

Postsecondary Enrollment of Immigrant Boys and Girls:
The Effect of Family Contexts in the Transition to Adulthood

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Introduction.

The pathway to socioeconomic attainment in the United States is largely predicated on successfully navigating through primary and secondary school, and, in many cases, making a successful transition to postsecondary institutions (Heckman et al. 2003; Smith and Welch 1986). Although participation in higher education has increased across all racial and ethnic groups in the post-Civil rights era (An 2010; Clotfelter et al. 1991), the educational attainment of some immigrants and their descendants continues to lag behind. With children of immigrants representing nearly one quarter of the youth population in the United States today (Howden and Meyers 2011), understanding the factors that shape their pathways through secondary and into postsecondary education becomes critical.

This paper employs a life course perspective to understand the diverging trajectories of children of immigrants in the United States as they move through late adolescence and into adulthood with a focus on their transition into postsecondary education. A life course perspective emphasizes key transition points in an individual's life that can alter subsequent trajectories and attainment going forward (Crosnoe and Wildsmith 2011; Elder et al. 2003). In the case of educational differentials, a life course perspective points to the individual and family circumstances at key transition points that may alter subsequent school enrollment, school engagement and, finally, educational attainment. The analyses presented here examine the role of competing demands on youth that may be associated with generation status differences in the

transitions out of high school. Research following immigrant and U.S.-born youth through their high school years suggests some of the divergence in attainment stems from disadvantaged economic backgrounds among some immigrant groups but also finds that higher educational expectations and motivations on the part of some immigrants reduces attainment gaps (e.g., Hao and Bonstead-Bruns 1998; Kao and Tienda 1995; Portes and Rumbaut 2001; Rumbaut 2005; White and Glick 2009). Based on this prior research, the analyses here examine the extent to which differences in the post-secondary educational pathways among children of immigrants and their third and higher generation counterparts (i.e. U.S. born children who have U.S. born parents) are associated with expectations and life course transitions that may constrain post-secondary school participation or influence the type of post-secondary institution attended.

Life course pathways in young adulthood, including transitions through school, are differentiated by gender. Although gender gaps in educational attainment have decreased overall in the United States (Bailey and Dynarski 2011; Buchmann and DiPrete 2006; Fuller 2010) and the most recent studies show that female students outnumber male counterparts in the college enrollment and completion (Flashman 2013), this is not the case for all racial/ethnic groups (Wood, Kaplan, and McLoyd 2007). And, for children of immigrants, parental expectations and differential paths to family formation create gendered patterns through postsecondary education (Feliciano and Rumbaut 2005; Qin 2006). Understanding differences in the educational attainment of immigrants, children of immigrants and those of higher generation statuses requires attention to the differential opportunities and demands placed on boys and girls by nativity and generation status.

The analyses presented here focus on one key educational transition: The move from high school into postsecondary school. There is considerable variation in the likelihood of going to

college, the type of colleges attended and the probability of completing a degree by nativity and generation, and these gaps in educational attainment are visible at various points throughout the academic pathway. Some of the difference occurs among those who fail to complete high school. Failure to complete high school is a strong indicator of low educational attainment because few of those who drop out at that point ever receive additional education (Murnane et al. 2000). Even among those few who attain the GED after dropping out of high school, fewer still move to postsecondary education (Boesel, Alsalam, and Smith 1998; Tyler and Lofstrom 2010). Another gap in the educational pathway occurs between those who start their postsecondary education at four-year colleges and those who start at two-year or community colleges (Alba and Lavin 1981; Rouse 1994; Velez 1985; Whitaker and Pascarella 1994). Adjusting for previous school performance and educational expectations during high school does not completely explain the disadvantage among those who begin their postsecondary careers in two-year colleges that persists when compared to those who begin at four-year colleges (Alfonso 2006).

This paper addresses the possible factors that lead immigrant youth, second generation youth and their peers in the third and higher generation to select different pathways through the educational pipeline. The analyses rely on the Educational Longitudinal Study (hereafter ELS) 10th grade cohort of 2002 and include consideration of the familial roles that may further influence different pathways for boys and girls across these generation groups. Specifically, we ask whether parental expectations and family formation play a larger role in the transition from high school to postsecondary education of first or second generation youth when compared to their third and higher generation peers, whether that varies by racial/ethnic group, and whether these factors explain generational gaps for girls more so than boys.

Background.

Postsecondary pathways. Understanding differences in the likelihood of going to college and then completing a degree requires attention to variations in the earlier educational paths taken by adolescents and young adults. The route chosen is often predicated on student's previous educational performance and experiences as well as family financial resources. Earlier school performance and success are strong predictors of high school completion as well as the likelihood of pursuing higher education (Hurtado et al. 1997). Once students make it into high school in the United States, they are then faced with a series of possible routes out of secondary school. High school students are faced with the possibility of exiting education before the completion of high school or continuing on to complete high school. The path divides again for those who choose postsecondary education versus those who do not. And still more, the path divides again sorting among those who choose to attend postsecondary institutions by institution type.

Among high school graduates in the United States, there is considerable variation in the likelihood of applying to college and the types of colleges to which youth apply and subsequently attend (Conway 2009; Desmond and Turley 2009; Kim 2002). There are a variety of postsecondary options available from vocational or applied schools, two-year institutions or four-year institutions offering bachelor's degrees. The choices that students make are critical because completed educational attainment is strongly associated with the first educational institution students attend following high school (Reynolds 2012). There is limited agreement as to whether community colleges "increase baccalaureate attainment by providing access to higher education for students who would otherwise not attend college", or as some counter, "decrease baccalaureate attainment for students who would otherwise attend a four-year institution." (Alfonso 2006: 873). However, community colleges and related institutions may serve important

roles for students with fewer educational resources (Cohen and Brawer 2008; Kao and Thompson 2003; Swail, Cabrera, and Lee 2004; Szelenyi and Chang 2002). The availability of two-year colleges not only boosts the total years of education but also the probability of completing a bachelor's degree among Hispanic students (Gonzalez and Hilmer 2006). Therefore, these two-year institutions may be a more accessible route to postsecondary education for some immigrant and second generation youth.

Generation Status and College Attendance. Overall, research with nationally representative data on adolescents suggests that first and second generation youth are more likely to attend college than their same race peers in the third and higher generations (Keller and Tillman 2008; Rethon, Heath, and Lessard-Phillips 2009). Some of this is accounted for by the similar educational attainment among first generation adults who entered the United States as children. Analyses with the National Education Longitudinal Study (NELS), a school based cohort study beginning with eighth graders in 1988, demonstrate that Latino youth have lower levels of postsecondary participation than non-Hispanic white or Asian youth (Swail, Cabrera, and Lee 2004). This, however, varies by generation status and ethnicity (Farley and Alba 2002; Hagy and Staniec 2002). Once family background and socioeconomic status is controlled, Mexican and other Hispanic youth in the second generation are more likely to go onto college than their third and higher generation counterparts while there is only a small advantage among Asians in the first generation when compared to their third and higher generation counterparts (Glick and White 2004; Hagy and Staniec 2002). Performance on high school exams, previous grade retention, and family socioeconomic status continued to be important predictors of attainment into adulthood (White and Glick 2009; Witkow and Fuligni 2011).

Another important consideration for understanding generation status differences in

educational pathways that has received somewhat less attention in the research literature is the extent to which boys and girls in immigrant families face different opportunities when compared to their peers with US born parents. For recent cohorts, gender gaps in education have reduced or reversed but there remains considerable variation in the gender gap in education by race/ethnicity and nativity (Everett et al. 2011; Flashman 2013). Although young Hispanic girls appear to be less likely to persist in some postsecondary settings than their male counterparts, the gender differences have been reported to be smaller for other groups (Conway 2009). Another study examining educational paths among children of immigrants in Miami and San Diego reports overall higher rates of college attainment among young women than their male counterparts, a gap particularly apparent among several of the Asian-origin groups (Rumbaut 2005). Women in the second generation appear to have an advantage over men in educational attainment but again only for some ethnic groups (Rothon, Heath, and Lessard-Phillips 2009).

Although family socioeconomic status and previous school performance may help explain some of the generation status gaps in educational attainment, explaining these divergent paths at the intersection of gender and generation status requires further work. One factor that influences ultimate educational attainment among those who go on to college is the type of institution chosen (Raynolds 2012). Nationally, more females than males enrolled in postsecondary institutions but this gender ‘advantage’ is not present among Black, Hispanic and American Indian youth. Further, those who began at a 4-year institution were more likely to complete a degree program than those who began at a 2-year institution (Ross et al., 2012). Unfortunately, these analyses did not examine nativity or generational status differences in these paths.

There are many reasons why we may observe differences in the type of institution youth

attend: differential academic preparation among some children of immigrants and differential access to educational resources and financial aid all influence choice of post-secondary institution (Alon, Domina, and Tienda 2010; Rouse 1994). Community colleges are an important conduit to higher education for many minorities including immigrants and their children with limited resources (Cohen and Brawer 2008; Kao and Thompson 2003; Olivas 1979; Swail, Cabrera, and Lee 2004). These institutions may also be appealing for those immigrant groups with stronger preferences for keeping adult children nearby or in the same household. But such generation status differences may be more pronounced when compared separately by gender. For example, children of immigrants in New York City tend to stay within the city to attend college, a pattern that was especially prevalent among female students across all ethnic groups (Holdaway 2011). Traditional gender roles may make two year institutions particularly important for girls from immigrant families by limiting options to nearby institutions (Auerbach 2004; Desmond and Turley 2009; Kibria 1993).

Gender, Family Context and Generational Status. What factors associated with family context might explain gaps in educational attainment by generation status and gender? There are several studies that have addressed the importance of gender differences in explaining nativity or generational differences in education. Overall, family economic background similarly predicts educational outcomes for immigrants of both genders (Kao and Tienda 1995; Portes and Rumbaut 2001; Rumbaut 2005; White and Glick 2009). But there are other factors that may underlie gender variations in educational attainment for immigrant youth. For example, familial roles and expectations clearly vary for boys and girls across racial/ethnic groups in the United States (Fuligni, Tseng, and Lam 1999). Although few studies have considered this throughout the transition into postsecondary education, there is reason to expect that parental expectations,

obligations to the family of origin, and differential paths to family formation all create gendered patterns through postsecondary education for children of immigrants (Feliciano and Rumbaut 2005; Qin 2006; Wells et al. 2011).

First, immigrant parents often express higher educational aspirations than U.S. born parents and continue to report consistently high expectations for children's educational attainment than many U.S. born parents (Raleigh and Kao 2010; Waters 1994; Portes and Rumbaut 2001). This seems to be particularly true for second generation youth (Hao and Bonsted-Burns 1998). Besides variation by generation status, parental expectations also vary by gender (Flouri and Hawks 2008; Rosen and Aneshensel 1978). Some immigrant groups may hold more gendered expectations for education and the transition to adulthood, and this may be associated with subsequent variations in actual educational attainment. Investing in education for daughters may be less valued than investing for sons among immigrant parents, and daughters, as compared to sons, are often subject to more parental control (Dion and Dion 2001). However, in other studies, equal importance on education for both genders was presented, resulting in higher attainment among girls (Zhou and Bankston 1997; Flashman 2013). One recent study of Latinos in the United States finds that parental encouragement and engagement have a stronger positive effect on the educational performance of boys. However, there was little differential effect found among girls (Lutz and Christ 2009). Another study of Latino parents' expectations for their children to attend college supports this finding as well (Auerbach 2004).

Second, children of immigrants may experience different timing in their own family formation experiences than children of U.S. born parents. Early marriage and childbearing is associated with lower educational attainment and explains some of the variations in racial/ethnic educational attainment in the United States (Brand and Davis 2011; Landale, Schoen, and

Daniels 2010; Morgan 2011; Rumbaut 2005). There is a limited body of research attending to nativity and generation differences in youths' early sexual activity, fertility or union formation, but research does suggest that these patterns differ by race/ethnicity and gender. For example, Spence and Brewster (2010) report that sexual initiation is slower among first generation and second generation Hispanic and Asian girls than their third and higher generation peers. Among boys, Asians tend to make slower transitions into sexual activity than their peers from other ethnic groups and this is less variable by generation status than it is among girls (Spence and Brewster 2010). Other studies also report a slower transition to sexual initiation among immigrant youth, particularly for those with less exposure to the United States and coming from non-English backgrounds (Afable-Munsuz and Brindis 2006). There is also variation in early family formation with entrance to parenthood or marriage coming earlier among some Hispanic foreign born youth than Hispanic U.S. born youth (Singly and Landale 1998). Others report a curvilinear pattern such that those in the second generation are the least likely to be married when compared to first and third and higher generation young adults across race and ethnicity (Brown, Van Hook, and Glick 2008).

All of this work suggests there are indeed important generation differences in adolescent sexual and union formation behaviors and that these behaviors also vary by gender (Marini 1984). Here we further suggest these differences may also alter subsequent generation status variations in the routes out of secondary and into postsecondary education. The pursuit of postsecondary education delays marriage and childbearing (Cherlin 2000). But such early family formation is not a uniform barrier to education for all youth. Black and Hispanic youth who marry or have a child are less likely to drop out of education than non-Hispanic white youth who enter family formation at the same point in the life course (Glick et al. 2006). If, however, first or

second generation youth are more likely to enter into family formation during or before they complete high school than third and higher generation youth, this may explain not only differential rates of high school completion and continuation to postsecondary education but subsequent decisions about the type of postsecondary educational setting chosen.

The Current Study.

This paper addresses several questions regarding the routes to postsecondary educational attainment among immigrant and U.S. born youth. First, the analyses address the persistence of generation status differences in the participation in postsecondary education. Because two-year colleges are often the first choice for many minority and immigrant youth (Cohen and Brawer 2008; Vernez and Abrahamse 1996), the analyses contrast those who attend two-year versus four-year colleges. This was presented in a study among students at the City University of New York, a system that grants both associate and bachelor's degrees. Among students, immigrants who are Black or Hispanic, or come from Latin America and Caribbean tend to be more represented in associate degree programs (Bailey and Weininger 2002). In our study, these two groups are then compared to youth who do not transition into a postsecondary institution in the first two years after high school.

The next step in the analyses is to identify the extent to which parental educational expectations and family formation intervene in the educational pathways from high school to postsecondary education. Based on previous research, we expect to see variation in the experiences of early adulthood by gender (Waters, Carr, and Kefalas 2011). We expect these family-related factors – parental expectations and family formation – to explain generational differences in the educational routes of girls with perhaps less of the generational variation among boys accounted for. This seems likely if such family related obligations are heavier for

girls than boys and thus seen as acceptable barriers in girls' educational pathways.

The analyses take advantage of the longitudinal ELS study to follow youth from 10th grade, out of high school and into their first postsecondary institution. Based on the previous research on generation status differences in secondary education, we expect family resources and previous school performance to exert considerable influence on the likelihood that youth of all generations attend any postsecondary education following high school. However, noting the importance of two-year institutions for those with fewer resources and less familiarity with postsecondary institutions in the United States, we expect considerable differences by generation status in the type of postsecondary institution chosen.

Guided by previous research and prevailing trends, we expect that the first generation youth will be more likely to attend a two-year institution than a four-year institution when compared to their second or third and higher generation counterparts. However, we also expect this variation to be more pronounced among girls than boys as well as by race and ethnicity. We expect family factors, (i.e. parental expectation and family formation) which tend to reflect gendered role expectations, to influence the paths chosen by first and second generation girls and should observe fewer differentials by generation status in models adjusting for these factors. We expect these factors to be less important as mediators between generation status and post-secondary school enrollment in models for boys.

Data and Methods.

The data come from three waves of Educational Longitudinal Study of 2002. The ELS data is nationally representative of 10th graders in 2002. We rely on three waves of data: the base year when respondents are in 10th grade (2002), the first follow-up when most respondents are in 12th grade (2004), and the second follow-up which occurs two years later (2006) when the

majority of respondents are two years out of high school. The outcome measure of education comes from the respondent's status by the 2006 wave of the data. Respondents whose educational status is not observed in 2006 are removed from the sample. This leaves us with a final sample of analyses are 4,665 girls and 4,080 boys. The analyses are run separately by gender to explore how boys and girls from immigrant households (first and second generation) differ in their educational pathways from the students who are from non-immigrant households (third and higher generation). We also take into consideration of potential variation within respective generation by race and ethnicity.

The ELS data have several advantages including being nationally representative, longitudinal and including significant numbers of youth from immigrant families. The data provide sufficient information on family of origin contexts, youth's own experiences of family formation and educational activities during the transition to adulthood. The longitudinal data allow us to observe youth while they are in high school. Unfortunately, we cannot address a significant proportion of immigrant youth who arrive in the United States without ever enrolling in high school in the United States (see Oropesa and Landale 2009). The sample also does not include those who dropped out prior to 10th grade. However, if respondents drop out of school at any point after they are initially observed in the ELS, they are still retained in the sample. Thus, we can focus on the educational persistence of students who were enrolled in 10th grade in the United States regardless of their education status after that point.

Dependent Variable. The analyses take on a two-step binary logistic regression. The first dependent variable is a binary measure of educational attainment observed in 2006, two years after the majority of the sample completes high school. Respondents who enroll in a postsecondary institution regardless of its type (i.e. two-year college or a four-year college) are

compared to those terminating their education, at least temporarily, at high school graduation or less (reference group)¹. The second dependent variable is the type of postsecondary institution the respondents are enrolled. Respondents who enroll in four-year institution are compared to those enrolled in two-year institution including community college regardless of whether it is public, non-profit private, or for-profit private. All other institutions in which students matriculate in less than two years (e.g., vocational schools and technical schools, n =264) were not considered as postsecondary education in the current study and are therefore categorized in the same group with those completing high school or less education by 2006². This is due to the fact that the credits earned at two-year institutions often transfer to four year institutions, while that is not often the case for vocational and technical schools.

Independent Variables. One of the key independent variables in the analyses reflects the generation status of the individual respondents. If the respondent and their parent(s) are born abroad, he/she is coded as first generation. If the respondent was born in the United States but had one or two foreign born parent, he/she is coded as second generation. If the respondent and their parent(s) are all born in the U.S., he/she is coded as third and higher generation. The third and higher generation category, the largest, serves as the reference group. In this paper, first and second generation students are identified as students from immigrant households while third and higher generation students are identified as students from non-immigrant households. Household level generation categories are used interchangeably with individual level generation categories when appropriate. In order to analyze potential generational differences within respective racial and ethnic group, we grouped generation by race and ethnicity (e.g., First generation White,

¹ Some of these youth may return to complete high school (Entwisle et al., 2004). We do not observe returns to schooling beyond these two years after what would have been their senior year.

² Those who go onto vocational and technical schools consist 8% of this group. The majority is those who graduate from high school, followed by those who drop out of high school.

Second generation Asian). Some subgroups were combined together to deal with the small cell size³.

We are also interested in exploring how family factors are associated with the educational pathways of the respondents. We focus on two dimensions of family context that may intervene in the educational experiences during late adolescence to early adulthood: Parental educational expectations and formation of new family through marriage and/or childbearing. First, because youth who come from homes in which education is valued and expected may be more likely to pursue not only postsecondary education in general but to focus on the pursuit of higher degrees than their peers from early on, we include a measure for parental educational expectations reported by students at 10th grade. We use students' report instead of parental report⁴. In other word, we are interested in whether the way youth perceive and internalize the educational expectation of their parents influences actual educational pathways. The majority of students reported that their parents expected their child to at least complete high school (i.e. few reported expectations of less than high school). Therefore, parental expectations are represented in the analyses in four categories: (1) High school graduate with or without some college (reference group), (2) Complete a four year college degree, (3) Complete an advanced degree, and (4) Do not know the expectation of their parents. We retain this last group rather than imputing a level of expectations for them because youth who do not know their parents' expectations for them are unlikely to consider these expectations in their own educational decisions. Further, this may

³ We conducted several sensitivity checks prior to collapsing categories and concluded that combining subgroups would not be detrimental to our study. The collapsed subgroups include the following: First generation and second generation Blacks; First and Second generation Native American and Mixed and Other Race; Third generation Native American and Mixed and Other Race.

⁴ When coding parental expectation, we also prioritized mother's expectation over that of father. The expectation of father was substituted when mother's expectation was missing or student reported as "don't know". Overall, parental expectations in the ELS are fairly high.

imply less parental influence on youth overall, a theoretically important distinction and one that may differ significantly by generation status.

Second, some youth engage in early family formation activities (i.e. becoming parents and/or entering marriage). Such family formation experiences are expected to reduce educational attainment, particularly in the case of girls. We create a single binary measure identifying those who experienced marriage or child bearing (or partner bearing child) by third wave with those who have not experienced the events as the reference group. Because respondents' report of family related schooling interruptions and their actual family formation behaviors are highly correlated (i.e. those who marry or have a child are considerably more likely to offer this as a reason for interrupting schooling than those who do not engage in family formation) we enter these measures into separate regression models.

Control Variables. The analyses also include several control variables known to be associated with educational progress. To assess the resources available at home, we include a standardized measure of socioeconomic status based on a composite measure of household income, occupational prestige, and parental educational attainment (Teachman 1987). Other variables reflect the family composition and individual respondent characteristics in high school. Family composition is coded into five categories based on the composition of the respondent's household in the base year (2002): two-parent household (reference group), single parent household, and non-parent household. We include a measure of the respondent's age combined with their history of grade retention: The variable is coded as one if he/she is age 16 years, the normative age for 10th grade in 2002, or younger. The variable is coded as zero if he/she is older than average 10th grade age or reported to have been held back a grade in the past. Combining these measures, age and grade retention reduces the prevalence of missing data to be imputed.

We obtain similar substantive results with using age alone. Disability status is based on the report by their teachers at wave one. It is coded as one when the teacher reports that the student experiences at least one type of disability (Cho 2007; DesJardins, Ahlburg, and McCall 2002). Previous school performance is also an important factor in predicting attendance in any postsecondary institution so we also include measures of standardized test scores from 10th grade in math and reading tests.

Analytic Strategy. Two-step nested models of binary logistic regression were conducted to estimate the likelihood of (1) attending postsecondary education as opposed to not attending postsecondary education, and (2) attending four-year college as opposed to attending two-year college. We are interested in the probable variation of educational pathways by immigrant generation status for boys and girls respectively. The binary logistics regression models predict the likelihood the respondent attends postsecondary institution in 2006, which is two years post normal high school graduation, independent of the educational experiences between base year in 2002 at 10th grade.

We present five models for each outcome. Because our life course model predicts greater nativity and generational variation in the pathways through higher education among girls and greater mediation by other life course events and expectations, we present all models estimated separately by gender. The first model represents a baseline model to present the differences in the likelihood of attending a postsecondary institution as opposed to not attending postsecondary institution by generation and race/ethnicity. Based on previous research, we then control for measures that are associated with previous schooling experiences: socioeconomic status, age, household composition, math and reading test scores, and disability status. In the third model, we add our first key measure of family context: perceived parental expectations. This model

addresses whether generational differences observed in the first model are mediated at least in part by differences in parental expectations. The fourth model explores the association of actual family formation on postsecondary participation. The final model explores the association when the family of origin and the family of formation factors are both included in a model.

Descriptive Statistics.

The descriptive characteristics of the ELS cohort by gender are presented in Table 1. Overall, demographic variables including generation status, household composition, race and ethnicity are similar in distribution for both girls and boys. The average standardized test scores at 10th grade in math and readings are also similar although boys have slightly higher math scores while girls have slightly higher reading scores. Girls tend to come from lower socioeconomic households than boys on average for the study sample. On the other hand, higher proportions of boys than girls are reported by their teachers to have some type of disability. For our main dependent variable, educational attainment by the third wave of the ELS study, boys have lower educational attainment than girls. For example, approximately 17% of the girls have only completed high school or less education compared to over 22% for boys. Likewise, 55% of the girls enroll in four year college by this point compared to less than half of the boys 51%. Enrollment in two-year college is also slightly higher for girls than boys.

<Table 1. About Here>

There is also considerable generational and gender variation in those family context factors that we expect may interfere with educational experiences in the late adolescence and early adulthood. Table 1 demonstrates that girls report higher perceived parental educational expectation than boys. The vast majority of girls (84%) report that their parents expect them to attend graduate school. We also explored the frequency of actual family formation (i.e. marriage

or childbearing) on the part of the respondents throughout the study period. Girls are much more likely to have experienced either marriage or childbearing than boys. While over 12% girls reported to have either married or had a child by 2006, less than 5% of boys had any family formation experiences.

These variations in family formation and other family context are even more magnified if we examine these patterns separately for girls and boys by generation status. This can be seen descriptively in Table 2. Recall that girls overwhelmingly report high parental expectations. But in Table 2 it is apparent that this is not shared by all girls. First generation girls report that their parents have significantly lower expectations than girls in the higher order generation groups. Similarly, first and third and higher generation girls are more likely than second generation girls to experience a schooling interruption and/or their own family formation, while among boys, there is less difference across generations (results not shown). These patterns provides some preliminary support to the hypothesis that second generation girls experience or perceive more family support for higher education and are less likely to engage in activities that delay their educational progress. And, as first generation girls are the most likely to have married or become a parent, this may be an important factor in their overall lower likelihood of postsecondary institution and also attending a four year college and may explain why two-year institutions are more favored by first generation girls than their peers in either the second or third and higher generations.

<Table 2 About Here>

Among boys, parental expectations are distributed more evenly across all generations. Recall that second generation girls appear to be advantaged in terms of parental expectations and slower family formation compared to their first or third and higher generation counterparts. In

contrast, the family context measures are more similar between first and second generation boys with both groups experiencing fewer interruptions in their educational pathways when compared to third and higher generation boys. These descriptive results reflecting different educational activities as well as family context experiences further support analyzing generational patterns for boys and girls separately.

Our outcome variable, educational attainment/enrollment as of 2006, shows similar patterns for girls and boys overall. However, our interest is in the generational variations in education by gender. Table 3 presents a cross tabulation of educational status in 2006 by immigrant generation status separately by gender. Overall, first generation respondents have lower educational attainment and are less likely to be enrolled in a four-year college than their higher generation peers. For girls in the first generation, two-year colleges appear to be a particularly attractive option as they are the most likely than any of their higher generation peers or any of the groups of boys to attend these institutions. There is less generational variation in education among boys than among girls (this is due to relatively lower proportion of boys attending four-year college when compared with girls) although first generation boys are somewhat less represented among those in a four-year institution than their higher generation peers. In sum, these initial results suggest differences in the experience of late adolescence and early adulthood by gender as well as generation status. The multivariate models that follow examine whether these differences in the educational pathways chosen by 2006 continue after controlling for demographic characteristics including socioeconomic status but also with adjustment for the contexts in the family of origin and family formation during the transition to adulthood.

<Table 3 About Here>

Multivariate Models.

Two-step logistic regression models predicting postsecondary enrollment patterns, estimated separately for girls and boys, are presented in the two panels of Table 4 and Table 5. Table 4 shows the likelihood of attending postsecondary institution (i.e. two-year and four-year colleges) as opposed to not enrolled in any postsecondary institution two years after graduation. Among girls, model 1 shows that second generation Asian is the only group that is significantly more likely to attend college as compared to our reference group, third and higher generation Whites. To the contrary, third and higher generation Blacks, first and second generation Hispanics, and third and higher generation Other Race are significantly less likely to attend college than the reference group.

<Table 4 About Here>

As shown in model 2, however, once other demographic factors are controlled (i.e., age, family socioeconomic status, household structure, disability, and previous school performance), only third and higher generation Other Race remains at a relative disadvantage. First and second generation Asians, third and higher generation Blacks, and first and second generation Hispanics are more likely to attend college than the reference group. Among boys, not only second generation Asians but also first and second generation Whites are more likely to attend college than third and higher generation Whites, while third and higher generation Blacks, Hispanics of all generation, and third and higher generation Other Race are less likely to attend college than our reference group. Similar to girls, in model 2, once we control for other demographic factors, neither Blacks nor Hispanics are at a relative disadvantage. As a matter of fact, first generation Hispanics along with Asians, Blacks, and Whites from immigrant households (i.e. first and second generation) are more likely to attend college than our reference group. In short, much of

the disadvantages observed among Blacks and Hispanics of both gender are explained away by the demographic controls. This is especially the case for second generation Hispanic girls and first generation Hispanic boys.

The next models add our first family context measures. Model 3 adjusts for the respondents' perceptions of their parent's educational expectations when the respondents were in 10th grade. For both girls and boys, perceiving that their parents expect them to attain postsecondary education even beyond a four year degree is associated with an increased probability of attending postsecondary education two years after high school. For both gender, there is little difference in the effect of parental expectation on the likelihood of students attending college, yet the effect is much prominent for boys. While for girls, only very high expectation significantly increases the likelihood of attending college, for boys, any expectation more than college completion contribute to their postsecondary enrollment.

In model 4, we examine the role of actual family formation on respondents' likelihood of attending postsecondary institution following high school. Model 4 includes a measure indicating that the respondent had either married or become a parent at any time between 2002 and 2006. This measure is distinct from the first family related measures in the sense that it includes respondents' actual behavior rather than their perceptions or expectations. Overall, the likelihood of attending postsecondary education decreases significantly if respondents have experienced marriage or had a child. Among girls, we observe a large decrease in the coefficients of second generation girls, noting that significant advantage among this group are attributed to them postponing to start a family. In other words, the relative advantage of second generation girls is accounted for by the lower prevalence of family formation among this group.

The final model includes the two family context variables. The patterns are similar from the earlier models for both gender. Among girls, first and second generation Asians and Hispanics and third and higher generation Blacks are at an advantage while are more likely to attend college than our reference group, while third generation Other Race is at a disadvantage when compared to our reference group. Among boys, those from immigrant households are at a relative advantage except for second generation Hispanics. When within race/ethnic group generational differences are examined, we find that among Asian boys, the second generation is most likely to go on to postsecondary education followed by the first generation. Third and higher generation is least likely to take that path. For Asian girls, we find less overall variation across generations, but first generation is more advantaged than second generation. Similarly, among Hispanics, first generation boys are at a relative advantage, while among girls, second generation tops the other generations.

The second step of our analyses predicts the probability of attending a four-year college as opposed to a two-year college among the students who continued on to postsecondary education. Notice that the sample of these models only includes boys and girls enrolled in postsecondary institution in 2006. The parameters of the models in Table 5 are equivalent with the previous models shown in Table 4. In model 1, we observe similar pattern for boys and girls. Without any control, Hispanics of all generation and third and higher generation Blacks are less likely to attend four-year college as opposed to two-year college than third and higher generation Whites. Additionally, among girls, second generation Asians show relative advantage.

<Table 5 About Here>

In model 2, once the demographic factors are controlled, the pattern starts to diverge between gender. Among girls, second generation Hispanics now becomes significantly more

likely to attend four-year college than our reference group along with second generation Asians and third and higher generation Blacks. Although it didn't reach statistical significance, other groups such as first and third and higher generation Hispanics as well as first and second generation Blacks are at a relative advantage once socioeconomics, family background, and previous test scores are held constant. Among boys, on the other hand, we see no significant advantage among Asians; rather we observe significant advantage among Blacks. Third and higher generation boys, on the other hand, are at a significant disadvantage.

Model 3 explores the effect of parental expectation. As compared to the models in Table 4, the parental expectation matter less for boys. In other words, while parental expectation may be attributed to encouraging boys to attend postsecondary education, it matters less in deciding the type of institution. For girls, however, very high parental expectation encourages them to go on to four-year colleges.

In model 4, we observe few remaining generation status differences once we adjust for family formation. While family formation equally discourages youth to continue on to postsecondary education, when it comes to the types of institution, it only affects girls. For boys, starting family does not increase the probability of them opting for a two-year college while that is a more likely option for girls. Also, the results that suggest the lower family formation among girls in the second generation is an important component of their subsequent participation in higher education.

The final model includes all the parameters. The patterns across the models continue to prevail in this model for both gender. This recurrent pattern across models shows that for boys, there is very little variation by race and ethnicity and generation, and that the socioeconomic status, family background and standardized test scores predict the type of institutions they attend.

On the other hand, for girls, although these are important factors in institutional preference, starting family is a strong factor. Furthermore, there is more variation by race and ethnicity and generation as compared to boys. Second generation Asian and Hispanic girls and third and higher generation Black girls are most likely to go to four-year college.

Discussion.

The growth of the first and second generation in the young adult population today requires greater attention to how educational pathway trajectories diverge and perpetuate socioeconomic inequalities. Early life course events set the stage for the cumulative advantages or disadvantages in educational attainment (Crosnoe and Wildsmith 2011; Elder et al. 2003). The analyses presented here demonstrate the importance of family context in late adolescence on educational paths into the transition to adulthood. Family socioeconomic status and prior academic preparedness clearly predict subsequent educational transitions. Once these factors are taken into account, boys and girls from immigrant families are more likely to pursue some post-secondary education.

Overall, the results presented here suggest that there is a great deal to be optimistic about when looking at the educational prospects for the growing population of first and second generation youth in the United States. Consistent with prior research, the factors that impede their postsecondary educational enrollment among first and second generation youth are largely similar to those that hamper the education of all students: low socioeconomic status and low academic preparation in primary or secondary school (see Baum and Flores 2011; Rumbaut 2005). Students from low socioeconomic status backgrounds are more likely to rely on two-year institutions than their peers from higher socioeconomic status backgrounds. These institutions may serve as stepping stones to higher education. However, it will be necessary that these

schools offer assistance for students to move on to complete a four year degree if these students are not to be ultimately disadvantaged compared to their U.S. born peers (see Clark 1960; Rosenbaum, Deil-Amen, and Person 2006).

The paths through postsecondary education also clearly diverge more by generation status among girls than boys. The small advantage in postsecondary enrollment evidenced among second generation girls may be accounted for by their slower transition to family formation and lower likelihood of interrupting their secondary schooling for family related demands. Early childbearing can disrupt “educational and occupational opportunities to develop human capital and move into the economic mainstream” (Rumbaut 2005:1041). These gendered behaviors appear to cumulatively hinder mobility for first generation girls.

There are some limitations to the analyses presented here. The ELS sample is too small for further disaggregation by parental country of origin. The results here suggest some higher enrollment among Asian girls and boys when compared to non-Hispanic whites with some additional advantage in four-year college enrollment among Black youth once family background is included in the analyses. We examined the data descriptively for the largest country of origin groups (Chinese, Filipino and Mexican) even though the number of cases in each group is insufficient for separate multivariate analyses. Overall, the patterns are quite consistent with our substantive conclusions as well as general patterns observed in other studies of youth (Bailey & Weininger 2002; Rumbaut 2005). For example, first generation Mexican origin girls are the most likely to rely on two-year colleges than their higher generation counterparts.

Clearly, more research is needed to understand the potential presence of multiple hurdles that may interfere with the postsecondary education experience of youth from diverse

backgrounds. Further work is also needed to identify the educational differences by gender in parents' countries of origin which may further elucidate the gendered patterns immigrant parents may bring with them and then confer to their children in the United States. We were also faced with some limitations when operationalizing gender role expectations and family obligations. We hypothesized that gender role expectations and gendered family related activities in late adolescence and early adulthood would help explain generational variation in pathways to higher education and found some support for this. We infer these expectations and activities based on the variations in perceived parental educational expectations and respondents' reports of reasons for not continuing their education out of high school or into college. Although we do not have more direct measures of obligations to family of origin and tasks performed in the home, results based on the measure of actual family formation experiences are consistent with our contention that girls and boys engage in different activities during adolescence and early adulthood and these activities help explain some of the generational status differences in educational pathways by gender.

The results of this study suggest the rapidly closing educational gender gap in the United States is still ajar among the first generation and that especially among girls in the midst of predominant presence of female students on campus. Unlike first generation boys who are more likely to go on to four year colleges relative to their native born peers from similar socioeconomic backgrounds, first generation girls are less likely to matriculate to four-year institutions than their U.S. born counterparts. And, higher attainment by second generation girls is, in part, explained by a delay of family formation by comparison. To further reduce generation status gaps in educational attainment, therefore, it is important to attend to the competing demands placed on boys and girls in adolescence among these different generation status groups.

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Table 1. Summary Statistics

Variables	Total		Girls		Boys	
	Proportion or Mean	Std Error	Proportion or Mean	Std Error	Proportion or Mean	Std Error
Immigrant Generation & Race/Ethnicity						
1 st Generation White	0.9 %		0.9 %		0.8 %	
2 nd Generation White	3.3 %		3.2 %		3.4 %	
3 rd + Generation White	60.1 %		59.8 %		60.5 %	
1 st Generation Asian	3.0 %		3.2 %		2.8 %	
2 nd Generation Asian	3.9 %		3.8 %		4.0 %	
3 rd + Generation Asian	0.8 %		0.6 %		0.9 %	
1 st & 2 nd Generation Black	1.3 %		1.2 %		1.4 %	
3 rd + Generation Black	9.1 %		9.7 %		8.4 %	
1 st Generation Hispanic	2.6 %		2.9 %		2.3 %	
2 nd Generation Hispanic	5.0 %		4.7 %		5.4 %	
3 rd + Generation Hispanic	5.0 %		5.0 %		5.0 %	
1 st & 2 nd Generation Other Race	1.4 %		1.3 %		1.6 %	
3 rd + Generation Other Race	3.6 %		3.6 %		3.6 %	
Family Composition						
Two Parents	79.8 %		79.2 %		80.3 %	
No Parent	1.2 %		1.2 %		1.2 %	
One Parent	19.0 %		19.5 %		18.5 %	
Parental Expectation						
HS graduation	6.5 %		5.5 %		7.6 %	
Attending College	7.2 %		6.7 %		7.7 %	
Attending Graduate School	82.3 %		84.1 %		80.3 %	
Student do not know	4.0 %		3.6 %		4.5 %	
Family Formation by 2006 (married or had a child)	8.9 %		12.8 %		4.5 %	
Actual Educational Attainment in 2006						
HS or Less	19.4 %		17.1 %		22.1 %	
Enrolled in 2 yr college	27.3 %		27.8 %		26.7 %	
Enrolled in 4 yr college	53.3 %		55.2 %		51.2 %	
Male	46.7 %		0.0 %		100.0 %	
Age for Grade (percent at the average)	61.1 %		64.6 %		57.0 %	
Socioeconomic Status (z score)	0.131	0.983	0.085	0.997	0.183	0.963
Participants with disability	9.17 %		7.46 %		11.13 %	
Standardized Test Scores at 10th Grade						
Math	52.8	9.660	52.0	9.280	53.7	10.002
Reading	52.7	9.711	53.1	9.361	52.3	10.081
Sample Size	8,745		4,665		4,080	

Source: Educational Longitudinal Study, 2002-2006

Table 2. Family Context Measures by Generation Status and Gender

Panel A. Girls

	Parent Expectations			Family Formation			
	High school or less	College	More than College				
First generation	10.64	***	7.00	79.83	**	14.29	
Second generation	7.11	**	5.85	83.89		8.53	***
Third and Higher generation (= ref)	4.71		6.86	84.60		13.33	

Panel B. Boys

	Parent Expectations			Family Formation			
	High school or less	College	More than College				
First generation	12.22	***	7.41	76.67		5.56	
Second generation	9.92	***	6.02	* 79.84		3.09	*
Third and Higher generation (= ref)	6.79		8.01	80.63		4.73	

* $p > 0.1$, * $p > 0.05$, *** $p > 0.01$

Source: Educational Longitudinal Study, 2002-2006

Table 3. Paths through Postsecondary Education by Generation Status and Gender
 Panel A. Girls

	High school only	2 year college	4 year college
First generation	20.73*	34.17***	45.10***
Second generation	14.38*	27.96	57.66
Third and Higher generation (= ref)	17.17	27.13	55.70

Panel B. Boys

	High school only	2 year college	4 year college
First generation	20.74	31.11*	48.15
Second generation	20.65	28.29	51.06
Third and Higher generation (= ref)	22.50	25.98	51.52

* $p > 0.1$, ** $p > 0.05$, *** $p > 0.01$

Source: Educational Longitudinal Study, 2002-2006

Table 4. Binary Logistic Regression of Postsecondary Education (no postsecondary = reference group), 2006

Panel A. Girls	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	1.781 *** (0.052)	-3.295 *** (0.332)	-3.479 *** (0.352)	-2.564 *** (0.345)	-2.742 (0.368)
Generation Status (vs. 3rd + Generation White)					
1 st Generation White	0.784 (0.601)	1.097 (0.638)	1.037 (0.638)	0.938 (0.646)	0.874 (0.643)
2 nd Generation White	0.402 (0.277)	0.193 (0.301)	0.190 (0.304)	-0.033 (0.299)	-0.037 (0.301)
1 st Generation Asian	0.337 (0.270)	0.822 *** (0.301)	0.797 *** (0.302)	0.645 ** (0.304)	0.636 ** (0.306)
2 nd Generation Asian	0.611 ** (0.275)	0.822 *** (0.303)	0.808 *** (0.304)	0.590 * (0.305)	0.584 * (0.307)
3 rd + Generation Asian	0.858 (0.734)	0.795 (0.795)	0.717 (0.786)	0.789 (0.836)	0.710 (0.823)
1 st & 2 nd Generation Black	0.185 (0.407)	0.903 (0.451)	0.809 (0.445)	0.743 (0.464)	0.652 (0.457)
3 rd + Generation Black	-0.682 *** (0.121)	0.369 ** (0.145)	0.348 ** (0.146)	0.425 *** (0.151)	0.403 *** (0.152)
1 st Generation Hispanic	-1.250 *** (0.186)	0.425 * (0.218)	0.415 * (0.220)	0.391 * (0.225)	0.380 * (0.227)
2 nd Generation Hispanic	-0.595 *** (0.168)	0.669 *** (0.197)	0.651 *** (0.197)	0.657 *** (0.205)	0.635 *** (0.205)
3 rd + Generation Hispanic	-0.841 (0.154)	-0.198 (0.179)	-0.197 (0.182)	-0.140 (0.186)	-0.140 (0.189)
1 st & 2 nd Generation Other Race	0.129 (0.382)	0.061 (0.408)	0.033 (0.410)	-0.056 (0.414)	-0.086 (0.415)
3 rd + Generation Other Race	-0.950 *** (0.176)	-0.531 *** (0.203)	-0.554 *** (0.204)	-0.551 *** (0.210)	-0.567 *** (0.211)
SES (z scores)		0.718 *** (0.055)	0.682 *** (0.055)	0.650 *** (0.057)	0.618 *** (0.057)
Age		0.349 *** (0.089)	0.344 *** (0.090)	0.258 *** (0.093)	0.253 *** (0.093)
Household Structure (vs. Two-Parent)					
Single Parent		-0.035 (0.105)	-0.053 (0.106)	-0.010 (0.110)	-0.026 (0.110)
Non-Parent		-0.957 *** (0.301)	-0.931 *** (0.303)	-0.800 *** (0.310)	-0.780 ** (0.312)
Previous school performance					
Math scores in 10th grade		0.070 *** (0.008)	0.067 *** (0.008)	0.066 *** (0.008)	0.064 *** (0.008)
Reading scores in 10th grade		0.027 *** (0.007)	0.023 *** (0.007)	0.022 *** (0.007)	0.019 ** (0.008)
Disability		-0.377 *** (0.144)	-0.355 ** (0.145)	-0.417 *** (0.149)	-0.395 *** (0.150)
Parents' expectations (vs. < college)					
College degree			0.191 (0.194)		0.173 (0.202)
More than college degree			0.629 *** (0.154)		0.591 *** (0.160)
Unknown expectations			0.086 (0.235)		0.066 (0.243)
Family formation				-1.458 *** (0.106)	-1.448 *** (0.106)

* p>0.1, ** p> 0.05, *** p> 0.01

Source: Education Longitudinal Study, 2002-2006, N = 4,829

Panel B. Boys	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	1.383 *** (0.049)	-2.898 *** (0.301)	-3.207 *** (0.318)	-2.713 (0.304)	-3.029 *** (0.321)
Generation Status (vs.3rd + Generation White)					
1 st Generation White	1.357 * (0.731)	1.360 * (0.794)	1.344 * (0.781)	1.295 (0.790)	1.279 * (0.778)
2 nd Generation White	0.664 ** (0.270)	0.523 * (0.293)	0.560 * (0.299)	0.470 (0.292)	0.507 * (0.298)
1 st Generation Asian	0.429 (0.274)	1.013 *** (0.305)	0.967 *** (0.307)	0.997 *** (0.308)	0.951 *** (0.309)
2 nd Generation Asian	1.351 *** (0.330)	1.580 *** (0.361)	1.573 *** (0.363)	1.506 *** (0.359)	1.499 *** (0.361)
3 rd + Generation Asian	0.291 (0.448)	0.262 (0.485)	0.210 (0.483)	0.264 (0.492)	0.214 (0.489)
1 st & 2 nd Generation Black	0.449 (0.384)	1.100 ** (0.444)	0.980 ** (0.439)	1.098 ** (0.446)	0.981 ** (0.441)
3 rd + Generation Black	-0.695 *** (0.125)	0.361 ** (0.149)	0.270 * (0.150)	0.372 ** (0.150)	0.286 * (0.151)
1 st Generation Hispanic	-0.832 *** (0.221)	0.580 ** (0.259)	0.566 ** (0.261)	0.626 ** (0.262)	0.605 ** (0.263)
2 nd Generation Hispanic	-0.947 *** (0.147)	0.026 (0.175)	0.042 (0.178)	0.012 (0.176)	0.031 (0.179)
3 rd + Generation Hispanic	-0.450 *** (0.164)	0.167 (0.185)	0.090 (0.186)	0.201 (0.187)	0.126 (0.188)
1 st & 2 nd Generation Other Race	0.189 (0.335)	0.222 (0.370)	0.132 (0.370)	0.186 (0.368)	0.096 (0.368)
3 rd + Generation Other Race	-0.851 *** (0.178)	-0.646 ** (0.208)	-0.640 ** (0.210)	-0.604 *** (0.211)	-0.602 *** (0.213)
SES (z scores)		0.770 *** (0.054)	0.714 *** (0.055)	0.746 *** (0.054)	0.689 *** (0.055)
Age		0.306 *** (0.086)	0.279 ** (0.087)	0.278 ** (0.087)	0.251 ** (0.088)
Household Structure (vs. Two-Parent)					
Single Parent		-0.123 (0.105)	-0.129 (0.106)	-0.127 (0.105)	-0.134 (0.106)
Non-Parent		-0.148 (0.310)	-0.129 (0.312)	-0.080 (0.317)	-0.062 (0.318)
Previous school performance					
Math scores in 10th grade		0.044 *** (0.007)	0.041 *** (0.007)	0.041 *** (0.007)	0.039 *** (0.007)
Reading scores in 10th grade		0.036 *** (0.006)	0.032 *** (0.006)	0.036 *** (0.006)	0.032 *** (0.006)
Disability		-0.501 *** (0.123)	-0.471 *** (0.125)	-0.503 *** (0.124)	-0.473 (0.126)
Parents' expectations (vs. < college)					
College degree			0.501 *** (0.179)		0.496 *** (0.180)
More than college degree			0.758 *** (0.137)		0.760 *** (0.138)
Unknown expectations			-0.053 (0.212)		-0.042 (0.213)
Family formation				-1.009 *** (0.172)	-1.006 *** (0.173)

* p>0.1, ** p> 0.05, *** p> 0.01

Source: Education Longitudinal Study, 2002-2006, N = 4,426

Table 5. Binary Logistic Regression of Four-Year College (Two-Year College = reference group), 2006

Panel A. Girls	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.774 *** (0.043)	-5.815 *** (0.334)	-6.029 *** (0.376)	-5.631 *** (0.337)	-5.849 *** (0.379)
Generation Status (vs.3rd + Generation White)					
1 st Generation White	0.037 (0.350)	0.575 (0.406)	0.564 (0.406)	0.559 (0.412)	0.550 (0.412)
2 nd Generation White	0.070 (0.194)	0.020 (0.218)	0.006 (0.218)	-0.015 (0.218)	-0.028 (0.218)
1 st Generation Asian	-0.137 (0.187)	0.306 (0.221)	0.325 (0.221)	0.278 (0.221)	0.295 (0.222)
2 nd Generation Asian	0.425 ** (0.190)	0.615 *** (0.223)	0.620 ** (0.225)	0.529 ** (0.222)	0.535 ** (0.224)
3 rd + Generation Asian	0.325 (0.439)	0.437 (0.526)	0.443 (0.523)	0.387 (0.532)	0.394 (0.529)
1 st & 2 nd Generation Black	-0.020 (0.306)	0.567 (0.340)	0.563 * (0.340)	0.521 (0.343)	0.516 (0.342)
3 rd + Generation Black	-0.236 ** (0.120)	0.879 *** (0.145)	0.871 *** (0.146)	0.942 *** (0.148)	0.933 *** (0.149)
1 st Generation Hispanic	-1.278 *** (0.228)	0.217 (0.265)	0.209 (0.266)	0.224 (0.266)	0.221 (0.268)
2 nd Generation Hispanic	-0.666 *** (0.161)	0.439 ** (0.192)	0.440 ** (0.193)	0.434 ** (0.195)	0.434 ** (0.195)
3 rd + Generation Hispanic	-0.596 *** (0.160)	-0.017 (0.184)	-0.026 (0.185)	0.023 (0.188)	0.011 (0.189)
1 st & 2 nd Generation Other Race	0.182 (0.307)	0.419 (0.340)	0.391 (0.341)	0.451 *** (0.347)	0.425 (0.348)
3 rd + Generation Other Race	-0.231 (0.197)	0.157 (0.221)	0.140 (0.221)	0.186 (0.223)	0.171 (0.223)
SES (z scores)		0.498 *** (0.046)	0.481 *** (0.046)	0.475 *** (0.046)	0.458 *** (0.047)
Age		0.076 (0.082)	0.083 (0.082)	0.040 (0.083)	0.046 (0.083)
Household Structure (vs. Two-Parent)					
Single Parent		0.070 (0.100)	0.067 (0.100)	0.096 (0.101)	0.093 (0.102)
Non-Parent		-0.493 (0.389)	-0.474 (0.391)	-0.480 (0.393)	-0.463 (0.394)
Previous school performance					
Math scores in 10th grade		0.071 *** (0.007)	0.070 *** (0.007)	0.071 *** (0.007)	0.070 *** (0.007)
Reading scores in 10th grade		0.047 *** (0.006)	0.045 *** (0.006)	0.046 *** (0.006)	0.044 *** (0.007)
Disability		-0.666 *** (0.162)	-0.642 *** (0.163)	-0.671 *** (0.163)	-0.648 *** (0.164)
Parents' expectations (vs. < college)					
College degree			0.113 (0.247)		0.129 (0.249)
More than college degree			0.402 ** (0.201)		0.407 ** (0.202)
Unknown expectations			-0.081 (0.286)		-0.048 (0.288)
Family formation				-1.137 *** (0.144)	-1.131 *** (0.144)

* p>0.1, ** p> 0.05, *** p> 0.01

Source: Education Longitudinal Study, 2002-2006, N = 4,006

Panel B. Boys	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.793 *** (0.047)	-5.200 *** (0.339)	-4.989 *** (0.375)	-5.175 *** (0.339)	-4.963 *** (0.376)
Generation Status (vs.3rd + Generation White)					
1 st Generation White	-0.195 (0.378)	-0.261 (0.410)	-0.274 (0.409)	-0.268 (0.409)	-0.282 (0.409)
2 nd Generation White	-0.124 (0.196)	-0.139 (0.218)	-0.137 (0.219)	-0.146 (0.218)	-0.145 (0.219)
1 st Generation Asian	-0.023 (0.222)	0.397 (0.255)	0.378 (0.256)	0.395 (0.256)	0.375 (0.257)
2 nd Generation Asian	0.030 (0.181)	0.012 (0.211)	-0.005 (0.211)	0.002 (0.210)	-0.015 (0.211)
3 rd + Generation Asian	-0.147 (0.375)	-0.146 (0.426)	-0.139 (0.427)	-0.143 (0.427)	-0.136 (0.428)
1 st & 2 nd Generation Black	0.253 (0.326)	0.982 *** (0.371)	0.967 *** (0.370)	0.977 *** (0.370)	0.962 *** (0.370)
3 rd + Generation Black	-0.280 * (0.145)	0.867 *** (0.172)	0.865 *** (0.172)	0.871 *** (0.172)	0.870 *** (0.172)
1 st Generation Hispanic	-1.386 *** (0.276)	-0.481 (0.325)	-0.484 (0.326)	-0.461 (0.326)	-0.462 (0.327)
2 nd Generation Hispanic	-0.627 *** (0.180)	0.075 (0.208)	0.041 (0.209)	0.070 (0.208)	0.035 (0.209)
3 rd + Generation Hispanic	-1.227 *** (0.176)	-0.785 *** (0.198)	-0.772 *** (0.198)	-0.783 *** (0.198)	-0.770 *** (0.198)
1 st & 2 nd Generation Other Race	0.136 (0.309)	0.224 (0.341)	0.224 (0.344)	0.214 (0.341)	0.214 (0.344)
3 rd + Generation Other Race	-0.212 (0.222)	-0.056 (0.252)	-0.037 (0.253)	-0.054 (0.253)	-0.035 (0.254)
SES (z scores)		0.491 *** (0.051)	0.477 *** (0.052)	0.484 *** (0.051)	0.469 *** (0.053)
Age		0.135 (0.086)	0.137 (0.086)	0.133 (0.086)	0.135 (0.086)
Household Structure (vs. Two-Parent)					
Single Parent		0.051 (0.113)	0.042 (0.113)	0.049 (0.113)	0.040 (0.113)
Non-Parent		-0.231 (0.383)	-0.231 (0.382)	-0.216 (0.384)	-0.214 (0.383)
Previous school performance					
Math scores in 10th grade		0.062 *** (0.007)	0.060 *** (0.007)	0.061 *** (0.007)	0.060 *** (0.007)
Reading scores in 10th grade		0.043 *** (0.006)	0.042 *** (0.006)	0.043 *** (0.006)	0.042 *** (0.006)
Disability		-0.573 *** (0.150)	-0.566 *** (0.151)	-0.573 *** (0.150)	-0.565 *** (0.151)
Parents' expectations (vs. < college)					
College degree			-0.604 ** (0.243)		-0.609 ** (0.243)
More than college degree			-0.029 (0.193)		-0.029 (0.193)
Unknown expectations			-0.156 (0.292)		-0.152 (0.292)
Family formation				-0.364 (0.271)	-0.385 (0.272)

* p>0.1, ** p> 0.05, *** p> 0.01

Source: Education Longitudinal Study, 2002-2006, N = 3,304