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## **ABSTRACT**

Increased immigration from Latin America and the subsequent boom in the U.S. Latino population has brought with it controversy over how these 'new immigrants' are assimilating relative to Europeans from earlier waves of immigration. Empirical evidence suggests a Latino disadvantage in educational outcomes as well as intergenerational decline or stagnation. However, the fluid and dynamic nature of Latino self-identification suggests that some of these trends may be, in part, an artifact of the selective nature of Latino self-identification and ethnic attrition. This study uses data from the National Longitudinal Study of Adolescent Health (Add Health) and its newly released educational component, the Adolescent Health and Academic Achievement Study (AHAA), to examine whether empirical evidence of educational disadvantage among Latinos at the end of high school and intergenerational decline in educational outcomes are influenced by inconsistent reports of ethnicity between home and school and ethnic attrition among adolescents with Latino family origins.

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### Introduction

With an influx of new immigrants in recent decades, primarily from Asia and Latin

America, the U.S. has experienced rapid demographic shifts. Most notable are the large rise in
the Latino population and the predictions about its exponential increase: it is predicted that by
2050 Latinos will make up 29% of the U.S. population (Passel and D'Vera Cohn 2008).

Consequently, the assimilation of Latinos is closely tied to the well-being of the U.S. as a whole.

Thus, consistent reports of Latino disadvantage in education and the labor market and signs of
intergenerational decline have spurred enormous research and debate. At the same time,
increased immigration and intermarriage have made the U.S. population increasingly diverse.

While racial and ethnic identification have always been fluid and complex, such demographic
changes have renewed interest in the social constructionist view of race and ethnicity and have
brought new attention to the shifty and inconsistent nature of self-identification. With this have
come questions about the ability to make valid inferences from survey data about group
differences in educational outcomes (Saperstein 2006).

Due to the racialization of Latino ethnicity and the subsequent meanings it has become imbued with, the choice of Latino self-identification may not be random; in fact, adolescents who identify as Latino may be negatively selected on the outcomes most often used to gauge the well-being of the population, including educational achievement and attainment. In addition, adolescents with Latino family origins who no longer identify as Latino may be positively selected on these same outcomes. The bifurcated nature of the current U.S. economy has made postsecondary matriculation a necessary condition for labor market success. Thus, educational outcomes measuring preparation for college are often used to gauge the well-being of the Latino population relative to non-Latino whites as well as intergenerational progress among Latinos. A

better understanding of the meanings behind Latino self-identification within schools is important when drawing conclusions about the well-being of this growing population.

Data from the National Longitudinal Survey of Adolescent Health (Add Health) and its attached education component (Adolescent Health and Academic Achievement Study) provides a unique opportunity to gauge the impact of measurement on trends in Latino educational disadvantage and generational decline. Specifically, this study will investigate how self-reports of Latino ethnicity based on in-school or in-home reports and/or ethnic attrition might bias empirical trends in Latino educational achievement and attainment.

## **Academic Disadvantage and Generational Decline**

Empirical evidence suggests that Latinos lag behind non-Latino whites in a variety of measures of educational achievement and attainment, including standardized test scores, high school grades, SAT scores, high school graduation rates, and college entrance and completion rates. In addition, evidence suggests that Latinos are more often placed in general or vocational tracks in high school and take less advanced coursework required for success at the postsecondary level (Kao and Thompson 2003; Crosnoe, Lopez-Gonzalez, and Muller 2004). Disadvantages in the educational arena, especially those most proximate to postsecondary education, raise alarm because of the increasing necessity of a college degree for success in the labor market and for overall economic security. In addition, the growth in the U.S. Latino population since 1965 has made the success of this group increasingly tied to the overall well-being of the U.S. (U.S Census 2000; Bean and Tienda 1987). Thus, it is not surprising that evidence of Latino educational disadvantage relative to non-Latino whites has received such attention and debate and has become one of the most important social issues of the 21st century (Suarez-Orozco and Suarez-Orozco 2001).

Moreover, evidence suggests that, among Latinos, educational outcomes decline or stagnate across generations (Crosnoe 2005; Gibson and Ogbu 1991; Wojtkiewicz and Donato 1995; Valenzuela 1999). Some evidence suggests that U.S. born Latinos, both second and third generation, have worse academic outcomes than the first generation, while other evidence suggests an increase in performance between the first and second generation followed by stagnation or reversal in the third generation. Either scenario provokes concern and poses the question of why the new immigrants, particulary groups of Latino immigrants, are not assimilating into mainstream U.S. society. Such debate over generational decline coupled with overwhelming evidence of Latino educational disadvantage relative to non-Latino whites has sparked controversy and concern, in part, because of the huge demographic changes that have occurred over the last several decades and the future impact Latinos will have in the U.S. However, it is important to recognize that the use of self-identification to measure Latino ethnicity, especially that which is collected in racialized school contexts, may be impacting observed trends in important ways.

# The Fluidity of Ethnic Self-Identification and Ethnic Attrition

The U.S. is becoming an increasingly multiracial and multiethnic context. The latest Census enumeration, allowing for counts of the multiracial population, has piqued new interest in the consistency of reports of racial and ethnic identification (Harris and Sim 2000; Harris 2002; Perlmann and Waters 2002) and solidified a position that social scientists have long affirmed: race is a social construction (Omi and Winant 1994, Haney Lopez 1996) and ethnic identity is inherently fluid and complex (Hollinger 1995, Thernstrom 1992, Waters 1990).

Recent research using data from the National Longitudinal Study of Adolescent Health (Add Health) has shown that racial and ethnic self-identification can shift depending on the

context in which the self-identification occurs. Specifically, using student reports of racial identity from both an in-school and an in-home survey, Harris and Sim (2002) found discrepancies between the race(s) reported in-school versus in-home among a sample of adolescents and that such discrepancies have a large impact on estimates of the proportion of multiracials in the sample. In an effort to explain in-home and in-school reporting discrepancies, they posit that having a parent present during an interview may lead adolescents to base their racial self-identification on parental norms of race, norms that may not correspond to current understandings of race relations in the U.S. Thus, when given the opportunity to identity themselves racially in school, a context that offers more anonymity, adolescents often choose to self-identify racially differently than they would at home.

Extending the work of Harris and Sim, Brown, Hitlin, and Elder (2006) include Hispanics in their analysis and find that such an inclusion only bolsters the findings of Harris and Sim.

They find that Hispanic self-identification between home and school, similar to racial self-identification, is fluid: 20% of adolescents who self-identify as Hispanic at school do not identify as Hispanic at home. Notably, adolescents who identify as Hispanic at home appear to be more consistent in their identification between home and school. The authors also find that black youth are more likely to show inconsistencies in their reports of Latino ethnicity. While not clear, these findings suggest that the choice made by adolescents to inconsistently report their Latino ethnicity may not be random. Such a possibility may have implications for the empirical comparison of self-identified Latinos to non-Latino whites as well as any observed intergenerational decline among Latinos. If adolescents self-identifying in school but not at home are performing better or worse academically, measures of Latino progress and intergenerational progress may differ depending on the source of Latino self-identification the analysis is based on.

Other research has shown the fluidity of Hispanic identity across time. Eschbach and Gomez (1998) use two waves of High School and Beyond to estimate the likelihood of shifting from a Hispanic identity to a non-Hispanic identity. They find that 16% of adolescents identifying as Hispanic in 1980 shift to a non-Hispanic identity just two years later. Factors contributing to such shifting identity included English monolingualism, attendance at school with few Hispanic students, and increasing socioeconomic status. Such findings suggest that individuals who drop their Hispanic identity may be positively selected on human capital, including English language proficiency and socioeconomic status.

Additional research has explicitly examined the human capital selectivity in ethnic attrition among Mexican Americans. Duncan and Trejo (2005), using data from the 2000 U.S. Census, show that Mexican intermarriage often results in children who are identified by and identify as non-Latino. Importantly, individuals in such intermarriages are often positively selected on human capital, including educational attainment and English proficiency. These results suggest that the identification of children from Mexican intermarriages as non-Hispanic could lead to selective ethnic attrition, which could contribute to observed generational declines in education and labor market outcomes among Mexican Americans.

This previous literature suggests that the choices individuals make about their Latino self-identification is fluid, such that it varies across time and space. In addition, evidence of ethnic attrition and ethnic shifting across time does not appear to be random: individuals who choose to shift to a non-Latino self-identification and individuals who are products of Mexican intermarriages yet not identified as Latino are positively selected on important resources, including educational attainment and English language proficiency. However, the evidence on inconsistent reports across different contexts such as school and home is less clear. While we do

know that Latino adolescents who identify racially as black are more likely to report a Latino identity in school but not at home, we do not know if inconsistent reporters vary on their educational achievement and attainment. Such evidence may suggest that, in combination with ethnic attrition and ethnic shifting, inconsistent reports of Latino ethnicity may contribute to mismeasurement of intra- and intergenerational progress of Latinos in the U.S.

## **Latino Self-Identity and Academic Success or Failure**

The racialization of ethnicity in the U.S. has led to the creation of a pan-ethnic label of Hispanic or Latino, which has become imbued with significant meaning and which is often used to describe all individuals with Latin American origins in the U.S (Rodriguez 2000). In some public rhetoric the term may be used disparagingly, and the Latino population may be spoken of as a "problem" the U.S. must solve through policy reforms (Huntington 2004). The historic discrimination of Latinos in the U.S. in the educational system and the labor market and the subtractive assimilation forced upon them has led to the creation of a racialized ethnic minority population in the U.S. whose youth often feel compelled to reject normative educational goals as a form of psychological self-defense (Matute-Bianchi 1991; Flores-Gonzalez 1999; Valenzuela 1999). Thus, many Latino youth underperform academically even after taking into account differences in human capital such as parent's education and language use. In addition, the decline in academic well-being across generations of Latinos suggests a powerful link between a racialized Latino ethnic identity that emerges within the U.S. and academic success (Matute-Bianchi 1991; Valenzuela 1999).

Research has established a clear link between racial and ethnic identities and academic success: some identities are positively associated with academic success (white) and some are negatively associated with academic success (black and Latino), and these associations influence

the academic effort of individuals as they attempt to resist acting white or non-white (Fordham and Ogbu 1986; Valenzuela 1999). In addition, individuals establish particular identities (racial and other) based on the messages received from teachers and peers and academic success. The development of a non-white identity occurs through the daily experiences within schools and the larger community, experiences that often involve exclusion and subordination (Flores-Gonzalez 1999; Lewis 2003; Morris 2006). Schools are a central site for the development of identity, especially racialized identities both because of the developmental stage of school children and because schools are highly racialized (Lewis 2003). Individuals base their racial classifications of themselves and others on certain cues, not all of which are related to physical characteristics. Students with low academic status within the school, aware that such status is racialized, may begin to identify as a racialized minority or as "other." Such identification may have more to do with cultural cues other than racial or ethnic heritage.

# **Situational Identity**

Cooley (1902) suggested that negative feelings that emerge through interaction with others may provoke changes in behavior, as individuals constantly seek social acceptance from others. Thus, what individuals assume others are thinking about them impacts how they see themselves and how they, in turn, identify themselves (Cooley 1902). Similarly, Goffman (1954) proposed that individuals are constantly trying to control how others perceive them, through impression management. Individual self identities often serve as adaptive strategies and resources used to maneuver within systems of inequality. In different contexts, one identity may be emphasized over another, depending on the nature of the situation, and these identities have meanings for both those performing the identity and those observing the performance. Lewis (2003) recounts the experience of a white woman who passes as Puerto Rican only to fit into her

role as a garment factory worker. The woman was afraid the other workers would not be able to make sense of the situation if they learned that she was white (non-Latino).

In secondary schools, where identities become more tied to potential future success both in the educational system and the labor market (Bettie), individuals who perceive limited opportunity for advancement may use ethnic identity to downplay or resist normative goals. This may occur because of the close link in the U.S. between race and class, with "whiteness" being linked to middle class culture. They may be forced to "adopt alternative badges of dignity" (Bettie 2003).

Thus, while an inconsistent Latino self-identification between home and school may suggest assimilation, or loss of ethnic identity, it may also indicate an adoption of a racialized ethnic identity associated with resistance to educational norms. Inconsistent self-identifiers who have Latino parents or who report having Latino family origins may be more likely to be experiencing assimilation; inconsistent identifiers coming from non-Latino families may more likely be adopting a Latino self-identity in school as a form of resistance.

I use data from the National Longitudinal Study of Adolescent Health (Add Health) and its newly attached educational component, the Adolescent Health and Academic Achievement Study (AHAA), to examine possible selectivity in educational outcomes among adolescents with Latino family origins who self-identify as Latino in school but not at home and among adolescents with non-Latino family origins who self-identity as Latino in school but not at home. Additionally, I examine possible selectivity in educational outcomes among adolescents who have Latino parents or Latino family origins but choose not to identify ethnically as Latino. Finally, I examine the impact of such selectivity on estimates of educational disadvantage of Latinos relative to non-Latino whites and on intergenerational decline among Latinos.

## **Data and Methods**

This study uses data from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative, longitudinal study of adolescents who were in grades 7-12 in 1994, and its newly attached education component, the Adolescent Health and Academic Achievement Study (AHAA). Based on a two-stage stratified sampling design, over 80 high schools were selected for the Add Health study according to their region, urbanicity, sector, racial composition, and size. Each sample high school was then matched to one of its feeder schools, leading to a sample of 80 high schools and 52 middle schools (132 schools in total) in 80 communities.

Between September 1994 and December 1995, all available 7th-12th grade students in study schools (N=90,118) responded to the In-School Survey, which covered topics ranging from family background to risky behaviors. In 1995, a sub-sample of students participating in the In-School survey (N=20,475) completed the Wave I In-Home survey. The data collected during the In-Home sample is nationally representative of adolescents in grades 7-12 in the U.S. In addition, the In-Home interview was much more extensive than the In-School survey and included a parent interview, which provided family composition history, which can be linked to the student In-Home interviews. Adolescents interviewed at Wave I, excluding those that had been in 12<sup>th</sup> grade at Wave I, were re-interviewed for the Wave II In-Home survey in 1996 and interviewed again for the Wave III survey in 2001 (Bearman, Jones, and Udry 1997).

In 2002-2003, when almost all Add Health respondents were no longer attending high school, high school transcripts and other education data were collected from the high schools last attended by Wave III Add Health respondents. Transcripts were collected and coded for 12,250 Wave III respondents, over 81% of the Wave III Add Health sample. Each course that appeared

on the transcript was coded with a standard coding scheme, the Classification System for Secondary Courses (CSSC), using information provided by the schools about course offerings. Grades were coded in a standard format and the courses were assigned Carnegie Units for comparability across schools. The coding schemes were comparable to those used in the National Assessment of Educational Progress High School Transcript Studies (NAEP-HSTS), and are similar to those used in NELS and HSB.

Independent Variables

Latino Self-Identification, Latino Family Origin, and Race

Both the in-school and in-home surveys allowed respondents to report their Latino ethnicity. Specifically, they were asked, "Are you of Hispanic or Latino origin?" Respondents had the option of reporting 'yes,' 'no,' or 'don't know.' The main categories of interest for this study include consistently non-Latino, Latino in-school but non-Latino at home, and consistently Latino.

The parent interview gave parents the opportunity to identify their racial and ethnic background and also allowed them to identify the racial and ethnic background of their spouse or partner, if applicable. With this information, I can identify students who have one or more parents who identify as Latino. However, Add Health does not provide the racial and ethnic background of non-resident biological parents. In an effort to include all respondents from Latino families, I used additional information from Wave III about family origins to create this variable. In Wave III respondents were allowed to describe their family origins by naming up to four countries, groups, or geographic areas. Thus, respondents with Latino family origins include those with one or more Latino parents and/or those who reported Latino family origins in Wave III. Individuals missing this data are excluded from analyses.

Using the standard race/ethnic coding scheme I create mutually exclusive racial categories based on information from the in school survey. I create a dummy for non-Latino white and a dummy for non-Latino black. Non-Latino white students are those who did not report a Latino ethnicity either at home or in school, who did not report a black, Asian, Native American, or other racial identity, and who chose a white racial identity. Non-Latino black students are those who did not report a Latino ethnicity either at home or in school and who chose a black racial identity, whether alone or in combination with another racial identity.

Using information about Latino self-identification, Latino family origins, and race, I construct six analytical categories: non-Latino white without Latino family origins, non-Latino white with Latino family origins, Latino in-school only without Latino family origins, Latino in-school only with Latino family origins, Latino in-school and at home, and non-Latino black.

# Dependent Variables

#### Educational Achievement and Attainment

I measure educational achievement and attainment using four indicators: high school graduation, graduated from or attending college, highest math course taken in high school, cumulative high school GPA, and verbal ability in young adulthood. All measures are constructed using transcript data except postsecondary attendance, which is constructed using several responses from the Wave III survey, and verbal ability, which is taken from the Wave III survey. I use the broader outcome of graduated from or attending college because of the age range of the Add Health sample; not all respondents had the opportunity to graduate from college by the time of the Wave III interview. This measure uses Wave III survey data that asked respondents how many years of education they have received, which type of degrees they have obtained, and whether or not they are currently enrolled in school. Using this information I

constructed a dummy indicator where 1=graduated from or attending college and 0=did not graduate from and not attending college. Also, high school graduation is based on student's exit status as recorded on their transcript as well as self-reported information from Wave III. It is a dichotomous variable where 1=graduated and 0=did not graduate.

Highest math course taken is an ordinal measure that comes from the student transcript data and represents the highest level of math course taken by the end of high school. The variable ranges from 1 (basic/remedial math) to 9 (calculus). Highest science course taken is also an ordinal measure that comes from the students' transcript data and represents the highest level of science course taken by the end of high school. This variable ranges from 1 (basic/remedial science) to 6 (physics).

Cumulative GPA was calculated by first averaging all of the grades (which were weighted by the amount of course credit) that appeared on the student's high school transcript for each year of high school and then taking the mean across all years. This variable is continuous, ranging from 0 to 4. For verbal ability in young adulthood, I use the percentile rank given respondents after taking an abridged picture vocabulary test in young adulthood. This score ranges from 0 to 100.

#### Control Variables

Add Health provides information on both parents' and respondents' nativity status. I use this information to determine if respondents are first, second, or third or higher generation. In the Wave I home interview respondents were given an abridged version of the Add Health Picture Vocabulary Test. I use this as a continuous variable. I create two dummy variables for urban and rural locale using data provided by the school administrator survey. The reference category is suburban. In Wave I, respondents are asked what language they usually speak at home, which

indicates whether or not respondents speak a non-English language at home. I create a dummy indicator where 1=usually speak a language other than English at home. Parents' education is a continuous variable ranging from 1-7. It is based on information from both the mother and father and takes the maximum of their highest level of education. I use age from Wave III and gender self-identification from Wave I. Add Health provides information on both parents' and respondents' nativity status. I use this information to determine if respondents are first, second, or third or higher generation.

## **Analytic Sample**

For the first set of analyses, which investigate the combined effect of ethnic attrition and inconsistent Latino self-identification between home and school on the over-estimation of Latino educational disadvantage relative to non-Latino whites, I limit the sample to third plus generation Latino, non-Latino white, and non-Latino black adolescents who were not missing data on parents' Latino ethnicity or Wave III self-reported Latino family origins. This results in an analytic sample of 5,263 adolescents, including 3,505 third plus generation adolescents who self-identified as non-Latino white, 3,461 of which do have Latino family origins and 44 of which do not have Latino family origins; 197 third plus generation adolescents who self-identified as Latino in school but not at home, 29 of which do have Latino family origins and 168 of which do not have Latino family origins; and 332 third plus generation adolescents who self-identified as Latino both in school and at home; and 1,248 third plus generation adolescents who self-identified as non-Latino black (Table 1).

The second set of analyses investigates the impact of ethnic attrition and inconsistent

Latino self-identification between home and school on observed generational decline in

academic outcomes among Latinos. Thus, I limit the sample to Latinos of all family origins and

non-Latinos with Latino family origins. This results in an analytic sample of 1,388 adolescents, including 236 first generation Latinos, 222 of which consistently identified as Latino and 14 of which did not; 502 second generation Latinos, 488 of which consistently identified as Latino and 26 of which did not; 529 third generation Latinos, 332 of which consistently identified as Latino and 197 of which did not; and 110 adolescents who self-identified as non-Latino but who had Latino resident parents or self-reported Latino family origins in young adulthood (Table 1).

# **Analytic Plan**

Latino Disadvantage Relative to Non-Latino Whites

Bivariate Analyses

The first step of my analysis is to compare the academic outcomes of the self-identifying racial-ethnic groups of interest including non-Latino whites with no Latino family origins, non-Latino whites with Latino family origins, adolescents who inconsistently identify as Latino and do not have Latino family origins, adolescents who inconsistently identify as Latino and do have Latino family origins, and adolescents who consistently identify as Latino, to see if particular groups are faring better or worse on academic outcomes. Such evidence might suggest that individuals who are inconsistent in their reports of Latino ethnicity may be positively or negatively selected on human capital in the form of educational achievement and attainment. It also might suggest that adolescents who self-identify as non-Latino but have Latino family origins (experiencing ethnic attrition) may be positively selected on human capital relative to self-identifying Latinos. I use t-tests to compare the means across groups, as seen in Table 2.

Multivariate Regression Predicting Academic Outcomes

Tables 3 through 7 present multivariate regression models predicting each of the six academic outcomes shown in Table 1. Each table includes six models, which help to confirm

whether or not inconsistent self-identification and/or ethnic attrition contribute to the observed educational disadvantage of Latinos relative to non-Latino whites. In each table, Model 1 includes a dichotomous variable indicating Latino self-identification in adolescence, either in school or at home. Model 1 also includes a dichotomous variable representing non-Latino black self-identification, making the reference group non-Latino whites; thus, the Latino coefficient in Model 1 represents the disadvantage experienced by adolescents who self-identify as Latino relative to adolescents who self-identify as non-Latino white. This coefficient represents the effect of Latino without taking into account either ethnic attrition (self-identifying as non-Latino white but having Latino family origins) or inconsistent Latino self-identification between home and school.

Model 2 in each table answers the question of whether or not taking into account ethnic attrition would reduce any Latino disadvantage relative to non-Latino whites. In other words, it tells us if re-classifying non-Latino whites with Latino family origins as Latino would reduce the negative effect of Latino relative to non-Latino whites. Thus, in Model 2 the Latino coefficient now represents the disadvantage experienced by adolescents who either self-identify as Latino in adolescence, have resident parents who self-identify as Latino, or report Latino family origins in young adulthood, relative to non-Latino whites with non-Latino family origins.

Model 3 in each table addresses the impact that inconsistent Latino self-identification may have on observed Latino educational disadvantage relative to non-Latino whites. It adds two dichotomous variables representing inconsistent Latino self-identification between home and school in adolescence. The first dichotomous variable represents individuals who self-identified as Latino in school but not at home and who had Latino resident parents or reported Latino family origins. The second dichotomous variable represents adolescents who self-identified as

Latino in school but not at home and who did not have Latino resident parents or report Latino family origins in young adulthood. The purpose of adding these two dichotomous variables in Model 3 is to see if any negative effect of Latino seen in Model 2 is reduced after controlling for inconsistent Latino self-identification. If the Latino coefficient is reduced between Model 2 and Model 3 and the inconsistent self-identification/no Latino family origins variable is significant then there is evidence that some of the Latino disadvantage relative to non-Latino whites may be due to the low academic performance of adolescents from non-Latino families who choose to identify as Latino in school. Thus, the Latino coefficient in Model 3 represents the Latino effect after adjusting for both inconsistent self-identification and Latino ethnic attrition.

Models 4-6 in tables 3-7 replicate Models 1-3 but also include basic socio-demographic variables, including gender, age, parents' education, verbal ability, language use at home, and school locale, to see if any Latino academic disadvantage exists after controlling for important individual and family characteristics associated with academic achievement and attainment.

Model 6 shows whether or not any Latino disadvantage exists after taking into account ethnic attrition, inconsistent Latino self-identification between home and school, and important socio-demographic variables.

Latino Generational Decline

Bivariate Analyses

Table 9 shows weighted means of academic outcomes by Latino self-identification and generational status for the second analytic sample, which includes all adolescents who self-identified as Latino in adolescence (in school or at home) and adolescents who self-identified as non-Latino but have Latino family origins.

Multivariate Regression Predicting Academic Outcomes

Tables 10 through 14 present multivariate regression models predicting each of the six academic outcomes shown in Table 9. Each table includes six models, which help to confirm whether or not inconsistent self-identification and/or ethnic attrition contribute to observations of generational decline in educational outcomes among Latinos. In each table Model 1 includes three dichotomous variables representing first generation Latino, second generation Latino, and non-Latino with Latino family origins. Thus, the reference category in Model 1 is third plus generation Latinos, and the coefficient for second generation indicates whether or not second generation Latinos are doing better or worse academically relative to third plus generation Latinos. A positive coefficient indicates that second generation Latinos are outperforming third plus generation Latinos and is therefore evidence of generational decline.

Model 2 in tables 10 through 14 includes only the two dichotomous variables from Model 1 representing second generation Latinos and third generation Latinos. The dichotomous variable representing non-Latinos with Latino family origins has been removed, changing the reference group from only third plus generation self-identified Latinos to third plus generation self-identified Latinos and self-identified non-Latinos with Latino family origins. If any of the observed generational decline among Latinos is due to ethnic attrition, then removing the dichotomous variable representing non-Latinos with Latino backgrounds should decrease any positive effect of second generation.

Model 3 in tables 10 through 14 adds a dichotomous indicator of inconsistent Latino self-identification. If any of the observed generational decline among Latinos is due to the low academic performance of adolescents who choose to self-identify as Latino at school, then the addition of this variable should further reduce any positive effect of second generation that remains in Model 2.

Models 4-6 replicate Models 1-3 but also include basic socio-demographic variables, including gender, age, parents' education, verbal ability, language use at home, and school locale, to see if any second generation advantage, or generational decline, exists after controlling for important individual and family characteristics associated with academic achievement and attainment. Model 6 shows whether or not any generational decline exists after taking into account ethnic attrition, inconsistent Latino self-identification between home and school, and important socio-demographic variables.

### **Results**

Latino Academic Disadvantage Relative to Non-Latino Whites

Bivariate Analyses

Table 2 shows weighted means of educational outcomes by Latino self-identification and Latino family origin. Column one shows the average educational outcomes for self-identifying non-Latino whites who do not have Latino family origins, and we see that these adolescents do better academically, both in terms of achievement and attainment, than all of the Latino categories. It also shows that adolescents who self-identified as Latino inconsistently and who do not have Latino family origins are disadvantaged relative to those who consistently identified as Latino in adolescence on all six educational outcomes shown. Inconsistent self-identifiers from non-Latino families, on average, do not quite reach geometry, while those who consistently identified as Latino almost reach Algebra II, a critical course for college admission and success. For science, inconsistent identifiers from non-Latino families, on average, do not reach Chemistry, while consistently identifying Latinos reach beyond Chemistry. Also, inconsistent identifiers from non-Latino families have a cumulative high school GPA that is, on average, .36 of a grade point lower than that of consistently identifying Latinos. They are also less likely to

graduate from high school (.76 vs. .85) and to attend college (.26 vs. .42) and have lower levels of verbal ability in young adulthood (33.05 vs. 49.29). These bivariate results suggest that observed academic disadvantages of self-identifying Latinos relative to non-Latino whites may be partly due to the identification of inconsistently self-identifying Latinos from non-Latino backgrounds as Latino.

Table 2 also shows that non-Latino whites with Latino family origins are advantaged on all academic outcomes of interest relative to all three groups of Latinos shown here, including adolescents with Latino family backgrounds who self-identify as Latino inconsistently, and adolescents without Latino family backgrounds who self-identify as Latino inconsistently, and adolescents who consistently identify as Latino. This suggests that the inclusion of non-Latino white adolescents with Latino family origins in the Latino category might reduce the observed disadvantage of Latinos relative to non-Latino whites in empirical analyses that rely on self-reported Latino ethnicity. Taken together, the descriptive statistics shown in Table 2 suggest that the combination of including adolescents with Latino origins as non-Latino and including inconsistent Latino self-identifiers from non-Latino backgrounds as Latino may over-estimate the disadvantage of Latinos relative to non-Latino whites in quantitative analyses that rely on self reports of Latino ethnicity.

Multivariate Regression Predicting Academic Outcomes

Table 3 presents results of multivariate regression models predicting highest math course taken in high school. The coefficient for Latino is negative and statistically significant: on average, third plus generation Latinos reach one course lower on the high school math sequence than do their non-Latino white counterparts. We see a similar pattern for cumulative high school GPA in Table 4, highest science taken in Table 5, high school graduation in Table 6, college

attendance in Table 7, and verbal ability in young adulthood in Table 8. Thus, there is a clear pattern of Latino disadvantage in academic achievement and attainment relative to non-Latino whites among third plus generation adolescents.

For highest math course taken in high school, shown in Table 3, we see that classifying non-Latino whites with Latino family origins as Latino slightly reduces the overall negative effect of Latino from -1.04 to -.94. Table 4 shows a similar reduction in the negative effect of Latino for cumulative high school GPA, and we also see a similar pattern for highest science course taken in high school in Table 5, high school graduation in Table 6, college attendance in Table 7, and verbal ability in young adulthood in Table 8. However, taking into account ethnic attrition only slightly reduces the negative effect of Latino ethnicity in all of these models, and there remains a large and statistically significant negative effect of Latino ethnicity for all of the educational outcomes.

For highest math course taken in Table 3, adding the two dichotomous indicators for inconsistent Latino self-identification reduces the negative effect of Latino from -.94 in Model 2 to -.50 in Model 3, and it is the inconsistent Latino self-identification with no Latino family origins coefficient that is negative and responsible for reducing the negative effect of Latino. A similar pattern can be seen for all remaining educational outcomes in Table 4-8. Adding an indicator of inconsistent Latino self-identification with no Latino family origins reduces the negative effect of Latino relative to third plus generation non-Latino whites from -.43 to -.28 for cumulative high school GPA, from -.52 to -.30 for highest science course taken in high school, from -.97 to -.79 for high school graduation, from -.71 to -.45 for college attendance, from -14.82 to -8.99 for verbal ability in young adulthood. However, for all outcomes a statistically significant negative effect of Latino persists.

For highest math course taken, taking into account ethnic attrition and inconsistent Latino self-identification reduces the negative effect of Latino to statistical insignificance. The same is true for cumulative GPA in Table 4, and verbal ability in young adulthood in Table 8. For highest science taken in Table 5, we see that the addition of individual and family background characteristics strongly reduces the negative effect of Latino (Model 3) and that this, in combination with accounting for ethnic attrition by moving non-Latino whites with Latino family origins into the Latino category, reduces the negative effect of Latino to statistical insignificance. This is also what we see for college attendance in Table 7. For high school graduation in Table 6, the addition of individual and family background characteristics, without accounting for ethnic attrition or inconsistent Latino self-identification, reduces the negative effect of Latino seen in Models 1, 2, and 3 to statistical insignificance.

#### Latino Generational Decline

# Bivariate Analyses

Table 9 shows weighted means of academic outcomes by Latino self-identification and generational status for the second analytic sample, which includes all adolescents who self-identified as Latino in adolescence (in school or at home) and adolescents who self-identified as non-Latino but have Latino family origins. While results show third plus generation consistently identifying Latino adolescents taking less advanced math and science courses in high school then their second generation counterparts and are more likely to attend college than their second generational counterparts, these differences are not statistically significant.

However, Table 9 does show that for two outcomes, math course-taking and science course-taking, third plus generation adolescents who self-identify as Latino only in school are performing worse then second generation adolescents who self-identify as Latino in school only.

On average, third plus generation adolescents who inconsistently report their Latino identity between home and school do not reach Geometry, while their second generation counterparts, on average, reach Algebra II. Also, third plus generation adolescents inconsistently self-identifying as Latino fail to reach Chemistry, while second generation adolescents who consistently identify as Latino reach or surpass this level of the high school science sequence. Thus, evidence of generational decline is much stronger among the group of Latino adolescents that only self-identifies as Latino in school, suggesting that taking into account inconsistent self-identification may reduce any evidence of generational decline in quantitative data analysis that relies on Latino self-identification.

In addition to this finding, Table 9 also shows that non-Latinos of Latino family origin, or adolescents who have experienced ethnic attrition, have higher levels of academic achievement and attainment than either group of third plus generation self-identifying Latinos. However, this difference is only statistically significant for verbal ability in young adulthood. This suggests that classifying non-Latinos of Latino family origin as third plus generation Latino may reduce some of the evidence of generational decline that often shows up in quantitative studies that rely on ethnic self-identification. Thus, the combination of ethnic attrition and inconsistent Latino self-identification may be causing an over-estimation of generational decline in academic outcomes among Latinos.

Multivariate Regression Predicting Academic Outcomes

Evidence of generational decline can be seen for highest math course taken in Table 10, highest science course taken in Table 12, and college attendance in Table 14. Second generation Latinos reach .67 of a math course higher than do third plus generation Latinos, .31 of a science

course higher than third plus generation Latinos, and are 124% more likely to attend college than are third plus generation Latinos.

In Model 2 in Table 10 we see that the positive coefficient for second generation is reduced from .67 in Model 1 to .54 in Model 2. The positive effect of second generation relative to third generation on highest science taken is reduced to statistical insignificance when the reference category is changed to include non-Latino whites with Latino family origins, suggesting that ethnic attrition may account for some of the observed generational decline in course taking in high school among Latinos. For college attendance in Table 14 we see that changing the reference category to include self-identifying non-Latinos with Latino family origins reduces but does not explain away the positive effect of second generation.

For highest math course taken in Table 10 we see that adding inconsistent Latino self-identification in the model explains away the positive effect of second generation relative to third plus generation. Thus, it appears that some evidence of generational decline see in quantitative data analysis may be to the lower academic performance of adolescents who choose to self-identify as Latino at school, who are also more likely to be third plus generation.

## **Conclusion and Discussion**

While previous research has demonstrated that the context in which racial and ethnic identity is measured matters and that self-identity changes over time, little has examined the effects of ethnic identity selectivity on empirical trends. The majority of what has been done is based on parent and child reported ethnicity taken from the Census and shows that there may be unmeasured intergenerational progress among Mexican Americans due to the selective nature of Mexican intermarriage (Duncan and Trejo). Additional work has looked at the effect of using observer reports rather than self-reports of race on racial income gaps (Saperstein). This study

takes a different approach by looking at how the same individual may report his or her ethnicity differently in different contexts and how this might impact observations of both intra- and intergenerational trends of Latino educational progress. At the same time, it integrates an ethnic attrition analysis by including self-identifying non-Latino whites with Latino family origins. Also, unlike previous research in this area, this study deals specifically with Latinos and the racialization of Latino ethnicity within secondary schools. Thus, it incorporates the role of Latino family origins into the analysis of Latino self-identify selectivity.

I find that adolescents who report a Latino ethnic identity within a school context, surrounded by peers and current understandings of race in the U.S., but do not report one at home are negatively selected on a variety of academic outcomes. In addition, I find that it is inconsistent Latino self-identifiers without Latino family origins that are driving this negative selection, suggesting that Latino ethnicity within secondary schools has become associated with academic failure or resistance to educational norms. In addition, I find that non-Latino whites with Latino family origins have higher cumulative GPAs than consistently identifying Latinos, are more likely to graduate from high school than inconsistent identifiers with Latino family origins, and do better on all six academic outcomes relative to inconsistent identifiers without Latino family origins. Thus, when comparing the educational outcomes of Latinos to non-Latino whites, the negative effect for Latinos declines slightly after taking into account ethnic attrition, and it declines even more after taking into account inconsistent Latino self-identification among adolescents without Latino family origins. This pattern is consistent across all academic outcomes.

In addition, results show that the decline in educational outcomes experienced by Latinos between the second and third plus generations is stronger among adolescents who identify as

Latino in school but not at home. In addition, self-identifying non-Latino whites with Latino family origins fare better academically than do either third plus generation consistently identifying Latinos or third plus generation inconsistently identifying Latinos, suggesting that observations of generational decline among Latinos may be over-estimated by not taking into account ethnic attrition or inconsistent self-identification between contexts may over-estimate observations of generational decline among Latinos. Multivariate regression results further support these findings. However, it should be noted that the impact of self-identification at school but not at home has a much larger effect on estimates of both Latino disadvantage relative to whites and generational decline among Latinos than does ethnic attrition.

These findings add more to a literature that emphasizes the fluid and complex nature of race and ethnicity and the impact of such fluidity on empirical trends. Perhaps more importantly, these findings suggest that a Latino identity in secondary schools has become associated with academic failure or resistance to educational norms. In fact, preliminary analysis not presented here suggests that adolescents who self-identify as Latino in school but not at home are more likely to report being disengaged from school and have lower college aspirations than both consistently identifying Latinos and non-Latino whites. In addition, they are more likely to experience low course placement at the beginning of high school and more likely to be in schools with higher levels of student disengagement and low course placement. Taken together, these findings suggest that adolescents may be strategically adopting a Latino or "other" identity in school as a way to save face and maneuver within and between systems of inequality. More research needs to be done to understand identity formation processes in school and how they may impact empirical trends in race/ethnic disadvantage and in turn reify racial differences.

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Table 2. Weighted Means of Educational Outcomes by Latino Self-Identification and Latino Family Origin

Adolescent Self-Identification by Latino Family Origin

	Non-Latino White / No Latino Family	Non-Latino White / Latino	Latino In School Only / No Latino	Latino In School Only / Latino Family	Consistently	Non-Latino
	Origins	ramily Origins	ramily Origins	Origins	Latino	Black
Z	3461		168	29	332	1248
Parents' Education	3.76 <sup>a,b,c</sup>	4.02 <sup>e,f,g</sup>	2.81	2.98	3 2.96	3.01
Highest Math Taken	6.43 <sup>a, c</sup>	6.35 <sup>e</sup>	4.54	00.9	5.85 <sup>d</sup>	5.72
Highest Science Taken	4.52 <sup>a,c</sup>	4.60 <sup>e</sup>	3.54	4.15	5 4.15 <sup>d</sup>	4.26
Cumulative GPA	2.79 <sup>a,b,c</sup>	2.88 <sup>e,g</sup>	2.08	2.35	5 2.44 <sup>d</sup>	2.21
Graduated From/ Attending College	0.56 <sup>a,b,c</sup>	0.58	0.26	0.36	) 0.42 <sup>d</sup>	0.43
Graduated From High School	I 0.93 <sup>a,b,c</sup>	0.89	0.76	1.00	0.85	0.88
Wave III PVT	60.16 <sup>a,b</sup>	61.39 <sup>e</sup>	33.05	46.65	5 49.29 <sup>d</sup>	36.14
Source: Waves I and III of the National I ongitudinal Study of Adolescent Health and Academic Achievement	National Londing Study	of Adolescent Health and	A transcript data from	n the Adolescent E	lealth and Arademi	2 Achievement

Source: Waves I and III of the National Longitudinal Study of Adolescent Health and transcript data from the Adolescent Health and Academic Achievement

<sup>e</sup> Difference in means between Non-Latino White/Latino FO and Latino IS/No FO significant at <.05 level

<sup>&</sup>lt;sup>a</sup> Difference in means between Non-Latino White/No Latino FO and Latino IS/No FO significant at <.05 level

<sup>&</sup>lt;sup>b</sup> Difference in means between Non-Latino White/No Latino FO and Latino IS/FO significant at <.05 level

<sup>&</sup>lt;sup>c</sup> Difference in means between Non-Latino White/No Latino FO and Consistently Latino significant at <.05 level

<sup>&</sup>lt;sup>d</sup> Difference in means between Latino IS/No FO and Consistently Latino significant at <.05 level

<sup>&</sup>lt;sup>f</sup> Difference in means between Non-Latino White/Latino FO and Latino IS/FO significant at <.05 level

<sup>&</sup>lt;sup>9</sup> Difference in means between Non-Latino White/Latino FO and Consistently Latino significant at <.05 level

Table 3. Linear Regression Predicting Academic Outcomes by Type of Latino Self-Identification, 3rd+ Generation Latino, Non-Latino White, and Non-Latino Black Individuals Only

						Highest Math Taken	Math Ta	ken				
,	Mod	Model 1	Model 2	12	Mo	Model 3	Model 4	el 4	Model 5	el 5	Model 6	9
•	В	s.e.	В	s.e.	В	s.e.	В	s.e.	В	s.e.	В в	s.e.
Race/Ethnicity (Non-Latino White) Latino (In school or at home) Non-Latino Black	-1.04	0.15 ** 0.14 **					-0.43	0.13 ***				
Race/Ethnicity (Non-Latino White with No Latino Family Origin) Latino (In school or at home or Non-Latino with Latino Family Origins) Non-Latino Black			-0.94 -0.71	0.15 ***	-0.50	0.63 ***			-0.41	0.13 *	-0.11	0.14 1.0
Inconsistent Latino Self-Identification (Consistent) Inconsistent w/ Latino Parents Inconsistent w/ No Latino Parents					-1.38	0.22					0.13	0.59
Urban School							-0.07	0.15	-0.07	0.15	-0.08	0.15
Rural School							-0.19	0.14	-0.19	0.14		0.14
Age							-0.04	0.03	-0.04	0.03		0.03
Parents' Education							0.24	0.02 ***	0.24	0.02 ***	0.24	0.02 ***
PVT							0.05	0.00	0.05	0.003 ***		0.00
Usually Speak Non-English at Home							0.17	0.57	0.15	0.57	-0.10	0.59
Female							0.36	0.07 ***	0.36	0.07 ***	0.36	0.07 ***
Intercept	6.43	6.43 0.08 ***	6.43	6.43 0.08 ***	6.43	6.43 0.08 ***	1.15	0.63	1.15	0.63	1.23	0.63
$R^2$	0.0	0.035	o.	0.033	0.0	0.043	0	0.221	0	0.221	0.226	56
Z						Ω	5263					
Source: Waves I and III of the National Longitudinal Study of Adolescent Health and transcript data from the Adolescent Health and Academic Achievement	Longituc	linal Study	of Adole	scent Healt	h and tra	anscript da	ata from	the Adolesc	ent Heal	th and Acade	mic Achie	vement

 $p \le .05$ ; \*\*p  $\le .01$  \*\*\*p  $\le .001$ 

Table 4. Linear Regression Predicting Academic Outcomes by Type of Latino Self-Identification, 3rd+ Generation Latino, Non-Latino White, and Non-Latino Black Individuals Only

Race/Ethnicity (Non-Latino White) Latino (In school or at home) Non-Latino Black Non-Latino white with Latino Family Origins) Non-Latino Black Non-Latino Black Non-Latino Black Non-Latino White With No Latino Family Origin) Family Origins) Non-Latino Black	<b>B</b>	S.e.					4		5	MODE	2
.0.49 -0.58 White )			ď	В		В	s.e.	В	s.e.	8	S.e.
) -0.49 -0.58 White )	* * * * * *										
Race/Ethnicity (Non-Latino White with No Latino Family Origin) Latino (In school or at home or non-Latino white with Latino Family Origins) Non-Latino Black						-0.22 -0.28	0.05 ***				
Latino (In school or at home or non-Latino white with Latino Family Origins) Non-Latino Black											
Family Origins) Non-Latino Black											
	-0.43 -0.58		0.06 *** 0.08 ***	-0.28	0.06 *** 80.0			-0.20 -0.28	0.06 ***	-0.11 -0.28	0.06
of the state of th											
Inconsistent Lauro Sen- Identification											
(Consistent)					(						(
Inconsistent w/ Latino Parents				-0.16	0.20					-0.15	0.19
Inconsistent w/ No Latino Parents				-0.43	0.20 ***					-0.25	* 60 <sup>.</sup> 0
Urban School						-0.08	90.0	-0.08	90.0	-0.08	90.0
Rural School						0.05	90.0	0.05	90.0	0.05	90.0
Age						-0.01	0.01	-0.01	0.01	-0.01	0.01
Parents' Education						0.11	0.01 ***	0.11	0.01 ***	0.11	0.01 ***
PVT 2.79 0.03 ***		2.79 0.	0.03 ***	2.79	0.03 ***	0.02	0.00	0.02	0.00	0.05	0.00
Usually Speak Non-English at Home						0.26	0.14	0.24	0.14	0.16	0.14
Female						0.35	0.03 ***	0.35	0.03 ***	0.35	0.03 ***
Intercept						0.46	0.27	0.45	0.27	0.47	0.27
$R^{2}$ 0.09		0.084	4	0	0.089	o.	0.281	0	0.280	0	0.281
Z						5263					

Study \*p ≤ .05; \*\*p ≤ .01 \*\*\*p ≤ .001

Table 5. Linear Regression Predicting Academic Outcomes by Type of Latino Self-Identification, 3rd+ Generation Latino, Non-Latino White, and Non-Latino Black Individuals Only

	2	Model 1	Model 2	12	Mo	Highest Science Taken Model 3 Model 4	cience 7	ice Taken Model 4	Moc	Model 5	M	Model 6	
	8		8		8	S.e.	В	s.e.	8	s.e.	В	s.e.	
Race/Ethnicity (Non-Latino White) Latino (In school or at home) Non-Latino Black	-0.58 -0.26	8 0.11 *** 6 0.12 *					-0.20 0.22	0.10 *					
Race/Ethnicity (Non-Latino White with No Latino Family Origin) Latino (In school or at home or non-Latino white with Latino Family Origins) Non-Latino Black			-0.52 -0.26	0.12*	-0.30	0.12*			-0.18	3 0.09 2 0.12	-0.03	3 0.11	
Inconsistent Latino Self-Identification (Consistent) Inconsistent w/ Latino Parents Inconsistent w/ No Latino Parents					-0.07	0.31					-0.04 -0.45	4 0.29 5 0.20*	
Urban School  Rural School  Age  Parents' Education  PyT  PyT  PyT  Rural Speak Non-English at Home  PyT  Rural Speak Non-English at Home  Rural School  Rural Rural Home  Rural School  Rural Rural Home  Rural Rural Home  Rural School  Rural Rural Health and Academic Achievement School  Rural Rural Rural Home Health and Academic Achievement School  Rural School  Rural School  Rural R	4.5: Longitu	4.52 0.06 *** 0.017 ngitudinal Study o	4.52 C	4.52 0.06 *** 0.02 dolescent Health	4.520.06 0.020 and transcri	20.06 *** 0.020 <u>5</u> anscript data	-0.02 0.07 0.01 0.15 0.09 0.12 0.53 a from the	2 0.11 7 0.13 1 0.02 5 0.01 *** 3 0.00 *** 9 0.31 2 0.05 * 3 0.52 0.153	-0.02 0.07 0.01 0.15 0.07 0.12 0.52 0.52	2 0.11 7 0.13 1 0.02 5 0.01 *** 3 0.00 *** 7 0.31 2 0.52 2 0.52 0.152	-0.02 0.07 0.01 0.015 -0.05 0.12 0.56	2 0.11 7 0.13 1 0.02 5 0.01 *** 5 0.31 5 0.31 6 0.52 6 0.52 6 0.52 6 0.52	* *

Table 6. Logistic Regression Predicting Academic Outcomes by Type of Latino Self-Identification, 3rd+ Generation Latino, Non-Latino White, and Non-Latino Black Individuals Only

			High Sch	High School Graduation			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	9
	Coef. s.e.	Coef. s.e.	Coef. s.e.	Coef. s.e.	Coef. s.e.	Coef. s.e.	
Race/Ethnicity (Non-Latino White) Latino (In school or at home) Non-Latino Black	-1.01 0.25*** -0.57 0.26*			-0.42 0.25 0.20 0.24			
Race/Ethnicity (Non-Latino White with No Latino Family Origin) Latino (In school or at home or non-Latino white with Latino Family Origins) Non-Latino Black		-0.97 0.25*** -0.58 0.26*	-0.79 0.30** -0.58 0.26*		-0.45 0.27 0.19 0.24	-0.39	0.31 0.24
Inconsistent Latino Self-Identification (Consistent) Inconsistent w/ Latino Parents Inconsistent w/ No Latino Parents			4.39 1.06***			4.51	1.11 ***
Urban School Rural School						-0.25 -0.2	0.27 0.23
Age Parents' Education				0.14 0.05 ** 0.30 0.06 ***	0.14 0.05**		0.05 **
PVT							0.01 ***
Usually Speak Non-English at Home Female				1.11 1.11 0.52 0.15***	1.12 1.11 0.52 0.15***	1.09	1.11
Intercept N	2.560.12 ***	2.57 0.12 ***	2.57 0.12 ***				1.05 ***
Source: Waves I and III of the National Longitudinal Study of Adolescent Health and transcript data from the Adolescent Health	Longitudinal Study o	of Adolescent Health	and transcript data	rom the Adolescent	Health		

 $p \le .05$ ; \*\*p  $\le .01$  \*\*\*p  $\le .001$ 

Table 7. Logistic Regression Predicting Academic Outcomes by Type of Latino Self-Identification, 3rd+ Generation Latino, Non-Latino White, and Non-Latino Black Individuals Only

	:	:	College	College Attendance	:	:
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef. s.e.	Coef. s.e.	Coef. s.e.	Coef. s.e.	Coef. s.e.	Coef. s.e.
Race/Ethnicity (Non-Latino White) Latino (In school or at home)	-0.80 0.15***			-0.30 0.15*		
Non-Latino Black	-0.52 0.16**			0.11 0.15		
Race/Ethnicity (Non-Latino White with No Latino Family Origin)						
Latino (In school or at home or non-Latino white with Latino Family Origins)		-0.71 0.15 ***	-0.45 0.19*		-0.28 0.16	-0.09 0.21
Non-Latino Black		-0.52 0.16 **	-0.52 0.16**		0.11 0.15	0.11 0.15
Inconsistent Latino Self-Identification						
( <i>Colisistent</i> ) Inconsistent w/ Latino Parents			-0.34 0.61			-0.34 0.65
Inconsistent w/ No Latino Parents			-0.85 0.26***			
Urban School				-0.08 0.14		-0.09 0.14
Rural School				-0.05 0.14	-0.05 0.14	-0.04 0.14
Age						-0.07
Parents' Education					0.39 0.03 ***	0.39
PVT				0.03 0.00***	0.03 0.00 ***	0.03
Usually Speak Non-English at Home				0.25 0.69	0.23 0.69	90.0
Female				0.50 0.09***		
Intercept	0.23 0.08**	0.23 0.08 **	0.23 0.08**	-3.69 0.73***	-3.69 0.74 ***	-3.66
Z			4)	5263		
Courses: Manager A brashed A brashed to the Alaston of A approach to a state to a state of the Alaston of A abitation of A state of the Alaston of A state of A state of the Alaston of A state of the Alaston of A state of A state of the Alaston of A state	0 40 1.40 locibusti	700 4H00 H + 00000 OF	2 0 2 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1	100 Adologo 4	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	, b

Source: Waves I and III of the National Longitudinal Study of Adolescent Health and transcript data from the Adolescent Health and Academic Achievement Study \*p ≤ .05; \*\*p ≤ .01 \*\*\*p ≤ .001

Table 8. Linear Regression Predicting Academic Outcomes by Type of Latino Self-Identification, 3rd+ Generation Latino, Non-Latino White, and Non-Latino Black Individuals Only

						Wave	Wave III PVT	_			
	M	Model 1	Mo	Model 2		Model 3	_	Model 4	Model 5	5	Model 6
	В	s.e.	В	s.e.	В	s.e.	В	s.e.	В	s.e.	B s.e.
Race/Ethnicity (Non-Latino White) Latino (In school or at home) Non-Latino Black	-16.61 -24.04	1 2.09*** 4 2.52***					1 1	-6.11 1.58 *** -8.10 1.66 ***			
Race/Ethnicity (Non-Latino White with No Latino Family Origin) Latino (In school or at home or non-Latino white with Latino Family Origins) Non-Latino Black			-14.82	2 2.51***	-8.99	9 2.46 ***			-5.53	1.48 ***	-2.42 1.74
Inconsistent Latino Self-Identification (Consistent) Inconsistent w/ Latino Parents Inconsistent w/ No Latino Parents					-4.52 -18.1	.2 7.85 .1 3.49***					-3.13 4.96
Urban School Rural School Age Parents' Education PVT Usually Speak Non-English at Home Female Intercept R <sup>2</sup> N	60.1	60.171.02 ***	60.16	1.01 ***	60.2	1.01 *** 0.117 55	* -11 \$ -11	0.19 1.27 -0.15 1.23 1.70 0.28 *** 1.62 0.29 *** 1.21 0.05 *** 15.86 7.60 * 0.32 1.00 * 0.439	0.10 -0.18 1.70 1.63 1.21 15.42 0.35 0.44	0 1.27 8 1.24 0 0.29 *** 33 0.30 *** 11 0.05 *** 2 7.62 * 15 1.00 17 7.63 ***	0.02 1.26 -0.09 1.25 1.70 0.29*** 1.63 0.29*** 1.20 0.05*** 12.84 7.76 0.29 1.00 -111.22 7.64 *** 0.440
Source: Waves I and III of the National Longitudinal Study of Adolescent Health and transcript data from the Adolescent Health and Academic Achievement Study	ı Longiu	dinai Study	or Adole	scent nea	Ith and	transcript ua	та поп	ı the Adolescen	т неапп аг	nd Acader	nic Acnievemen

 $^*p \le .05; ^{**}p \le .01 ^{***}p \le .001$ 

Table 9. Weighted Means by In-Home and In-School Latino Self-Identification and Generational Status among a Sample of Latino Adolescents and Non-Latino Adolescents of Latino Family Origin

Status
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	<u>-</u> <u>u</u>	In-Home and		<u>-</u> L	In-School		Non-Latino / Latino
	Ir	In-School			Only		Family Origin
	1st	2nd	3rd+	1st	2nd	3rd+	
Z	222	488	332	14	56	197	110
Highest Math Taken	5.64	6.05	5.85	6.92	6.25	4.74 ***	6.10
Highest Science Taken	4.32	4.24	4.15	4.20	4.35	3.63*	4.29
Cumulative GPA	2.43	2.40	2.44	2.47	2.22	2.11	2.58
Graduated From/Attending College	0.58	0.50	0.42	0.21	0.43	0.27	0.51
Graduated From High School	0.88	0.85	0.85	0.98	0.89	0.79	0.91
Wave III PVT	42.84	48.35	49.29	58.50	50.74	34.94	55.66ª
Source: Waves I and III of the National Longitudinal Study of Adolescent Health and transcript data from the Adolescent Health and Academic	Longitudinal	Study of Adol	escent Health	and transcript	data from t	ne Adolescent	Health and Academic

Achievement Study

Note: \*Difference in means between 3rd+ and 2nd generation significant at p<.05; \*\* Difference in means between 3rd+ and 2nd generations

significant at p<.01; \*\*\*Difference in means between 3rd+ and 2nd generation significant at p<.001

<sup>&</sup>lt;sup>a</sup> Difference in means between Non-Latino White/Latino FO and IS Only 3rd+ Generation

<sup>&</sup>lt;sup>b</sup> Difference in means between Non-Latino White/Latino FO and Consistently Latino significant at <.05 level

Table 10. Regression Predicting Academic Outcomes by Type of Latino Self-Identification and Generational Status, Latinos and Non-Latinos of Latino Family Origin

						Highest Math Taken	ath Taken					
•	Model 1	11	Model 2	12	Mo	Model 3	Model 4	4	Mo	Model 5	Mo	Model 6
•	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.
Generational Status (Third Plus Generation Latino)												
First Generation Latino	0.34	0.33	0.21	0.33	-0.01	0.34	0.71	0.30*	99.0	0.30*	0.59	0.30
Second Generation Latino	0.67	0.20 ***	0.54	0.20**	0.33	0.19	0.67	0.20 ***	0.61	0.20**	0.54	0.20 **
Family Origin	0.71	0.26 **					0.31	0.24				
Identified as Latino by: (In-School and In-Home)												
In-School Only					-0.83	0.19 ***					-0.53	0.18 **
Urban							0.25	0.22	0.23	0.22	0.19	0.21
Rural							-0.67	0.28*	-0.7	0.28*	-0.6	0.34
Age							-0.05	0.05	-0.05	0.05	-0.05	0.05
Parents' Education							0.17	0.04 ***	0.17	0.04 ***	0.17	0.04 ***
PVT							0.04	0.01 ***	0.04	0.01 ***	0.04	0.01 ***
Usually Speak Non- Fnolish at Home							0.04	0.24	0.05	0 24	-0.03	0.24
Female							2 0	14	2000	0.14	0.16	0.14
ייייייייין דיייייייין דיייייייין דיייייייי	20	7 20 0 1 5 ***	R R 2	***	л 2	т ***	 		- <del>-</del>			
miler cept	 	0.028	 	0.14	5	0.13	)  -  -	0.221	S -	0.219	26 0	0.230
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	:	:	-							-		-

Source: Waves I and III of the National Longitudinal Study of Adolescent Health and transcript data from the Adolescent Health and Academic Achievement Study \*p ≤ .05; \*\*p ≤ .01 \*\*\*p ≤ .001

Table 11. Regression Predicting Academic Outcomes by Type of Latino Self-Identification and Generational Status, Latinos and Non-Latinos of Latino Family Origin

	Model 1	Model 2	2	Mo	Model 3	I 3 Model 4	14	Mo	Model 5	Mo	Model 6
	Coef. s.e.	Coef.	s.e.	Coef.	S.e.	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.
Generational Status (Third Plus Generation Latino)											
First Generation Latino	0.13 0.15	0.08	0.15	0.00	0.15	0.30	0.14 *	0.28	0.14 *	0.25	0.14
Second Generation Latino	0.08 0.08	0.03	0.08	-0.05	80.0	0.12	0.08	0.10	0.08	0.07	0.08
Non-Latino with Latino Family Origin	0.27 0.13*					0.09	0.10				
Identified as Latino by: (In-School and In-Home)											
In-School Only				-0.32	0.10 ***					-0.25	0.08 **
Urban						-0.18		-0.19		-0.21	0.10*
Rural						-0.17	0.15	-0.18	0.15	-0.13	0.13
Age						0.00		0.00	0.02	0.00	0.02
Parents' Education						0.08	0.02 ***	0.08	0.02 ***	0.08	0.02 ***
PVT						0.01	0.00	0.01	0.00	0.01	0.002 ***
Usually Speak Non-English											
at Home						0.10	0.10	0.1	0.10	0.07	0.10
Female						0.23	0.06 ***	0.23	0.06 ***	0.22	0.06 ***
Intercept	2.30 0.06***		2.36 0.06 ***	2.46	2.46 0.06 ***	0.57	0.58	0.57	0.58	0.73	0.57
$R^2$	0.011	0.0	0.001	Ö	0.025	0.	0.172	o.	0.171	0	0.184
Z					÷	1377					

Achievement Study \*p ≤ .05; \*\*p ≤ .01 \*\*\*p ≤ .001

Table 12. Regression Predicting Academic Outcomes by Type of Latino Self-Identification and Generational Status, Latinos and Non-Latinos of Latino Family Origin

			Ξ	Highest Science Taken	ence Tak	en				
	Model 1	Model 2	Moc	Model 3	Model 4	4	Mo	Model 5	Mo	Model 6
'	Coef. s.e.	Coef. s.e.	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.
Generational Status (Third Plus Generation Latino)										
First Generation Latino	0.38 0.17*	0.31 0.17	0.20	0.16	0.44	0.19*	0.42	0.20*	0.39	0.19
Latino	0.31 0.13*	0.25 0.13	0.14	0.13	0.23	0.11*	0.20	0.12	0.17	0.12
Non-Latino with Latino Family Origin	0.36 0.20				0.14	0.18				
Identified as Latino by: (In-School and In-Home)										
In-School Only			-0.43	0.14 **					-0.24	0.14
Urban					0.24	0.14	0.23	0.14	0.21	0.14
Rural					-0.12	0.27	-0.13	0.27	-0.08	0.29
Age					0.04	0.03	0.04	0.03	0.04	0.03
Parents' Education					0.11	0.03 ***	0.12	0.03 ***	0.12	0.03 ***
PVT					0.03	0.00	0.03	0.00	0.03	0.003 ***
Usually Speak Non-					(		0	(	(	(
English at Home					0.22	0.15	0.22	0.16	0.18	0.16
Female					0.18	0.11	0.18	0.11	0.17	0.11
Intercept	3.93 0.10 ***	4.00 0.10 ***		4.14 0.10 ***	0.02	98.0	0.03	98.0	0.17	0.85
$R^2$	0.016	0.010	0.0	0.027		0.160	0.	0.159	O.	0.163
Z				1369	69					

N Source: Waves I and III of the National Longitudinal Study of Adolescent Health and transcript data from the Adolescent Health and Academic

Achievement Study \*p ≤ .05; \*\*p ≤ .01 \*\*\*p ≤ .001

Table 13. Regression Predicting Academic Outcomes by Type of Latino Self-Identification and Generational Status, Latinos and Non-Latinos of Latino Family Origin

					His	High School Graduation	Graduati	on				
	Model 1	1	Model 2	12	Mo	Model 3	Model 4	4	Mo	Model 5	Mod	Model 6
	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.	Coef.	S.e.	Coef.	s.e.
Generational Status (Third Plus Generation Latino)												
First Generation Latino	0.48	0.36	0.36	0.36	0.26	0.37	1.00	0.41*	0.96	0.41*	0.92	0.42*
Second Generation Latino	0.23	0.31	0.12	0.31	0.03	0.32	0.40	0.32	0.34	0.31	0.31	0.32
Non-Latino with Latino Family Origin	0.75	0.54					0.41	0.56				
Identified as Latino by: (In-School and In-Home)												
In-School Only					-0.35	0.32					-0.17	0.35
Urban							-0.17	0.42	-0.18	0.42	-0.19	0.43
Rural							-0.66	0.47	-0.68	0.48	-0.65	0.46
Age							0.07	0.08	0.0	0.08	0.07	0.08
Parents' Education							0.21	0.08 **	0.21	0.08 **	0.21	0.08 **
PVT							0.03	0.01 **	0.03	0.01 **	0.03	0.01 **
Usually Speak Non-English							0	0	i o	0	0	(
at Home							-0.07	0.39	-0.05	0.39	-0.08	0.40
Female							0.39	0.23	0.40	0.23	0.39	0.24
Intercept	1.55	0.23 ***	1.66	0.23 ***	1.79	0.25 ***	-3.39	2.29	-3.34	2.30	-3.26	2.35
Z						137	77					
Source: Waves I and III of the National Longitudinal Study of Adolescent Health and transcript data from the Adolescent Health and Academic	e National I	ongitudine-	al Study o	of Adolesco	ent Health	and trans	cript data	from the /	Adolescer	nt Health a	ind Acade	mic
Acnievement Study												
*p ≤ .05; **p ≤ .01 ***p ≤ .001												

Table 14. Regression Predicting Academic Outcomes by Type of Latino Self-Identification and Generational Status, Latinos and Non-Latinos of Latino Family Origin

						College Attendance	tendanc	ø				
	Model 1	1 1	Model 2	12	Mo	Model 3	Model 4	14	Mo	Model 5	Mo	Model 6
	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.
Generational Status (Third Plus Generation												
Latino)												
First Generation Latino	0.81	0.30 **	0.69	0.31*	0.51	0.32	1.52	0.41 ***	1.48	0.42 ***	1.40	0.40 ***
Second Generation Latino	0.56	0.24*	0.44	0.24	0.27	0.25	0.80	0.25***	0.76	0.24 **	0.69	0.25 **
Non-Latino with Latino												
Family Origin	0.62	0.29*					0.24	0.25				
Identified as Latino by:												
(In-School and In-Home)												
In-School Only					-0.73	0.21 ***					-0.64	0.24 **
r edr							α ο	0.50	c'	000	c	23
							0 0	5 10	- i	0.40	<u> </u>	7.0
Rural							-0.53	0.37	-0.55	0.37	-0.45	0.43
Age							-0.12	0.05*	-0.12	0.05*	-0.12	0.05*
Parents' Education							0.24	0.05 ***	0.24	0.05 ***	0.24	0.05 ***
PVT							0.04	0.01 ***	0.04	0.01 ***	0.0	0.01 ***
Usually Speak Non-English												
at Home							0.02	0.24	0.02	0.24	-0.07	0.22
Female							0.38	0.17*	0.39	0.17*	0.37	0.17*
Intercept	-0.58	0.13 ***	-0.46	0.13 ***	-0.23	0.15	-2.66	1.19*	-2.65	1.18*	-2.28	1.18
Z						13	1388					

N Source: Waves I and III of the National Longitudinal Study of Adolescent Health and transcript data from the Adolescent Health and Academic Achievement Study  $x_1 > 0.05$ ; \*\*p  $\leq 0.01$ \*\*\*

Table 15. Regression Predicting Academic Outcomes by Type of Latino Self-Identification and Generational Status, Latinos and Non-Latinos of Latino Family Origin

	Model 1	1	Model 2	12	Moc	Model 3	Model 4	4	M	Model 5	M	Model 6
	900		9000		ران		<b>J</b>		رينونو		, COO	
		9.0		9.0		9.0		9.0		0.00		9.0
Generational Status												
(Tilld Plus Generation Latino)												
First Generation Latino	0.50	4.81	-1.82	4.78	-4.69	5.05	9.12	4.98	8.39	4.95	7.64	5.00
Second Generation Latino	5.09	2.59 *	2.77	2.61	0.07	2.73	4.44	2.40	3.66	2.41	2.91	2.48
Non-Latino with Latino Family Origin	12.19	4.07 **					4.56	2.82				
Identified as Latino by:												
					•						1	; !
In-School Only					-11.40	3.32 ***					-5.65	2.15*
Urban							2.34	1.91	2.05	1.88	1.63	1.78
Rural							-7.56	2.37 **	-8.02	2.43 ***	-7.03	2.85 *
Age							1.1	0.56*	1.10	.26*	1.11	0.55*
Parents' Education							1.64	0.46 ***	1.69	0.47 ***	1.68	0.47 ***
PVT							1.14	0.10 ***	1.15	0.10 ***	1.13	0.10 ***
Usually Speak Non-English												
at Home							2.82	2.73	2.96	2.75	2.05	2.72
Female							-0.94	1.77	-0.88	1.78	-1.07	1.76
Intercept	43.47	1.92 ***	45.78	1.85 ***	49.48	2.31 ***	-97.07	13.68 ***	-96.96	13.65 ***	-93.42	13.53 ***
Z						5	1362					
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Source: Waves I and III of the National Longitudinal Study of Adolescent Health and transcript data from the Adolescent Health and Academic Achievement Study
\*p ≤ .05; \*\*p ≤ .001