects. First, contrary to previous work that uses regional data on immigrants (Portes and Rumbaut 2001), we use data from the National Educational Longitudinal Study (NELS), which allow for findings to be generalized to the U.S. population. Second, unlike previous research that examines group effects for Asians and Latinos, we disaggregate both groups in our analyses, permitting a more nuanced delineation of socioeconomic and immigrant factors for specific immigrant groups. Finally, in contrast to previous work that assesses immigrant effects by using whites as the reference group, we assess immigrant effects in our final models by using native Asians as the reference group for Asian subgroups (and likewise for Latinos). We argue that this approach allows for a more precise measurement of immigrant effects than the analytical strategies used in previous research. Thus, through the use of nationally representative data and more precise analytical means, we endeavor to explain the degree to which socioeconomic and immigrant factors explain variation in educational achievement and attainment across immigrant groups.

The first section details main findings from perspectives that emphasize the effects of socioeconomic attainment and immigrant characteristics on children's educational outcomes and presents hypotheses on the implications of such characteristics for racial/ethnic differences in academic outcomes given each group's reception context. The second section describes the NELS and presents our methodology. The third presents our results. Finally, in the last section, we discuss our results in the context of relevant literature, present our conclusions, and suggest new avenues for future research.

Predictors of Academic Achievement and Educational Attainment for Immigrant Children

Parental socioeconomic status

Numerous studies have documented the effect of socioeconomic status (SES) on educational achievement (Blau and Duncan 1967; Haller and Portes 1973; Krashen 1996; Portes and MacLeod 1996; Portes and Rumbaut 2001; Spenner and Featherman 1978; White 1982). Parental SES is often the most powerful predictor of educational achievement, particularly with respect to high performance on standardized tests (Portes and Rumbaut 2001; White 1982) and access to print (Krashen 1993; McQuillan 1998; Neuman and Celano 2001). Research in this area has also investigated potential mechanisms by which parental SES affects children's educational attainment, including educational aspirations and expectations (Sewell and Hauser 1975). This line of research relies on the

understanding that the link between parental SES and children's occupational attainment is mediated almost entirely by children's educational attainment, drawing great attention to the role of education in leading to the intergenerational transfer of SES.

Research on immigrant children has supported the claim that SES profoundly affects educational achievement, irrespective of immigrant status. School-age immigrant children in the United States whose parents have low SES often perform poorly in school (Krashen 1996; Portes and Rumbaut 2001). Conversely, immigrant children whose parents have middle or high SES typically have access to tutors, high-achieving schools, and other valuable resources that have a direct positive impact on their educational achievement (Krashen 1996). Parental SES has a consistent and positive impact on immigrant children's grades from middle school through college (Portes and Rumbaut 2001; Massey et al. 2003), time spent on homework (Wigfield and Asher 1984), children's aspirations (Spenner and Featherman 1978), and both parents' and children's educational expectations (Hao and Bonstead-Bruns 1998). In sum, SES significantly influences the immigrant adaptation process due to its persistent impact on children's educational success.

Immigrant advantage

In contrast to the SES framework, which emphasizes the effects of educational and material resources on youths' educational outcomes, the immigrant advantage framework stresses the impact of cultural resources on educational and occupational attainment. Portes and his colleagues have advanced a theoretical model that emphasizes the role of immigrant advantage in explaining socioeconomic outcomes. Portes and Fernández-Kelly (2008), in attempting to explain extraordinary educational attainment by immigrant youth who come from disadvantaged backgrounds, posit that strict, traditional upbringing, matched with influential "significant others" (e.g., teachers), cultural capital (*habitus* associated with a middle- or upper-class lifestyle), the existence of a respectable "past" for the family, and other family dynamics (e.g., birth order, gender) affect the assimilation process. Furthermore, Portes and Rumbaut (2001) assert that immigrants arrive in their destination countries with a strong disposition for achievement—the "immigrant drive"—which they attempt to pass on to their children through emphasizing their educational attainment. Immigrant parents often believe their youths' future employment opportunities will be constrained and compensate by pushing them to high levels of educational attainment (Xie and Goyette 2003; Sue and Okazaki 1990). Preferences among parents for their children to maximize schooling reflect cultural values often learned in their home countries, which can become reinforced in the United States via dense social networks composed of coethnics (Hao and Bonstead-Bruns 1998; Zhou and Bankston 1994; Portes and Rumbaut 2001). Portes and Rumbaut stress that the resources of immigrants' coethnic communities in the United States may have pronounced effects on the occupational attainment of the first generation, thus affecting the resources available to enhance educational opportunities for their youth.

In addition, Portes and Rumbaut argue that the degree to which members of U.S. society and the U.S. government are receptive to immigration from the immigrant's home country contributes significantly to immigrants' subsequent success in U.S. society (Portes and Zhou 1993; Portes and MacLeod 1996; Portes and Rumbaut 1996, 2001). The reception context includes the political relations between the sending and receiving countries; the values and prejudices against the sending country and its members; and the size, structure, and resources of a group's preexisting coethnic communities (Portes and Rumbaut 2001). Thus, Portes and his colleagues go beyond theories that merely stress the role of SES in affecting educational attainment, placing great emphasis on the cultural resources immigrant families draw upon, as well as the reception environment and the strength of the immigrant's coethnic communities in the United States.

Several studies note that a primary means by which immigrants successfully adapt to the United States is by retaining their "entire way of life, including languages, ideas, beliefs, values, behavioral patterns, and all that immigrants bring with them when they arrive in their new country" (Zhou and Bankston 1994, 822). Gibson (1988) finds that by avoiding acculturation into mainstream American culture, Punjabi Indian students can rely on ethnic cultural resources that enable them to outperform native whites academically. Similarly, Caplan, Choy, and Whitmore (1992) find that the academic achievement of Indochinese refugees is directly influenced by the transmission of cultural values passed on by their parents. Also, Zhou and Bankston (1998) demonstrate that Vietnamese youth maintain high academic achievement despite living in high-poverty, predominately minority communities because they benefit from ethnic solidarity and social integration into their Vietnamese community. Although the immigrant advantage perspective has been employed to account for the academic success of a variety of immigrant groups, recently this perspective has been used to explain in part why Asian Americans generally perform better academically than other native-born and immigrant minority groups (Zhou and Bankston 1998).

Expected results

The degree to which the SES and immigrant advantage frameworks explain immigrant children's educational outcomes appears to vary across immigrant groups. For example, while the immigrant advantage perspective has helped explain the academic successes of Asian and Cuban immigrants (Zhou and Bankston 1998; Hao and Bonstead-Bruns 1998; Portes and MacLeod 1996), some research suggests that this framework does not explain adequately poor academic outcomes among socioeconomically disadvantaged groups (Ainsworth-Darnell and Downey 1998; Harris 2006). Harris and Robinson (2007) find that cultural and behavioral factors explain a greater proportion of the Asian American academic advantage relative to whites (nearly 50 percent), whereas it explains a much smaller proportion of the academic disadvantage of African Americans (roughly 12 percent). Furthermore, Warren (1996) finds that parental SES is a much better predictor of the lower educational outcomes of Mexican-origin adolescents compared to immigrant characteristics such as language ability

and migration history. Similarly, Kao and Tienda (1995) find that SES is a primary explanatory factor of the educational achievement of Latino immigrants in grades and test scores.

SES is perhaps a better predictor of the educational outcomes of immigrant Latino children because they are vastly more socioeconomically disadvantaged than Asian immigrants. For example, according to the 2000 U.S. Census, the median yearly income for households headed by foreign-born Asians was $68,094, compared to only $35,734 for households headed by foreign-born Latinos (U.S. Census Bureau 2006). Given the findings cited above, and the fact that stark socioeconomic differences exist between Asian and Latino immigrants, we can expect that SES and immigrant characteristics will vary in their ability to explain group differences in achievement. More specifically, we expect the following:

Hypothesis 1: Socioeconomic factors explain a larger proportion of the differences in educational achievement and attainment relative to whites for socioeconomically disadvantaged immigrant groups (i.e., Mexican and Puerto Rican immigrants).

Hypothesis 2: Immigrant characteristics explain why Asian and Cuban immigrant youth have more favorable academic outcomes than whites. Accounting for immigrant characteristics will greatly reduce or eliminate differences in academic outcomes between these groups.

In addition, although many studies document the academic progress of immigrant groups within the United States, few studies actually estimate an immigration effect. In most studies that examine the educational outcomes of immigrant children and their native counterparts, whites are treated as the reference group (e.g., Warren 1996; Hao and Bonstead-Bruns 1998). As such, there is a dearth of research that isolates the specific effect of being an immigrant relative to the outcomes of native ethnic peers, that is, not whites. In other words, because previous research most often compares the success of immigrant groups to whites, it does not effectively investigate the advantage (or disadvantage) of being an immigrant relative to the success of the native coethnics for each immigrant group.

As discussed above, numerous studies support the notion that an immigrant effect exists for Asian immigrants. Furthermore, studies have demonstrated that Latino immigrants have better outcomes than their native counterparts. For example, immigrant Latino youth are more likely to complete high school than are native Latinos who are third generation or higher (Driscoll 1999; Rumberger 1995). Similarly, Suarez-Orozco and Suarez-Orozco (1995) find that Mexicans in Mexico and recent Mexican immigrants are more achievement oriented than are native-born Mexican Americans and whites in the United States. Therefore, when we compare the educational achievement and attainment of immigrant groups to their native ethnic counterparts, we expect to find that immigrants have higher educational success by virtue of the immigrant effect. Specifically, we assess the following hypothesis:

Hypothesis 3: Immigrant youth have better academic outcomes than their nonimmigrant counterparts. We expect to find this effect for all Asian and Latino groups.

Data and Analytic Strategy

For this study, we use the National Education Longitudinal Survey of 1988 (NELS), a study of nearly twenty-five thousand U.S. students who were in the eighth grade during the first wave of data collection. Respondents were given follow-up interviews in 1990, 1992, 1994, and 2000. To enrich information obtained for respondents, questionnaires were also administered to respondents' teachers, parents, and administrators at the schools participating students attended.

The sample used for this study is made up of 7,908 whites, 758 Asians, and 1,430 Latinos (61 Cubans, 945 Mexicans, 139 Puerto Ricans, and 285 other Latinos).[1] Since subgroups within the Asian category vary considerably in immigration histories (Zhou 1997; Hirschman and Wong 1986), assimilation patterns (Fuligni 1997), language and economic variations (Zhou and Bankston 1998; Bankston and Zhou 1995), and opportunities for social mobility (Zhou 1997; Kao 1995; Chen and Stevenson 1995; Goyette and Xie 1999), we divide them into two groups: Asians A ($n = 533$) and Asians B ($n = 225$). The former category is composed of groups that can be characterized as "model minority": Chinese, Filipino, Japanese, Korean, Middle Eastern, and South Asian respondents. The latter group is composed of socioeconomically disadvantaged Asian groups (Cambodians, Laotians, Hmong, Vietnamese, Pacific Islanders, West Asians, and other Asians). Thus, rather than treating Asians as one group, we believe placing them into these two groups allows for a test of the effects of the immigrant advantage, given variation in modal SES and mode of reception in the United States.[2] On the other hand, Latinos were disaggregated into three groups for which the NELS collected data on ethnicity: Cubans, Mexicans, and Puerto Ricans.

Table 1 presents variable descriptions and coding for measures used in our analyses, along with the unadjusted means and standard deviations for each group. Our primary dependent variable is the academic achievement and educational attainment of immigrant youth. In this study, we explore three measures of academic achievement (i.e., grades, reading and math standardized test scores) and two measures of educational attainment (i.e., high school completion and college enrollment). Our independent variables are immigrant characteristics and parental socioeconomic attainment. For immigrant characteristics, we include parents' length of stay in the United States, parental expectations for their children's educational attainment, and use of a foreign language at home. All of these factors have been identified as being key indicators of "selective acculturation" (Portes and Rumbaut 2001) and are good proxies for characteristics that constitute the "immigrant advantage." For parental socioeconomic attainment, we include measures of parents' educational attainment and household income. Finally, we control for household structure and gender of the child respondent. Data for independent and control variables are taken from the baseline survey (1988); for the dependent variables, data were obtained from both the 1992 and 1994 waves.

The statistical analysis for this study proceeds in three stages. The findings in Table 2 show three sets of ordinary least squares (OLS) regression models that

(text continues p. 101)

TABLE 1
MEANS, STANDARD DEVIATIONS, AND DESCRIPTIONS FOR VARIABLES IN THE ANALYSES: NATIONAL EDUCATIONAL LONGITUDINAL STUDY (NELS) 1988 TO 2000

Variable	Description	Metric	Whites	Asians (A)	Asians (B)	Cubans	Mexicans	Puerto Ricans
Achievement (Grade 12)								
Grades	Combined for reading, math, science, and social studies	0.10 = Min 3.98 = Max	2.13 (0.01)	2.58 (0.03)	2.37 (0.06)	2.06 (0.12)	1.74 (0.03)	1.55 (0.07)
Reading	IRT score	10.41 = Min 51.16 = Max	34.81 (0.12)	37.79 (0.48)	33.97 (0.76)	34.23 (1.82)	29.39 (0.34)	29.21 (0.97)
Math	IRT score	16.97 = Min 78.10 = Max	50.97 (0.18)	58.64 (0.67)	52.87 (1.08)	50.73 (1.93)	41.67 (0.48)	40.33 (1.41)
Educational attainment								
H.S. Completion	Whether youth completed high school	0 = No 1 = Yes	0.89 (0.00)	0.97 (0.01)	0.93 (0.02)	0.89 (0.04)	0.76 (0.01)	0.73 (0.04)
College Enrollment (1994)	Whether youth enrolled in college	0 = No 1 = Yes	0.71 (0.01)	0.90 (0.01)	0.78 (0.03)	0.76 (0.06)	0.57 (0.02)	0.55 (0.04)
Immigrant characteristics								
Parent's Expectations	Parents' educational expectations for youth	1 = H.S. or < 6 = Doctorate	4.90 (0.01)	5.41 (0.04)	5.27 (0.07)	5.15 (0.14)	4.79 (0.04)	4.88 (0.10)
Parents' immigrant status								
Both Parents Born in U.S.	Both parents born in U.S.	0 = No 1 = Yes	0.93 (0.00)	0.16 (0.02)	0.28 (0.03)	0.18 (0.05)	0.48 (0.02)	0.20 (0.04)

(continued)

TABLE 1 (continued)

Variable	Description	Metric	Whites	Asians (A)	Asians (B)	Cubans	Mexicans	Puerto Ricans
0-5 Years	At least one foreign-born parent in U.S. 0–5 years	0 = No 1 = Yes	0.00 (0.00)	0.08 (0.01)	0.06 (0.02)	0.02 (0.02)	0.01 (0.00)	0.03 (0.02)
5-10 Years	At least one foreign-born parent in U.S. 5–10 years	0 = No 1 = Yes	0.01 (0.00)	0.15 (0.02)	0.26 (0.04)	0.10 (0.05)	0.05 (0.01)	0.05 (0.02)
10-15 Years	At least one foreign-born parent in U.S. 10–15 years	0 = No 1 = Yes	0.01 (0.00)	0.16 (0.02)	0.24 (0.03)	0.03 (0.02)	0.11 (0.01)	0.06 (0.02)
16 or More Years	At least one foreign-born parent in U.S. 16 or more years	0 = No 1 = Yes	0.06 (0.00)	0.44 (0.02)	0.16 (0.03)	0.68 (0.06)	0.35 (0.02)	0.67 (0.04)
Youth Foreign-Born	Youth is foreign-born	0 = No 1 = Yes	0.02 (0.00)	0.43 (0.02)	0.59 (0.04)	0.13 (0.05)	0.13 (0.01)	0.15 (0.03)
Language	Language other than English predominantly spoken at home	0 = No 1 = Yes	0.01 (0.00)	0.38 (0.02)	0.45 (0.04)	0.44 (0.07)	0.35 (0.02)	0.33 (0.04)
Socioeconomic background								
Parent's Education	Parent's highest level of educational attainment	1 = HS or < 6 = Doctorate	3.51 (0.02)	4.38 (0.07)	3.41 (0.12)	3.37 (0.21)	2.31 (0.05)	2.61 (0.13)
Household Income	Total household income	1 = $0 15 = $200K or >	10.17 (0.03)	10.78 (0.11)	9.19 (0.22)	9.67 (0.34)	8.22 (0.09)	8.21 (0.26)
Controls								
Two-Parent Household	Youth lives with both mother and father	0 = No 1 = Yes	0.72 (0.01)	0.86 (0.02)	0.80 (0.03)	0.64 (0.07)	0.72 (0.02)	0.58 (0.05)
Female	Youth is female	0 = No 1 = Yes	0.52 (0.01)	0.53 (0.02)	0.48 (0.04)	0.46 (0.07)	0.57 (0.02)	0.50 (0.05)

NOTE: Standard deviations appear in parentheses. IRT = item response theory.

TABLE 2
ORDINARY LEAST SQUARES (OLS) REGRESSIONS OF ACHIEVEMENT ON ETHNICITY, IMMIGRATION STATUS, AND SOCIOECONOMIC STATUS (SES)

	Unadjusted Differences			Net of SES						Net of SES and Immigrant Characteristics				
Independent Variables	Grades	Reading	Math	Grades	% Δ	Reading	% Δ	Math	% Δ	Grades	% Δ	Reading	% Δ	Math
Ethnicity (whites = reference group)														
Asians (A)	0.323***	1.675	5.469**	0.224***	31	0.719		3.830**	30	0.055		–0.410		–0.113
	–0.078	–1.333	–1.613	–0.06		–1.124		–1.373		–0.087		–1.315		–1.661
Asians (B)	0.307**	–0.779	3.493*	0.405***	32	0.098		5.266**	51	0.158		–2.009		–0.023
	–0.099	–1.156	–1.612	–0.096		–1.166		–1.584		–0.119		–1.476		–1.969
Cubans	0.151	0.687	3.916	0.143		–0.186		2.397		–0.031		–1.696		–2.043
	–0.187	–2.088	–2.262	–0.175		–2.334		–1.936		–0.168		–2.396		–2.157
Mexicans	–0.517***	–6.906***	–11.458***	–0.144		–2.637**	62	–3.723**	68	–0.339**	34	–4.475***	35	–8.203***
	–0.068	–0.678	–1.002	–0.077		–0.774		–1.09		–0.107		–1.127		–1.608
Puerto Ricans	–0.487***	–5.136**	–8.383**	–0.279*	43	–3.278		–4.900*	42	–0.407**	16	–3.357		–7.102**
	–0.107	–1.736	–2.737	–0.123		–1.748		–2.229		–0.145		–1.951		–2.351
Immigrant characteristics														
Parental Expectations	—	—	—	—		—		—		0.113***		1.961***		2.848***
										–0.013		–0.17		–0.199
Parents' Immigration Status Both Parents U.S.-Born (Ref. Group)														
0–5 Yrs	—	—	—	—		—		—		0.208		–2.514		3.011
										–0.117		–1.565		–2.057
5–10 Yrs	—	—	—	—		—		—		–0.003		–1.200		2.09
										–0.109		–1.483		–1.97

(continued)

TABLE 2 (continued)

	Unadjusted Differences			Net of SES					Net of SES and Immigrant Characteristics				
Independent Variables	Grades	Reading	Math	Grades	% Δ	Reading	% Δ	Math	% Δ	Grades	% Δ	Reading	% Δ	Math
10-15 Yrs	—	—	—	—		—		—		–0.008		2.173		3.551°
										–0.104		–1.176		–1.418
16+ Yrs	—	—	—	—		—		—		–0.043		–0.051		1.958°
										–0.065		–0.746		–0.976
Language	—	—	—	—		—		—		0.322°°°		1.409		2.085
										–0.074		–0.925		–1.256
SES														
Parents' Education	—	—	—	0.165°°°		1.726°°°		2.912°°°		0.144°°°		1.371°°°		2.375°°°
				–0.01		–0.148		–0.171		–0.011		–0.162		–0.178
Household Income	—	—	—	0.031°°°		0.420°°°		0.914°°°		0.028°°°		0.316°°		0.773°°°
				–0.007		–0.087		–0.107		–0.008		–0.093		–0.107
Controls														
Two-Parent Household	0.388°°°	1.983°°°	4.851°°°	0.267°°°		0.452		1.949°°		0.268°°°		0.52		1.996°°
	–0.043	–0.443	–0.589	–0.036		–0.551		–0.631		–0.036		–0.552		–0.62
Female	0.237°°°	1.911°°°	–2.006°°°	0.263°°°		2.217°°°		–1.478°°		0.248°°°		2.019°°°		–1.811°°°
	–0.03	–0.334	–0.464	–0.027		–0.354		–0.431		–0.028		–0.355		–0.427
Constant	1.676°°°	32.267°°°	47.985°°°	0.841°°°		22.735°°°		30.026°°°		0.400°°°		15.465°°°		19.376°°°
	–0.051	–0.488	–0.621	–0.092		–1.058		–0.885		–0.091		–0.99		–1.088
R^2	0.084	0.041	0.065	0.194		0.141		0.218		0.215		0.178		0.256

NOTE: Numbers in parentheses are standard errors. N = 7,561, 7,068 and 7,063 for grades, reading, and math, respectively.
°$p < .05$. °°$p < .01$. °°°$p < .001$ (two-tailed tests).

compare immigrants from each minority group to whites on grades, reading, and math achievement (nonimmigrant members from these groups are not included in these analyses). The first set of models show means for the groups relative to whites for each outcome (controlling only for household structure and gender). To investigate the extent to which immigrant characteristics drive immigrants' achievement, we include socioeconomic characteristics in the second set of models and incorporate immigrant characteristics in the last set of models. The second set of models highlights the extent to which the differences in achievement observed between each of the groups and whites are due to varying levels of socioeconomic status, while the final set of models show the extent to which the differences are attributable to the groups' immigrant advantage. These analyses are repeated in Table 3 using logistic regression to estimate group differences relative to whites on the measures of educational attainment. To allow for a more substantive interpretation of the logit coefficients, we also provide odds ratios for statistically significant coefficients. The final stage of the analysis examines the immigration effect by comparing Asian and Latino immigrants to their nonimmigrant counterparts (Tables 4 and 5).

Several points regarding our analyses are worth mentioning. First, in line with common usage in the immigration literature, immigrant youth are either themselves foreign-born or have at least one foreign-born parent. Second, for purposes of these analyses, we distinguish between island-born Puerto Ricans and mainland-born Puerto Ricans. Even though all Puerto Ricans are U.S. citizens by birth, we treat island-born Puerto Ricans, or those with at least one parent born on the island of Puerto Rico, as "immigrants"; while mainland-born Puerto Ricans, or those born on the mainland and with mainland-born parents, are treated as "natives." We make this distinction because scholars have noted that the experience of Puerto Ricans moving to the mainland can mirror the experience of immigration (Rivera-Batiz and Santiago 1996). Third, multiple imputation was used to arrive at estimated values for respondents with missing values on indicator variables.[3] Finally, to obtain unbiased population estimates, analyses are based on weighted data using the appropriate NELS panel weights to adjust for sampling design (i.e., stratification, disproportionate sampling of certain strata, and clustered, multistage probability sampling), sample attrition, and nonresponse (Ingles et al. 1994).

Results

Do immigrant youth differ from whites on academic achievement, net of socioeconomic status and immigrant characteristics?

Table 2 presents results for immigrant youths' academic achievement. The first three models examine whether Asian and Latino immigrants differ in their academic achievement relative to whites (controlling only for household

structure and gender). All Asian immigrant groups have an achievement advantage relative to whites in grades and math standardized test scores, while they do not vary in achievement from whites on reading standardized test scores. With regard to Latinos, whereas Cuban immigrants do not differ from whites in grades, reading standardized test scores, or math standardized test scores, Mexican and Puerto Rican immigrants score lower than whites on all three achievement measures.

The next set of models show group differences in achievement after controlling for socioeconomic characteristics, household structure, and gender. They illustrate that SES accounts for a small percentage of the achievement advantage held by Asian immigrants for grades and math standardized test scores. For example, Asian immigrants still perform significantly better than whites on grades and math standardized test scores even after controlling for SES. For Asian A immigrants, the magnitude of their advantage over whites for achievement on grades is reduced by only about 30 percent when SES factors are held constant. In contrast, after holding SES constant, the Asian B immigrant advantage relative to whites increases by about 30 percent for grades and 50 percent for math standardized test scores, highlighting their lower SES position than Asian A immigrants. For Mexicans and Puerto Ricans, controlling for socioeconomic characteristics leads to substantial changes in their original achievement disadvantage. The disadvantage of Mexican immigrants on grades disappears, and their disadvantage on reading and math standardized test scores is reduced by about two-thirds. Similar effects are observed for Puerto Ricans; however, SES only accounts for about 40 percent of their disadvantage relative to whites on grades and math standardized test scores. Finally, as was expected, both parental education and household income are positively related to achievement for all outcomes.

The final three models in Table 2 show differences in achievement between Asian and Latino immigrants relative to whites after including immigrant characteristics. These models illustrate that immigrant characteristics provide an added benefit for Asian and Latino immigrants in terms of their educational achievement. After controlling for immigrant characteristics and socioeconomic factors, the achievement advantages that Asian immigrants hold relative to whites disappear. It is important to note that immigrant characteristics also provide an educational advantage for Mexicans and Puerto Ricans net of SES, since controlling for these characteristics results in decreases to their achievement relative to the previous set of models. However, unlike the results observed for Asian immigrants, immigrant characteristics and socioeconomic factors combined do not fully explain the educational disadvantages that Mexican and Puerto Rican immigrants have relative to whites; an achievement gap for Mexican and Puerto Rican immigrants persists after these factors are taken into account.

With regard to the effects of the immigrant characteristic variables, parental educational expectations are associated with an increase in achievement on all three measures. For youth with at least one foreign-born parent, the length of time that foreign-born parents have lived in the United States has positive

effects on only math standardized test scores. For example, youth who have at least one parent who arrived in the United States no less than ten years before the baseline survey have higher math standardized test scores. Finally, speaking only a non-English language at home leads to respondents getting higher grades but has no effects on reading or math standardized test scores. It is also interesting to note that respondents who live with both parents almost always have higher achievement outcomes (except on reading standardized test scores); females always achieve higher grades and reading standardized test scores than do males, and females always achieve lower math standardized test scores than do males.

Do Asian and Latino immigrants differ from whites on educational attainment, net of socioeconomic status and immigrant characteristics?

Table 3 displays results for two measures of educational attainment. The first two models show the results of logistic regressions on graduating from high school and enrolling in college for Asian and Latino immigrants relative to whites. Only Mexican and Puerto Rican immigrants have lower odds of graduating from high school than whites. Specifically, relative to whites, Mexican immigrants are 66 percent less likely to graduate from high school.[4] The odds of graduating from high school for Puerto Rican immigrants are about 59 percent lower than those for whites. With regard to college enrollment, both Asian immigrant groups have higher odds of enrolling in college than whites, while the odds for Cuban immigrants are the same as those for whites. Mexican and Puerto Rican immigrants, however, have lower odds of enrolling in college than whites.

The second models control for socioeconomic characteristics. After controlling for SES, the Asian A immigrant advantage relative to whites in college enrollment becomes nonsignificant. In contrast, controlling for socioeconomic characteristics more than doubles the odds that Asian B immigrants will enroll in college, thus highlighting their SES disadvantage. The results for Mexican and Puerto Rican immigrants illustrate the considerable importance that SES has for these groups. Once SES is controlled, Mexican and Puerto Rican immigrants have the same odds of graduating from high school as whites. Similarly, the disadvantage that Mexicans and Puerto Ricans experience in enrolling in college relative to whites disappears when SES is controlled; Puerto Ricans have the same odds of enrolling in college as whites, and Mexican immigrants are 66 percent more likely to enroll in college than whites.

After introducing immigrant characteristics into the models, the advantage in college enrollment observed among Asian B immigrants after controlling only for SES disappears. For Mexican immigrants, their advantage in college enrollment when only SES is controlled disappears; as a result, Mexicans are 47 percent less likely to enroll in college than whites after controlling for SES and immigrant characteristics. This further demonstrates the educational benefit that both Asian

TABLE 3
LOGISTIC REGRESSIONS OF EDUCATIONAL ATTAINMENT ON ETHNICITY, IMMIGRANT CHARACTERISTICS, AND SOCIOECONOMIC STATUS (SES)

	Unadjusted Differences				Net of SES				Net of SES and Immigrant Characteristics			
Independent Variables	HS Comp	Odds	Col Enrol	Odds	HS Comp	Odds [% Δ]	Col Enrol	Odds [% Δ]	HS Comp	Odds [% Δ]	Col Enrol	Odds [% Δ]
Ethnicity (whites = reference group)												
Asians (A)	0. 448		1.005°	2.733	0.212		0.879		–0.224		–0.037	
	–0.63		–0.446		–0.644		–0.488		–0.676		–0.488	
Asians (B)	0.184		0.728°	2.072	0.729		1.511°	4.531 [119]	0.119		0.399	
	–0.4		–0.296		–0.409		–0.321		–0.58		–0.416	
Cubans	0.393		0.767		0.285		0.791		–0.085		–0.213	
	–0.528		–0.416		–0.54		–0.444		–0.644		–0.451	
Mexicans	–1.087°°°	0.337	–0.890°°°	0.411	0.067		0.497°	1.644 [300]	–0.493		–0.640°	0.527 [28]
	–0.203		–0.163		–0.232		–0.197		–0.466		–0.322	
Puerto Ricans	–0.894°	0.409	–0.642°	0.526	–0.186		0.225		–0.449		–0.652	
	–0.366		–0.326		–0.406		–0.416		–0.569		–0.484	
Immigrant characteristics												
Par. Expectations	—		—		—		—		0.190°°°	1.209	0.406°°°	1.501
									–0.044		–0.036	
Parents' Immigration Status Both Parents U.S.-Born (Ref. Group)												
0–5 Yrs	—		—		—		—		0.449		0.168	
									–0.714		–0.477	
5–10 Yrs	—		—		—		—		–0.108		0.2	
									–0.542		–0.441	

(continued)

TABLE 3 (continued)

Independent Variables	Unadjusted Differences				Net of SES				Net of SES and Immigrant Characteristics			
	HS Comp	Odds	Col Enrol	Odds	HS Comp	Odds [% Δ]	Col Enrol	Odds [% Δ]	HS Comp	Odds [% Δ]	Col Enrol	Odds [% Δ]
10–15 Yrs	—		—		—		—		0.854		0.627	
									–0.482		–0.34	
16+ Yrs	—		—		—		—		0.012		0.479°	1.614
									–0.385		–0.22	
Language	—		—		—		—		0.485		0.860°°	2.364
									–0.338		–0.272	
SES												
Parents' Education	—		—		0.483°°°	1.621	0.542°°°	1.72	0.444°°°	1.559	0.471°°°	1.602
					–0.057		-0.031		–0.063		–0.034	
Household Income	—		—		0.172°°°	1.188	0.224°°°	1.25	0.164°°°	1.178	0.209°°°	1.232
					–0.029		-0.021		–0.031		–0.022	
Controls												
Two-Parent Household	1.096°°°	2.993	0.820°°°	2.269	0.734°°°	2.084	0.405°°°	1.499	0.744°°°	2.105	0.426°°°	1.531
	–0.124		–0.088		–0.139		-0.101		–0.147		–0.108	
Female	0.03		0.146		0.127		0.292°°°	1.34	0.107		0.260°°	1.297
	–0.121		–0.076		–0.123		–0.082		–0.129		–0.087	
Constant	0.982°°°		0.155		–1.985°°°		–3.609°°°		–2.682°°°		–5.206°°°	
	–0.127		–0.091		–0.248		–0.188		-0.28		–0.242	
Pseudo-R^2	0.055		0.039		0.156		0.18		0.165		0.215	

NOTE: Numbers in parentheses are standard errors. N = 8,882 and 8,854 for high school completion (HS comp) and college enrollment (Col Enrol), respectively.
°$p < .05$. °°$p < .01$. °°°$p < .001$ (two-tailed tests).

and Mexican immigrants gain from their immigrant characteristics; once this advantage is removed by controlling for immigrant characteristics, the educational attainment of Asians and Mexicans decreases relative to whites.

Similar to the previous set of analyses, greater parental educational expectations lead to increases in the odds of completing high school and enrolling in college. Immigrant youth with an immigrant parent who arrived in the United States no less than ten years before the baseline survey have higher odds of enrolling in college than those who do not have a foreign-born parent who arrived in the United States within that time frame. Like the effects observed in the previous analyses, the socioeconomic variables are significant and run in the expected direction.

Do Asian and Latino immigrants differ in their educational achievement and attainment from Asian and Latino natives?

Tables 4 and 5 show if and how Asian and Latino immigrants differ from their native counterparts on academic achievement and educational attainment. The top panel of each table shows the unadjusted immigrant effect on achievement and attainment for each immigrant group, while the bottom panel of each table shows these effects net of SES and immigrant characteristics. Because we are interested in whether the educational advantages observed for Asian immigrants and the educational disadvantages observed for Latino immigrants in the previous analyses are unique to immigrants, we replicate the analyses with Asian and Latino natives as the respective reference groups; as such, whites are excluded from these analyses.

The top panel of Table 4 shows that Asian immigrant groups achieve higher grades and math scores than native Asians. Furthermore, Asian A immigrants are more likely to enroll in college than are native Asians. These findings support Hypothesis 3. However, the bottom panel shows that accounting for SES and immigrant characteristics explains the advantage in grades for Asian immigrant groups and the advantage in math and college enrollment for Asian A immigrants (the advantage in math held by Asian B immigrants remains unchanged). These results illustrate that SES and immigrant characteristics combined mostly explain the advantage that Asian immigrants have over their native peers.

Table 5 displays analogous results for Latinos. The top panel shows that Cuban immigrants have higher grades, reading and math scores, and greater odds of enrolling in college than native Latinos. There are no significant differences between Mexican and Puerto Rican immigrants and their native Latino counterparts on any of the academic outcomes. Similar to the findings for Asian immigrants, the bottom panel shows that, after controlling for SES and immigrant characteristics, all of the Cuban academic advantages disappear (except for their advantage in math). These findings suggest that Cuban immigrants are more similar to Asian immigrants than Mexican or Puerto Rican immigrants; the educational advantages that Cuban immigrants have can be fully explained by

TABLE 4
EFFECT OF BEING IMMIGRANT ON ACHIEVEMENT AND EDUCATIONAL ATTAINMENT FOR ASIANS

	Educational Attainment						
	Achievement			H.S. Completion		College Enrollment	
Independent Variables	Grades	Reading	Math	1	Odds	1	Odds
Baseline							
Effect of being immigrant (native Asians = reference group)							
Asians (A)	0.441***	3.334	7.484**	–0.342		1.715*	3.240
	–0.106	–1.739	-2.485	–0.825		–0.54	
Asians (B)	0.365**	0.613	5.442*	–0.711		0.818	
	–0.132	–1.653	–2.424	–0.674		–0.438	
Constant	2.029***	33.382***	49.320***	2.707***		0.758*	
	–0.08	–1.149	–1.82	–0.532		–0.307	
R^2/Pseudo R^2	0.056	0.023	0.049	0.008		0.043	
Net of SES and immigrant characteristics							
Effect of being immigrant (Native Asians = reference group)							
Asians (A)	0.199	4.827	5.255	–1.300		–0.230	
	–0.244	–3.263	–5.078	–1.189		–0.769	
Asians (B)	0.285	4.182	5.541*	–1.212		–0.209	
	–0.258	–3.546	–5.444	–1.308		–0.85	
Background							
Parental Expectation	0.135*	1.128	3.076*	–0.110		0.158	
	–0.057	–0.88	–1.227	–0.321		–0.189	
Parents' Immigration Status Both Parents U.S.-Born (Ref. Group)							
0–5 Yrs	0.151	–8.500*	–1.106	1.091		0.396	
	–0.246	–3.756	–5.726	–1.53		–1.022	
5–10 Yrs	–0.068	–5.848	–4.556	–0.566		0.359	
	–0.266	–4.293	–5.865	–1.354		–1.052	
10–15 Yrs	–0.104	–0.699	–0.057	0.983		1.173	
	–0.243	–3.482	–5.134	–1.234		–0.878	
16+ Yrs	0.047	–2.202	–0.076	0.667		1.29	
	–0.23	–3.28	–5.034	–1.132		–0.79	
Language	0.363**	3.045	5.085*	1.764		1.428*	4.169
	–0.106	–1.79	–2.197	–0.905		–0.643	
Parents' Education	0.107**	1.514**	2.026**	0.658**	1.930	0.592***	1.808
	–0.036	–0.581	–0.733	–0.234		–0.159	
Household Income	0.024	0.724*	0.979*	0.137		0.047	
	–0.018	–0.314	–0.426	–0.116		–0.077	
Two-Parent Household	0.241*	0.535	2.457	0.395		0.334	
	–0.12	–2.059	–2.951	–0.576		–0.433	
Female	0.159	2.683*	–2.780	0.059		–0.050	
	–0.085	–1.25	–1.678	–0.483		–0.355	
Constant	0.374	11.831*	19.266***	–0.570		–2.933*	
	–0.304	–4.877	–14.383	–2.012		–1.208	
R^2/Pseudo-R^2	0.227	0.262	0.266	0.247		0.212	

NOTE: Numbers in parentheses are standard errors. Number of observations for the outcomes in order of presentation from left to right are 636, 570, 571, 719, and 714. SES = socioeconomic status.
*$p < .05$. **$p < .01$. ***$p < .001$ (two-tailed tests).

TABLE 5
EFFECT OF BEING IMMIGRANT ON ACHIEVEMENT AND EDUCATIONAL ATTAINMENT FOR LATINOS

	Educational Attainment						
	Achievement			H.S. Completion		College Enrollment	
Independent Variables	Grades	Reading	Math	1	Odds	1	Odds
Baseline							
Effect of being immigrant (native Latinos = reference group)							
Cubans	0.486°	5.762°	11.923°°°	0.873		1.253°°	3.501
	–0.215	–2.329	–2.71	–0.551		–0.419	
Mexicans	–0.048	–1.128	–1.728	–0.247		–0.131	
	–0.088	–0.97	–1.389	–0.245		–0.202	
Puerto Ricans	–0.098	–0.180	0.535	–0.264		–0.040	
	–0.13	–1.988	–3.016	–0.374		–0.356	
Constant	1.676°°°	29.301°°°	41.273°°°	0.999°°°		0.134	
	–0.053	–0.708	–0.989	–0.143		–0.122	
R^2/Pseudo-R^2	0.051	0.032	0.069	0.034	0.042		
Net of SES and immigrant characteristics							
Effect of being immigrant (native Latinos = reference group)							
Cubans	0.483	7.548	13.775°	5.477		1.811	
	–0.275	–5.177	–5.231	–2.705		–0.962	
Mexicans	0.074	3.84	5.902	4.961		1.048	
	–0.208	–4.55	–4.699	–2.497		–0.856	
Puerto Ricans	0.017	4.159	6. 621	5.076		1.201	
	–0.239	–4.874	–5.264	–2.691		–0.942	
Background							
Parental Expectation	0.042	0.57	1.656°°	0.174		0.329°°	1.39
	–0.035	–0.373	–0.52	–0.227		–0.09	
Parents' Immigration Status Both Parents U.S.-Born (Ref. Group)							
0–5 Yrs	–0.015	–3.346	–4.033	–4.535		–1.034	
	–0.296	–5.46	–6.606	–3.407		–1.155	
5–10 Yrs	–0.271	–5.139	–4.216	–4.903		–1.148	
	–0.241	–4.734	–5.077	–2.706		–0.963	
10–15 Yrs	–0.121	–2.378	–3.475	–4.234		–0.885	
	–0.227	–4.719	–4.859	–2.682		–0.918	
16+ Yrs	–0.219	–4.085	–5.545	–5.251		–1.117	
	–0.211	–4.562	–4.749	–2.527		–0.869	
Language	0.303°°	1.035	0.705	0.375		0.532	
	–0.097	–1.096	–1.453	–0.815		–0.276	
Parents' Education	0.095°°	1.564°°°	1.880°°°	0.223		0.191°	1.211
	–0.027	–0.383	–0.478	–0.26		–0.086	
Household Income	0.028	0.152	0.806°°°	0.219		0.225°°°	1.253
	–0.015	–0.17	–0.211	–0.12		–0.043	
Two-Parent Household	0.185°	1.358	1.446	0.311		0.373	
	–0.073	–1.088	–1.276	–0.656		–0.221	

(continued)

TABLE 5 (continued)

	Educational Attainment						
	Achievement			H.S. Completion		College Enrollment	
Independent Variables	Grades	Reading	Math	1	Odds	1	Odds
Female	0.166°	1.075	–3.587°°	–0.046		0.207	
	–0.076	–0.893	–1.218	–0.63		–0.211	
Constant	0.715°°	18.931°°°	21.146°°°	–2.455		–4.368°°°	
	–0.205	–2.195	–3.156	–1.394		–0.594	
R^2/Pseudo-R^2	0.144	0.111	0.219	0.138		0.158	

NOTE: Numbers in parentheses are standard errors. Number of observations for the outcomes in order of presentation from left to right are 1,050, 1,001, 1,000, 1,344, and 1,340. SES = socioeconomic status.
°$p < .05$. °°$p < .01$. °°°$p < .001$ (two-tailed tests).

SES and immigrant characteristics. Nevertheless, it is surprising that Mexican and Puerto Rican immigrants do not differ from their native coethnics even after controlling for SES and immigrant characteristics. These findings contradict Hypothesis 3.

With regard to the specific effects of the variables included in the analyses, the parental expectations variable is only significant for two of the five outcomes for both Asians and Latinos (grades and math scores for Asians and math scores and college enrollment for Latinos). Also, whereas Asian youth with a parent in the United States for less than five years have lower reading scores, parents' length of stay is not significant for academic outcomes among Latinos. In general, the parental education effects are in the direction expected for both Asians and Latinos and household income is only a significant predictor on two of the five outcomes for both Asians and Latinos.

Summary and Discussion

In this study, we set out to further understanding of the role of parental socioeconomic status and immigrant characteristics for the academic achievement and educational attainment of immigrant youth. We argued that the magnitude of socioeconomic differences between Asian and Latino groups and the substantial increase in their populations make the study of their adaptation to American society an important research agenda for the twenty-first century. We also noted that perhaps the best way to gauge how immigrants are assimilating is to explore their academic outcomes and the determinants of their academic outcomes, particularly because educational attainment is so vital to socioeconomic success in American society. We compared immigrants from the largest U.S. immigrant groups to whites on a range of educational outcomes using nationally representative data and assessed the extent to which group differences stemmed from differences in SES and immigrant characteristics. We also compared Asian and

Latino immigrants to their native counterparts to assess the immigration effect for these groups. This study yields several key findings.

[T]he magnitude of socioeconomic differences between Asian and Latino groups and the substantial increase in their populations make the study of their adaptation to American society an important research agenda for the twenty-first century.

First, the academic advantages held by Asian immigrants relative to whites are partially explained by their socioeconomic characteristics and fully explained by their immigrant and socioeconomic characteristics combined. This is consistent with the notion that immigrant groups successfully adapt to the United States by retaining traditional cultural patterns (Gibson 1988; Caplan, Choy, and Whitmore 1992; Zhou and Bankston 1998). Second, the academic disadvantage observed among Mexican and Puerto Rican immigrants relative to whites is largely explained by their lower SES. SES explains the entire disadvantage of Mexican immigrants in grades and about two-thirds of their lower achievement in reading and math. Among Puerto Rican immigrants, SES accounts for their entire disadvantage in reading and about two-fifths of their disadvantage in grades and math. These findings are similar to studies by Warren (1996) and Kao and Tienda (1995), which find that SES explains a substantial portion of the lower educational outcomes of Mexican-origin adolescents. Thus, while SES and immigrant characteristics fully explain the academic advantages of Asian immigrants, they do not completely account for the academic disadvantages of Mexican and Puerto Rican immigrants relative to whites. Even after controlling for SES and immigrant characteristics, we found that, on average, Mexican and Puerto Rican immigrants have lower educational achievement and attainment than whites.

Third, whereas Asian immigrants tend to perform better academically than their native Asian peers, for Latinos, only Cuban immigrants perform better than their native Latino peers; no significant differences in academic outcomes were observed between Mexican or Puerto Rican immigrants and their native peers. Furthermore, controlling for SES and immigrant characteristics eliminated almost all of the significant differences between immigrants and their native counterparts. These findings highlight the notable differences between Asian or

Cuban immigrants and their native counterparts but not between Mexican or Puerto Rican immigrants and their native coethnics. These results demonstrate the importance of employing the proper reference group for immigration scholars interested in immigration effects in education. The current findings show that within-group comparisons between immigrants and nonimmigrants can help refine the understanding of whether and how academic outcomes are influenced by the immigration process.

Furthermore, our findings suggest two main modifications for understanding the implications of immigrant characteristics for educational achievement. First, the persistence of academic disadvantages on academic outcomes relative to whites for Mexican and Puerto Rican immigrants after controlling for immigrant characteristics suggests that informational and community resources needed to enhance scholastic success are important for students from disadvantaged backgrounds. Our results suggest that material resources are the foundation from which parental immigrant drive can have its optimal effect; as Portes and Fernández-Kelly (2008) suggest, the assistance of "significant others" and targeted, voluntary programs may significantly bolster the ability of immigrant parents with socioeconomic disadvantages to translate their immigrant drive into their children's scholastic achievement. Although our models do not include measures for informational resources from significant others and voluntary program participation, our findings are consistent with Portes and Fernández-Kelly's assertion that such resources are vital for the academic success of immigrants from socioeconomically disadvantaged backgrounds.

Second, contrary to previous research, our analyses suggest ethnic differences in the degree to which immigrants are rewarded in grades for displaying respect and proper behavior in the classroom. Previous research asserts that grades, as an indicator of achievement, are in reality a measure of academic performance and appropriate comportment in the classroom (Lee 1996; Walker-Moffat 1995; Portes and Rumbaut 2001). Portes and Rumbaut (2001) argue that immigrant children who have not yet fully acculturated to the United States are rewarded through grades for obedience and good demeanor in the classroom. Empirical research has found that Laotian and Cambodian immigrant students earned higher grades even after controlling for SES and other factors (Portes and Rumbaut 2001), a result of immigrant children having a keen sense of their teachers' desires for classroom behavior (Walker-Moffat 1995) and teachers rewarding students who are quiet and respectful (Lee 1996).

Results from this study show that these findings may not extend to all immigrant groups as disadvantages in grades persist for Mexican and Puerto Rican immigrant youth after controlling for SES and immigrant characteristics. This may be due to qualitative differences in teachers' treatment of Asian and Latino immigrant youth. Asian immigrant students, because of their smaller population sizes, typically may compose only a small proportion of the students in American classrooms. Moreover, because they are present in such low numbers, teachers can readily identify their good behavior and reward them accordingly. However, Mexican and Puerto Rican immigrant students typically attend schools where

they are surrounded by many of their native peers. As a result, well-behaving Mexican and Puerto Rican immigrant youth may get "lost in the crowd," receive less individualized treatment by their teachers, and lose out on the grade reward their Asian immigrant counterparts receive.

Future studies should investigate the reasons for Mexican and Puerto Rican immigrant students' academic disadvantages. Portes and Fernández-Kelly's (2008) findings are suggestive of why academic disadvantages for Mexican and Puerto Rican immigrant youth persist; they stress the importance of "significant others" in mitigating the effects of socioeconomic disadvantage. Measures of these variables should be incorporated into future studies and tested systematically. Furthermore, future research should also investigate variation in teachers' treatment of immigrant youth based on student ethnicity. It would be interesting to investigate the way classroom ethnic demographics influence teachers' responses to immigrant students. For instance, are Asian immigrant students in predominantly Asian classrooms rewarded for appropriate classroom behavior to the same extent as their peers in predominantly non-Asian classrooms? Further research along these lines will allow for a more detailed understanding of the way that immigrants assimilate into U.S. society by virtue of the educational system.

Notes

1. Our data do not allow for us to discern the citizenship status of our respondents. Thus, although all respondents in the sample resided in the United States at the time of the study's administration, in our study all immigrant groups may be in part composed of an indeterminate proportion of noncitizens of the United States.

2. Ideally, we would prefer to disaggregate the Asian groups. However, the National Educational Longitudinal Study (NELS) does not yield sufficient sample sizes across Asian groups to support the analyses employed in this study.

3. To calculate imputed values, we used the STATA ICE module for multiple imputation designed by Patrick Royston (2004).

4. In this article, to aid readability, we talk about group differences in the odds of an event's occurrence in terms of an event's being more or less likely. However, such statements should not be interpreted as referring to estimates from maximum likelihood estimation.

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