

**The Impact of Significant Other's Encouragement on  
Racial/Ethnic Variation in College Plans and Attendance**

Nikolas D. Pharris-Ciurej,  
Department of Sociology and Center for Studies in Demography and Ecology  
University of Washington

April 19, 2009

This research has been supported by grants from the Andrew W. Mellon Foundation and the Bill and Melinda Gates Foundation. I am grateful to Charles Hirschman, Gunnar Almgren, Jerald Herting, Anthony Perez, Irina Voloshin, and Patty Glynn, for thoughtful comments. Paper presented at the 2009 Annual Meeting of the Population Association of America. This is a work in progress; please do not cite this paper without permission. Please direct all correspondence to: Nikolas Pharris-Ciurej, Department of Sociology, Box 353340, University of Washington, Seattle, WA 98195; email: [nickpc@u.washington.edu](mailto:nickpc@u.washington.edu)

## **The Impact of Significant Other's Encouragement on Racial/Ethnic Variation in College Plans and Attendance**

### **ABSTRACT**

This analysis uses longitudinal data from the University of Washington Beyond High School Project to examine whether encouragement from significant others, independent of social class, has a substantial positive effect on students' college plans and attendance. If so, does it significantly attenuate the racial/ethnic achievement gap? Also it examines whether the levels of and returns to significant others encouragement varies across racial/ethnic groups. Significant others encouragement is a powerful predictor of college plans and attendance. Further it explains a substantial fraction of the racial/ethnic difference in college plans and attendance. The levels of encouragement from significant other vary, but the returns to encouragement are consistent across racial/ethnic groups.

## INTRODUCTION

One of the major social accomplishments of the later part of the twentieth century was the dramatic increase in post-secondary educational attainment. In 1970 only 16% of young adults, ages 25 to 29, had obtained a college degree; however, that figure nearly doubled by 2007 to 30% (Snyder et. al. 2008). Further, the trend towards obtaining a college degree does not appear to be slowing down, as enrollment in two and four year institutions has steadily increased and is projected to continue increasing for the next decade (U.S Department of Education, 2002; Snyder et. al. 2008, The College Board 2006).

Despite the overall increase in college attendance and completion, variation exists across racial/ethnic groups. For example, in 2003, 62% of Asian American young adults completed a college degree or greater compared to 34% of white, 17% of African American, and 10% of Hispanic young adults, ages 25 to 29 (Stoops 2004). However, within the Asian pan-ethnic label variation exists, as Japanese, Chinese, and Asian Indian students were more likely to finish college than students of Vietnamese, Laotian, and Native Hawaiian descent (Kao and Thompson 2003). Native American students are less likely than white students to finish college (Freeman and Fox, 2005; Kao and Thompson, 2003).

Variation in college attendance and completion across an ascriptive group, such as race/ethnicity, is concerning, given that changes in the structure of the economy have created an upward shift in the educational level necessary for entry into the middle class. Increasingly, the receipt of a college degree or higher is a prerequisite to obtain a job in the well paying sectors of the economy. For example, from 1975 to 1999 the earnings of a college degree recipient relative to those of a high school degree recipient increased from 1.5 to 1.8 (Cheeseman-Day and Newburger, 2002). Clearly, college attendance is an increasingly important component of the status attainment process

One of the initial and most influential explanations of the status attainment process is the Wisconsin model (e.g. Sewell et. al. 1969, 1970). The initial research using the Wisconsin model focused on the social mobility process mainly for whites, but it provided a structural framework that is still used to analyze racial/ethnic differences in educational and occupational attainment. Although the major finding from this line of research was the importance of social class, another key finding was that

significant others influence both mediated the effect of social class and had a positive net effect on students' educational ambitions and attendance. However, relatively few studies have examined the extent to which significant others influence can explain the racial/ethnic variation in educational ambitions and attainment. An analysis by Cheng and Starks illustrated that significant others influence plays an important role in explaining the educational expectations of white, Asian, Hispanic, and black youth (2002). They also found that the levels and returns to encouragement vary across the four racial and pan-ethnic categories.

The analysis in this paper utilizes the rich racial/ethnic diversity in the University of Washington Beyond High School Project to examine the relationship between significant others influence and the racial/ethnic achievement gap in post-secondary schooling. More specifically this analysis answers the following questions: 1) Does encouragement from significant others mediate variations in social origins, such as race/ethnicity? 2) Does encouragement have a net impact that is uncorrelated with social origins? 3) Do the levels and returns to significant others' influence vary across racial/ethnic groups? This analysis finds that significant others encouragement to attend college exerts a strong independent effect on college plans and attendance and it substantially reduces the racial/ethnic variation. Levels of encouragement vary across racial/ethnic groups, but the returns to encouragement on college plans and attendance are consistent.

### **ENCOURAGEMENT FROM SIGNIFICANT OTHERS**

One possible explanation for the racial/ethnic variation in educational ambitions and attainment is the role of significant others encouragement to attend college. Significant others influence is one of the key explanatory variables in the Wisconsin model of status attainment developed by Sewell and colleagues (Sewell et al 1969, 1970). This conceptual framework was originally designed to examine the inter-generational transfer of socio-economic and occupational status. A major finding from this line of research was that the social class of the family of origin was a key predictor of educational and occupational success, but it only explained a small fraction of the variance in educational attainment--roughly 15% (Sewell and Hauser, 1975).

Sewell and colleagues also included a series of ability and social psychological variables to better explain the educational and occupational attainment process. They found that during childhood and young adulthood, the socio-economic status of one's family operates through mediating variables such as academic ability, influence of significant others, and educational and occupational aspirations to affect levels of educational attainment and occupational status. Additionally, the mediating variables, such as influence of significant others, displayed an effect, net of social class, on educational and occupational success. Ultimately, students from more advantaged families, as well as students receiving high levels of encouragement and students with increased educational and occupational aspirations, would display markedly higher levels of educational attainment and occupational prestige (Sewell et al 1969; Sewell and Hauser 1972; Sewell, Hauser, Wolf 1980)

Another important, though often overlooked, finding from this line of research was the sizable and positive effect of significant others influence on not only educational aspirations, but also attainment. Significant others exercise major influence over the attitudes of students. Significant others shape student's educational ambitions through repeated interaction. In these repeated interactions, the significant other is able to impart a general view of the importance (or, alternatively, lack thereof) of educational attainment. Also, the significant other can provide feedback on the student's thoughts and actions<sup>1</sup>. The students are able to form their own educational and occupational aspirations based upon their perception of the information that the significant others shared. Significant others include parents, teachers, and friends as these are the individuals who have a profound impact on the student's educational ambitions and eventual attainment (Sewell et al., 1969; Woelfel and Haller, 1971)..

Sewell, Hauser, and colleagues noted that parental and friends encouragement to attend college was the major mediator of SES of family of origin on educational and occupational aspirations<sup>2</sup>. They

---

<sup>1</sup> Potentially, significant others may factor their perceptions of the student's ability as well as observed measures of academic performance, into the advice and encouragement that they provide the student. Thus, it is possible that significant others encouragement could be endogenous to student ability and measures of academic performance

<sup>2</sup> Sewell and colleagues noted that teachers' encouragement to attend college was not influenced by the social class of the student. However, teachers' encouragement is influenced by a student's ability. Thus, teachers make decisions to encourage based upon merit, not ascription.

also noted that parental and friends encouragement to attend college, as well as teachers encouragement, had a strong positive effect on both college plans and educational attainment, net of other background measures. Parental and friends encouragement to attend college were the most important predictors of college plans. Interestingly, parental and friends encouragement to attend college was a more important predictor of college plans than high school grades. Teachers' encouragement was also significantly related to college plans, yet it was not as strong of a predictor. Similarly, parental and friends encouragement are the most important predictors of occupational aspirations (Hauser and Sewell, 1972).

Parental and friends encouragement to attend college is also positively related to increased levels of educational attainment. Only college plans and high school grades are more important predictors of educational attainment (Hauser and Sewell, 1972). Net of other background measures (i.e. familial SES, academic ability), having friends that planned on attending college was related to an additional .75 years of completed schooling while having parents that strongly encouraged college attendance resulted in an additional .60 years of schooling and having a teacher that encouraged college attendance is related to an additional .30 years of schooling (Sewell 1971).

Sewell and colleagues' results illustrate that significant others encouragement to attend college is related to increased levels of educational ambitions and attainment. A question that they do not address is whether significant others encouragement for college might play a mediating role in explaining racial/ethnic differences in educational ambitions and attainment. However, more recent studies have partially addressed the extent to which significant others' influence attenuates the racial/ethnic differences in educational ambitions and attainment (Cheng and Starks 2002; Fejgin, 1995; Frost, 2007 Goyette and Xie, 1999; Hanson, 1994; Kao, 1995). For example, an analysis by Goyette and Xie examines differences in educational expectations and expectations to finish college across Asian ethnic groups (1999). They note that parental educational expectations partially explain the increased levels of educational ambitions of Chinese, Korean, and Southeast Asian (Cambodian, Laotian, Vietnamese, and Hmong) students, net of other background factors. The extent to which parental educational expectations decreases the Asian ethnic groups' advantage in educational expectations, relative to whites, varies by group. The advantage

displayed by Chinese and Southeast Asian students was reduced by roughly 40% after parental educational expectations was included in the model, while the advantage for Korean and South Asian students was reduced by about 20% (Goyette and Xie, 1999).

Cheng and Starks examine whether significant others' influences attenuates differences in educational expectations across 4 racial/pan-ethnic groups: whites, Asians, Hispanics, and blacks. Cheng and Starks use a different measure of parental encouragement for college than Sewell and colleagues. Rather than examining whether parents encouraged students to attend college, they use measures of maternal and paternal educational aspirations for their child. They conclude that significant others influence, net of social class and school performance, partially attenuates the differences in the levels of educational expectations across racial/ethnic minority groups. However, despite the inclusion of significant others influence African American and Hispanic students are still more likely to aspire to an advanced degree than are whites and Asian students.

Although neither of the aforementioned analyses fully tested whether significant others influence attenuates differences in educational ambitions and attainment, they both provide convincing evidence that significant others influence may explain a substantial portion of the racial/ethnic differences in college plans and attendance. These analyses indicated that racial/ethnic differences in educational expectations, an indicator of educational ambitions, were partially attenuated, but neither of the analyses examined a measure of educational attainment, such as college attendance. Educational expectations and educational attainment are strongly correlated; however, the relationship between them is not the same for all racial/ethnic groups. African American students, for example have greater educational ambitions than white students, but they are less likely to actuate these plans (Hauser and Anderson, 1994; Hanson, 1994; Mickelson 1989). Thus, for some ethnic groups, significant others influence may operate in a different fashion on actual college attendance than it does on college plans.

Further, neither Cheng and Starks (2002) nor Goyette and Xie (1999) examine the full complement of significant others with specific racial/ethnic groups. Cheng and Starks examine how parental, teacher, friends, and a close relatives encouragement differs across four broad racial/pan-ethnic

categories. Goyette and Xie's analysis indicates that within pan-ethnic labels, such as Asian, there is variation in the levels of educational expectations across ethnic groups; however, they only examine the influence of parental encouragement on educational expectations. Although there are significant differences between pan-ethnic groups in respect to educational outcomes, significant diversity exists within these general groupings (Hirschman 2001; Kao and Thompson 2004). Thus, to fully understand the racial/ethnic differences it is best to disaggregate pan-ethnic groups into specific ethnicities.

## **DIFFERENTIAL LEVELS OF AND RETURNS TO ENCOURAGEMENT**

### **Levels of Encouragement**

A key finding in the Cheng and Starks analysis was that levels of encouragement from significant others varied across racial/ethnic groups. Specifically, they noted that, net of background and school performance, variation exists in the levels of encouragement from significant others. Asian students received the highest levels of encouragement from their parents, while African American students received the highest levels of encouragement from close relatives and teachers.

A commonly evoked explanation for the variation in parental and friends levels of encouragement to attend college can be found in John Ogbu's oppositional culture framework (see Ogbu and Gibson, 1991; Ogbu, 1991). Students that are members of involuntary minority groups (e.g. African Americans, Mexican, Native Americans) may receive lower levels of encouragement to attend college from their peers given that these youth and their peers are more likely to reject mainstream values, such as educational success (Fordham and Ogbu 1986; Matutute-Bianchi 1986). Further, given their mistrust of the educational system, parents of involuntary minority youth may send their children mixed signals in regards to their educational career (Massey et. al., 2003).

Students that are members of voluntary minority groups (e.g. Korean, Chinese, and Japanese) may be less likely to perceive discrimination as a potential hindrance to educational success. Thus, these youth and their co-ethnic peers would be less inclined to adopt countercultural views, such as those that devalue educational success. Also, their parents would be less likely to provide them with mixed signals regarding the value of education. Sue and Okazaki note Asian parents instill high educational



expectations in their children to combat any potential discrimination that their children may encounter (1990).

The oppositional culture framework posits that African American, Mexican, and Native American students should receive lower levels of encouragement to attend college from their parents and friends (Fordham and Ogbu, 1986; Matutute-Bianchi, 1986). However, Cheng and Starks do not find support for this perspective, concluding that parental aspirations and friends' encouragement are similar or greater amongst minorities after controlling for familial SES and school performance (2002). Further, Fejgin finds that African American students report higher levels of parental educational expectations than whites and Hispanics, net of family background (1995). In an ethnographic study of the educational aspirations of young white and black males, Jay MacLeod notes that the black youth were more likely than white youth to encourage educational ambitions amongst their friends (MacLeod, 1995). Further, Kao concludes that African American youth were less likely than Asian students to have academically orientated friends and that they were more likely to be persuaded by their friends' beliefs and behaviors (2001). However, she states that African American youth, on average, do not have friends with anti-educational beliefs.

Cheng and Starks argue that it is important to examine the role of close relatives, as African American youth are more likely than white youth to interact with members of their extend family and co-ethnic community. The members of the co-ethnic community, though unrelated, are often considered to be 'members' of the student's extended family. Further they note that African American youth are more likely to identify extended family as important figures in the development of the students' educational ambitions (2002). Stanton-Salazar and Spina make a similar argument in respect to the role that informal mentors play in the lives of urban Mexican-American youth (2003). Stanton-Salazar and Spina note that these informal mentors aid in the transition to adulthood by challenging the student to meet goals, such as educational plans, and by helping the youth cope with any challenges that they may encounter. Overall, it appears that a mentor or older relative plays an important role in the educational formation of minority youth from disadvantaged backgrounds.

In respect to the levels of encouragement from teachers, prior research has illustrated that teachers, net of student background and performance, have increased expectations for Asian students and decreased expectations for African American students (Wong 1980; Ferguson, 1998). Cheng and Starks found Asian, African American, and to a lesser extent, Hispanic students report higher levels of encouragement from their teachers than white students (2002).

### **Effect of Encouragement**

Cheng and Starks state that the effect of encouragement from significant others may vary across racial/ethnic groups (2002). They note that there are unique family and social contexts that vary across racial/ethnic groups which can influence how student's translate their father's and mother's educational aspirations into their own educational ambitions. Specifically, these relationships may vary for students from Hispanic and Asian families, as these children are more likely to live in a patriarchal household. This relationship may also vary for students from non-intact households, as students may be less likely to internalize the educational aspirations of a parent with whom they have less contact. That is, less return to encouragement from an absent parent.

Cheng and Starks also note that the returns to encouragement from close relatives may vary across racial/ethnic groups (2002). Drawing upon James Coleman's work on social capital, they note that, due to racial discrimination, disadvantaged minority youth, are more likely to rely upon members of their extended family and co-ethnic community to achieve their educational goals, as they lack cultural and financial capital. Thus, minority youth are not only more likely to establish relationships with close relatives, but they are also more likely to utilize these relationships in the formation of their educational ambitions than their white peers.

My analysis builds upon the prior work that examines the relationship between significant others' influence and students' educational ambitions and attainment across racial/ethnic groups. This will attempt to answer the following questions: What is role of encouragement in mediating the variation in social origins, specifically race/ethnicity? What is the net impact of encouragement that is uncorrelated

with social origins (family background and structure)? Lastly, do the levels of and returns to significant others' influence vary across racial/ethnic groups?

## **DATA**

The data used in this analysis come from the University of Washington Beyond High School Project (UWBHS), a longitudinal study designed to examine the transition from high school to college. The data were obtained from surveys of high school seniors<sup>3</sup> in multiple school districts in a large metropolitan area on the West Coast during the late Springs of 2000 and 2002 to 2005. The combined response rate for all years was roughly 75%. A total of 9,658 seniors<sup>4</sup> from twelve traditional high schools (9 public and 3 private) and numerous alternative site schools completed the survey, which was administered within the schools, either in separate classrooms or in an auditorium setting<sup>5</sup>. The full questionnaire included a wide variety of items designed to measure the students' educational and occupational aspirations, expectations, and plans. In addition, information was gathered about student demographic characteristics, family background, extracurricular activities, support networks, attitudes, and beliefs.

A follow-up survey of students who participated in the in-school survey was conducted in the Springs of 2001 and 2003 to 2006. This short and focused survey asked students to report on: their high school graduation, their post-graduation employment, and their post-graduation school enrollment. The students were contacted via a combination of phone calls, email messages, and an internet-based response system. Most students were contacted directly for the follow-up survey, but the information for some

---

<sup>3</sup> The definition of what constitutes a senior can be somewhat ambiguous. For example, students that have nearly completed four years of high school, but have only enough credits to be classified as a junior and are not graduating in the spring of their fourth year are often identified as seniors. Also, students who have completed enough credits to be considered a senior but have been enrolled in high school for three years or less are considered seniors. There are other scenarios that can also lead to an unclear definition of what constitutes a senior. For the purpose of this analysis we define a senior as a student that plans to be eligible to attend a post secondary institution in the coming academic year.

<sup>4</sup> 120 of these observations were excluded from the analysis as the surveys were completed by exchange students, developmentally disabled students, students that completed the survey with random answers, or students whom we could not match to the school records.

<sup>5</sup> Seniors from one public school district, with 5 comprehensive high schools and numerous alternative high schools, completed the survey in all years. An additional seven high schools (4 public and 3 private) were added to the study in 2003, so seniors from these seven schools completed the survey in 2003 and 2004.

students was obtained from “proxies” such as family members or friends. Of the 9,658 students surveyed in the spring of 2000 and 2002 to 2005, follow-up surveys were obtained from 8,885, yielding a follow-up response rate of 92% of the interviewed high school seniors. The latter number represents the eligible sample for the analyses that examine correlates of college attendance study. It is slightly reduced in the analysis presented below, however, due to missing information for a small number of cases on the dependent variables.

Generally, missing data does not appear to be a problem, as data is missing for less than about 5% of the sample across the independent variables. However, where necessary, regression single imputation methods were used to imputed missing values for all independent variables. This method, under the assumption that the data is missing at random, samples from the error distributions to maintain the natural variance of each variable and provides a predicted value for the missing data point. This method is superior to mean substitution (Allison, 2002).

## **MEASURES: CONCEPTUALIZATION AND OPERATIONALIZATION**

### **Variable of Interest: Encouragement from Significant Others**

The encouragement from significant others variables are based upon a series of questions that ask the student ‘what do you think your [lists the specific significant other] thinks is the most important thing for you to do after high school?’ The student is able to select a response from the following list of answers: 1) ‘go to college’, 2) ‘enter a trade, vocational school, or work apprenticeship program’, 3) ‘enter military service’, 4) ‘get a job’, 5) ‘get married’, 6) ‘I don’t know’, and, for the maternal and paternal question, 7) Does not apply (no [female/]male parent/guardian). Students are asked this question about five significant others: father, mother, friends, favorite teacher, and an adult whose advice the student values (i.e. an adult mentor).

Responses were coded such that ‘go to college’ received a value of ‘1’, while ‘I don’t know’, and, for the maternal and paternal question, ‘Does not apply’ received a value of ‘0’. All other responses were coded as ‘-1’. This coding schema was utilized, rather than a binary coding in which ‘go to college’ was coded as ‘1’ and all other responses were coded as ‘0’, as it allows for a modeling of the extent to which

significant others may steer students towards college, as well as away from college. Further, one could argue that a significant other encouraging a student to get a job or join the military would have more of a detrimental effect on the student's college plans and attendance than a student that does not know what the significant other thinks.

Using this trichotomous classification, each of the measures of significant others' encouragement is allowed three potential response categories: encouragement to not attend college ('-1'), unsure ('0'), and encouragement to attend college ('1'). A series of diagnostic tests indicated that this trichotomous classification was related to numerous educational outcomes in a relatively linear fashion. Thus, the measures of encouragement are operationalized as 3 category ordinal variables, with categories that roughly correspond to: encouragement not to attend college, unsure/low encouragement, and high encouragement.

Lastly, this coding schema is preferable to a binary classification of encouragement in that it provided less error in the estimates of significant others encouragement and better overall fit in a series of models predicting various measures of educational ambitions and attainment.

The paternal and maternal encouragement variables were summed to form a single index of parental encouragement for college<sup>6</sup>. Encouragement to attend college from the students' friends, adult mentor, and favorite teacher are operationalized as separate measures. Combined, these measures illustrate the student's perceptions of what they think the most important people in their life think they should do in the coming year—the year after high school.

These measures closely approximate the measures from the Wisconsin Longitudinal Study (WLS) used by Sewell and colleagues (Hauser, 1972). One small difference is that the WLS asked about friends' plans for after high school, while the question in the UWBHS asks what friends think the student should do after high school. Though conceptually very similar, the question asked in the UWBHS is preferable in that it more effectively taps friends' influence on the students' own college plans and

---

<sup>6</sup> The '-2' and '-1' categories for the parental encouragement index were collapsed due to the small number of cases in these categories.

attendance. Also, Sewell and colleagues used a binary coding schema ('1' is college, '0' is other) for measures of significant other's influence.

Means and standard deviations for the measures of significant others' influence are included in Table 1. Students on average perceive relatively high levels of encouragement from their parents. As for non-familial members, students generally perceive the highest level of encouragement from their favorite teacher and the lowest levels from their friends.

[TABLE 1 ABOUT HERE]

### **Dependent Variables**

The dependent variables utilized in this analysis attempt to capture students' college ambitions and college attendance. Whether the student has college plans for the year after high school is the measure of college ambitions. Students were asked "Do you plan to go on to college or other additional schooling right after high school? That is, do you plan to continue your education this Fall?" Students that reported college plans for the coming year were asked for the name and location of the top three college, professional, or technical schools that they planned on attending<sup>7</sup>. Students that reported plans to attend college and listed a college included in the 2005 Carnegie College classification were coded as having college plans. Overall, 80% of students had some college plans.

Data on college enrollment from the one year follow up survey was used a measure of educational attainment. The 2005 Carnegie classification of institutions of higher education was used to code the institutions that respondents attended<sup>8</sup>. The schools were coded as 4-year degree granting institution, 2 year degree programs, or other post-secondary educational programs<sup>9</sup>. This analysis utilizes two measures of college enrollment: attendance at any college (two- or four-year vs. none or other

---

<sup>7</sup> Students that responded 'yes' to the question about continuing their education post-high school are considered to have college plans. A few students skipped the college plans question, but listed the school which they planned on attending, we considered these students to have college plans for the year following high school.

<sup>8</sup> Information on the Carnegie classification of higher education institutions can be found at: <http://www.carnegiefoundation.org/classifications/>

<sup>9</sup> The institutional classification was based upon the highest degree offered by the institution (Associates or Baccalaureate) For the few schools which offered both Associates and Baccalaureate degrees, I coded these schools based upon which type of degree was more prevalent amongst all degree recipients. Lastly, I coded the small number schools without any form of accreditation and all special focus institutions as other post-secondary educational programs.

program) and attendance at a four-year college (versus no college, two year college, and other program). Seventy percent of students attended any college within one year after high school, while nearly 40% attended a four year college.

### **Demographic Variables**

The construction of the race/ethnicity variable is based upon a matrix of questions that students answered about their racial/ethnic identity. Roughly 96% of student provided at least some information about their race/ethnicity. Two of the numerous race and ethnicity items included in the UWBHS are the Hispanicity and race questions used in the 2000 Census. Roughly four out of five students reported membership in only one racial/ethnic group. For the students that noted membership in multiple racial/ethnic groups, information from a question on primary racial or ethnic identity was used as a ‘tie-breaker’ to determine the student’s race/ethnic group<sup>10</sup>. A small percentage of multi-racial/ethnic students did not provide a primary racial/ethnic identity, so in these instances information on the student’s ancestry was used in an attempt to identify the student’s race/ethnicity<sup>11</sup>. In total, 104 multi-racial students did not provide a singular race/ethnicity as their primary race or as their ancestry<sup>12</sup>. Thus, these 104 students (~1% of the sample) were assigned to the racial category that their same-race/ethnicity multi-racial/ethnic peers most selected as their primary racial/ethnic identity<sup>13</sup>. For the 4% of students that did not provide any race/ethnicity information in the survey, racial/ethnic information from the school administrative records was used<sup>14</sup>. Ultimately, I was able to code students into 12 distinct racial/ethnic groups: white;

---

<sup>10</sup> For example, if a student noted on the race question that they were white and African American and noted on the primary racial/ethnic identity question that they consider African American to be their primary race, they would be coded as African American.

<sup>11</sup> The ancestry question was used in lieu of primary identity for only 194 students. Also the first ancestry that a student listed was used as the student response.

<sup>12</sup> Often these students responded that they were ‘mixed,’ ‘American’ or ‘a lot of stuff’.

<sup>13</sup> For example, 203 students stated that they were African American and white on the race questions. Forty of these students stated that white was their primary race, 143 stated that black was their primary race, and 20 stated they did not have a single race/ethnicity primary identity. The 20 students were assigned a primary race of African American, as it was the modal response of a primary race for white and black students.

<sup>14</sup> There were 35 students for whom no race/ethnic data exists. These students were deleted from the analysis.

African American; Native American; Other Asians<sup>15</sup>; Chinese and Japanese<sup>16</sup>; Korean; Cambodian; Vietnamese; Filipino; Native Hawaiian/Pacific Islanders (NHOPI)<sup>17</sup>; Other Hispanics<sup>18</sup>; and Mexican.

Whites are the largest racial/ethnic groups in the sample constituting 61% of all students. African Americans, at 14%, are the second largest group, while Koreans are the third largest group at 4%. The remaining 9 racial/ethnic groups each consist of roughly 1 to 3% of the overall population.

Immigrant generational status is a demographic indicator that is also related to educational achievement. Second generation (child of immigrants) students, particularly those that are able to draw upon the social capital of their co-ethnic community while being simultaneously acculturated into aspects of US society, display higher levels of achievement than their first (immigrants) and third generation peers (Portes and Rumbaut, 2001). Generational status is coded as series of dummy variables, with third generation or higher serving as the referent. Nearly 70% of all students are third generation, with the balance of students almost evenly split between first and second generation. Gender is another demographic indicator, with males, who are 45% of the sample, used as the referent group.

### **Background Variables**

---

<sup>15</sup> Note that the Other Asian category serves as a residual category for ethnic groups that fall within the Asian racial classification used by the Census Bureau. This category includes students that noted an ethnic group that was not common enough to receive its own category (e.g. Indonesian, Laotian). It also includes students that students that only define themselves by a pan-ethnic identity (e.g. Asian, Asian-American). Lastly, it includes multi-ethnic/racial students that refused to provide a singular primary ethnicity but whose same-race/ethnicity multi-racial/ethnic peers most selected a Pan-ethnic identity (e.g. Asian) as their primary racial/ethnic identity.

<sup>16</sup> I combined the students of Japanese and Chinese descent due to the small sample sizes for these groups. Overall, two groups are very common; however, a few differences exist. Students of Chinese descent are less likely to be 3<sup>rd</sup> generation or higher, their families are less likely to own the home they live in, they are slightly more likely to receive college encouragement from their friends, and they are more likely to have college plans.

<sup>17</sup> Note that the NHOPI Others category serves as a residual category for ethnic groups that fall within the Native Hawaiian and Pacific Islander classification. This category includes students that noted an ethnic group that was not common enough to receive its own category (e.g. Samoan, Guamanian). It also includes students that students that only define themselves by a pan-ethnic identity. Lastly, it includes multi-ethnic/racial students that refused to provide a singular primary ethnicity but whose same-race/ethnicity multi-racial/ethnic peers most selected a Pan-ethnic identity as their primary racial/ethnic identity.

<sup>18</sup> Note that the Other Hispanic category serves as a residual category for ethnic groups that fall within the Hispanic classification used by the Census Bureau. This category includes students that noted an ethnic group that was not common enough to receive its own category (e.g. Puerto Rican, Panamanian). It also includes students that students that only define themselves by a pan-ethnic identity (e.g. Latino, Hispanic). Lastly, it includes multi-ethnic/racial students that refused to provide a singular primary ethnicity but whose same-race/ethnicity multi-racial/ethnic peers most selected a Pan-ethnic identity (e.g. Latino) as their primary racial/ethnic identity.



One of the most important predictors of educational attainment is the socio-economic status (SES) of the family of origin. SES is represented by a dummy variable indicating whether the student's family owns the home in which they live ('1' is home ownership, '0' is renters) and by a measure of the highest level of education completed by the student's parents. The highest level of education attained by the parents is coded as five levels of education: less than a high school degree ('1'), high school degree ('2'), some college ('3'), completed college ('4'), or advanced degree ('5'). Some students do not have a father or mother in their life, so two binary variables were constructed: one to indicate the absence of the mother and the other to indicate the absence of the father. In instances where the student was missing a mother or father figure, their value on the mother or father education question was imputed. The average level of completed education for fathers and mothers is some college, while 70% of families own their own home.

Youth that live with both of their biological/adoptive parents have access to greater resources and increased levels of social capital, allowing them to complete high school and attend college at higher rates than students from disrupted families, (Astone and McLanahan, 1991, 1994; Hauser and Sweeney, 1997; Peters and Mullis, 1997). Family structure is coded as a dummy variable to differentiate between students from intact families, 60% of all students, and non-intact families.

### **Academic Performance and Parenting Styles**

Student academic performance is related to educational success; students with higher levels of performance in high school are more likely to graduate from high school and attend college (Heck and Mahoe, 2006; Rumberger and Larson, 1998; Rumberger, 1995). Self-reported cumulative grade point average (GPA) is included in the analysis as a measure of academic performance.

Prior research notes the importance of parenting styles in the socialization of children and in the formation of children's educational orientation (Bowles and Gintis, 1976; Bourdieu, 1977). Thus, three parenting indices are included in the analysis: 'know friends', 'parental monitoring, and 'parental

communication'<sup>19</sup>. Youth that live in communities with high levels of solidarity and community integration experience greater educational success, as the parents are more likely to know each other and their children's friends, allowing them to better support and monitor the youth in the community (Coleman 1988).

The extent to which parents monitor their children's schoolwork and out of school activities is also related to educational success. Children that grow up in homes which emphasize autonomy and independence have greater educational success than students from homes in which parents utilize an authoritarian parenting style (Bourdieu, 1977). Lastly, the extent to which parents discuss and display support for their children's educational ambitions is related to eventual educational outcomes for the child. Children in homes with parents that convey high levels of interest in their children's educational career are more likely to experience educational success than students with parents that do not display similar interests (McNeal, 1999; Rumberger et al, 1990).

## **ANALYSIS**

[TABLE 2 ABOUT HERE]

### **Levels of Background Factors, Encouragement, Educational Outcomes by Race/Ethnicity**

Table 2 displays the bivariate relationship between race/ethnicity and encouragement and race/ethnicity and college plans and attendance. Variation exists in the levels of encouragement. Vietnamese and Japanese/Chinese students perceive high levels of encouragement to attend college from all of their significant others. Additionally, Filipino and Korean students perceive high levels of encouragement from their parents, friends and an adult mentor. Native American students perceive the lowest levels of encouragement from their significant others. Also, Mexican students tend to perceive lower levels of encouragement from their parents and friends. The bivariate relationships between race/ethnicity and the college outcome measures indicate that the racial/ethnic groups that perceive the highest levels of encouragement also have high levels of college plans and attendance.

### **Multivariate Analysis**

---

<sup>19</sup> More information about the construction of the parenting indices is presented in Appendix A.

The relationship between race/ethnicity, significant others encouragement, and college attendance may be attenuated or masked by other causal mechanisms, so it is important to examine this relationship within a multivariate context. The first stage of the multivariate analysis focuses on whether perceived encouragement from significant others attenuates the racial/ethnic variation in college plans and attendance. Tables 3, 4 and 5 present the results, in the form of odds-ratios<sup>20</sup> from a series of incremental logistic regression on college plans and college attendance that use a life course perspective, building upon an initial model which includes race/ethnicity, gender, and generational status.

[TABLE 3 ABOUT HERE]

### **College Plans**

Table 3 contains results from a series of logistic regressions on whether or not the student had college plans for the year following high school. Results from Model 1, which includes demographic measures, indicate that substantial racial/ethnic variation exists in college plans. Students of Korean, Chinese/Japanese, Cambodian, and Vietnamese descent are all more likely to have college plans than white students, while NHOPI, Mexican and other Hispanic students are less likely. The magnitude of the effect for the some of the specific ethnic groups is notable. For example, Vietnamese students, relative to whites, are nearly 3.6 times more likely to have college plans, while Korean and Japanese/Chinese students are roughly 2.5 times more likely than whites to have college plans. It is interesting to note the amount of heterogeneity within the Asian pan-ethnic group; some groups, such as the Vietnamese, are much more likely than whites to have college plans, while others, such as Filipino students, appear to have similar college plans to whites, and some groups, such as NHOPI, are less likely than whites to have college plans. Also, female and second generation students are more likely to have college plan than males and third generation students, respectively.

Model 2 includes family structure and the SES indicators. As expected, students from wealthier families and students that live with both parents are more likely to have college plans. The inclusion of

---

<sup>20</sup> Odds ratios can be easily converted into logistic regression coefficients by taking the log (to the base e) of the odds ratio

the family background variables attenuates the disadvantage that NHOPI, Mexican and other Hispanic students displayed in Model 1. After controlling for familial background, African American students display higher levels of college plans than comparable white students. The advantage that Korean and Japanese/Chinese students displayed in Model 1 remains relatively consistent in Model 2. However, the advantage displayed by Cambodian and Vietnamese students in Model 1 grows substantially in Model 2; they are, respectively, 5.6 and 3.2 times more likely than comparable whites to have college plans.

In Model 3 the parenting style indices are added to the model. Only one of the indices, parental communication and support, significantly affects college plans. Students that feel greater levels of support and communicate more with their parents are more likely to have college plans. Filipino students, with the inclusion of the parenting indices to the model, are more likely than white students to have college plans. As in the prior models, the advantage displayed by the Vietnamese students, relative to whites, increases with the inclusion of the additional measures. Cumulative grade point average (GPA) is included in Model 4, and it displays a positive relationship with college plans. The magnitude of the Vietnamese advantage is reduced from 6.42 to 3.98. Also, GPA attenuates the Filipino advantage, though the coefficient is on the threshold of significance (*p-value* of .052).

In Model 5 the measures of significant others encouragement are included and their inclusion greatly improves the model fit, as the BIC' increases from -914 to -1,666. The measures of parental, friends and mentors encouragement are all significantly and positively related to college plans, while perceived encouragement from favorite teacher does not display a significant relationship. The magnitude for all three significant variables is roughly equal, with a one unit increased resulting in about a 1.43 to 1.49 increase in the likelihood that the student will have college plans. The impact of encouragement on students' college plans appears to be relatively independent of student's social origins, as the inclusion of the encouragement variables only partially attenuates the social class differentials. Overall, the results indicate that encouragement from significant others has a powerful and independent positive net effect on student's college plans.

Also, student's perception of encouragement to attend college from their parents, friends, and an adult mentor substantially reduces the racial and ethnic variation in college plans. The advantage displayed by Vietnamese students in Model 4 is reduced in size by roughly 34%, while the advantage displayed by Korean and Cambodian is reduced by approximately 25 to 30%. Also the advantages displayed by Chinese/Japanese, Filipino, and African American students are reduced in size by 18%, 17%, and 12%, respectively. In fact the Chinese/Japanese coefficient is no longer significant at the .05 level, though it is on the threshold of statistical significance. The Filipino coefficient goes from being on the threshold of significance (*p-value* of .051) to being not significant at the .10 level.

Students' perception of encouragement to attend college from their parents, friends, and an adult mentor displays a powerful independent net effect on students' college plans. Also, it helps to explain a large fraction of the racial/ethnic variation in college plans. Specifically, increased levels of encouragement partially explain the higher levels of college plans amongst Korean, Chinese/Japanese, Cambodian, Vietnamese, Filipino, and African American students, relative to whites.

[TABLE 4 ABOUT HERE]

### **College Attendance**

Table 4 contains results from a series of logistic regressions predicting whether students attended a two-year or four-year college within a year of high school graduation. Results from Model 1, which includes a set of demographic variables, illustrate that substantial racial/ethnic variation exists in college attendance. African American, Native American, Cambodian, NHOPI, Other Hispanic, and Mexican students are all less likely than white students to attend college, while Korean, Chinese/Japanese, and Vietnamese students are more likely than comparable whites to attend college. Model 1 also illustrates a college enrollment advantage for females and third generation students, and an enrollment disadvantage for first generation students.

In Model 2 the family background measures are included and they operate as expected. The family background variables reduce some of the racial/ethnic gap in college attendance. The initial disadvantage displayed by African American, Native American, and Mexican students relative to whites

is attenuated to non-significance. Also, the Other Hispanic disadvantage is reduced in magnitude and is no longer significant at the .05 level. Familial background has a large effect on Cambodian students, adjusting for it allows Cambodian students to go from displaying a deficit, relative to whites, in Model 1 to an enrollment advantage in Model 2. The Chinese/Japanese students' enrollment advantage can be explained by their more privileged family background. Lastly, the Vietnamese coefficient more than doubles in magnitude, going from 3.73 to 7.74, after controlling for social class.

In model 3 the parenting indices are included. As in the regression on college plans, only parental communication and support is significantly related to the outcome. The inclusion of the parenting indices does not significantly alter the racial/ethnic variation. GPA is included in Model 4, and, as expected, it is positively related to college enrollment. After adjusting for GPA African Americans are more likely than white students to attend college and other Hispanic students no longer displays an enrollment advantage..

The significant others encouragement variables are included in the Model 5 and their inclusion substantially improves the model fit. The BIC' increases from -1,594, in the prior model, to -2,279. Parental, friends, and mentors encouragement is positively related to college attendance, while favorite teachers encouragement is not. It appears that mentors encouragement may have a slightly smaller effect than parental and friends encouragement. However, student's perception of encouragement from significant others, save favorite teachers, exerts a powerful effect on college enrollment. Further the minimal attenuation of the family background measures indicates that the effect of encouragement on college attendance is independent of students' social origins.

Students' perception of encouragement to attend college from their parents, friends, and an adult mentor, to a moderate extent, reduces the racial/ethnic variation in college enrollment. The enrollment advantage that African American and Cambodian students displayed in Model 4 is no longer apparent in the final model. The advantage relative to whites displayed by Koreans and Vietnamese in model 4 is reduced by 23% and 30% in size, respectively in model 5. As in the prior table, it appears that significant others encouragement explains a large fraction, if not all, of the variation across racial/ethnic groups.

[TABLE 4 ABOUT HERE]

## **Four Year College**

Table 5 contains results from a series of logistic regressions on whether students attended a four-year college within a year of high school graduation. Many of the covariates in the logistic regression on four year college attendance operate in the same fashion as they did in the regression on any college, so the discussion on table 5 focuses on the relationship between significant others encouragement to attend college and enrollment in a four year college as well as the extent to which significant others encouragement attenuates racial/ethnic variation in four year college attendance.

A few of the racial/ethnic patterns vary across table 4 and 5. The Cambodian advantage relative to whites, evident in the analysis of any college enrollment, is not consistently apparent in the analysis in Table 5. Also, Chinese /Japanese students appear to be more likely than white students to attend a four year college, but not any college. These differences are due to the fact that if Cambodian students attend college they are more likely to attend a two year school than a four year school (63% of all college going Cambodian attended a two year school), while Chinese/Japanese college going students were more likely to attend a four year school than a two year school (74% of college going Chinese/Japanese students attended a four year school).

As in the prior tables, perceived encouragement from significant others significantly and positively increases the model fit (BIC' increase from -2,634 to -3,181). Unlike the prior tables, favorite teachers encouragement is significantly related to four year college enrollment, making all four measures of significant others positively related to four year college attendance. The magnitude of the effect of friends encouragement is the greatest of the significant other measures, while the magnitude of favorite teachers is the weakest. The minimal attenuation of the social class indicators, again, indicates that the substantial positive effect of significant others encouragement is independent of social class.

Students' perception of encouragement from significant others to attend a four year college reduces the racial/ethnic variation. The magnitude of the Vietnamese advantage is reduced by about 27% across the models 4 and 5, while the magnitude of the Korean and Cambodian advantages displayed in Model 4 are reduced in size by about 17 to 18% after the encouragement variables are included in the

model. Further, the Cambodian coefficient is reduced from statistical significance at the .10 level to non-significance. The magnitude of the Chinese/Japanese advantage in Model 4 is reduced by about 11%, and it is no longer significant at the .05 level. Interestingly, the African American advantage is barely reduced (decrease of 3% in size) despite the inclusion of the encouragement indicators. The African American advantage in attending four year colleges can only be minimally explained by higher levels of encouragement. This is noteworthy as increased levels of encouragement, net of other covariates, explains the African American advantage relative to whites in two or four year college attendance.

[TABLE 5 ABOUT HERE]

The results from the regression on college plans and the two measures of college enrollment clearly illustrate that encouragement to attend college is a powerful and important predictor of educational outcomes. Encouragement to attend college from parents, friends, and an adult mentor appear to be particularly important. Further, significant others' encouragement is able to reduce a sizeable fraction of the racial/ethnic variation in college plans and attendance.

### **Levels of Encouragement**

This section of the analysis will first examine whether the levels of encouragement students receive from significant others vary across racial/ethnic groups. A series of incremental multinomial logistic regressions on the significant other measures were estimated<sup>21</sup>. Rather than display numerous sets of coefficients, the multinomial logistic regression results were used to predict the probability that students from each racial/ethnic group would receive encouragement to attend college from each of their significant others<sup>22</sup>. The predicted probabilities are displayed in Table 6. The 95% confidence intervals for the predicted values are included in appendix Table A1.

[TABLE 6 ABOUT HERE]

---

<sup>21</sup> Multinomial logistic regression was used as the measures of significant other's encouragement did not meet the requisite requirements to use ordinal logistic regression

<sup>22</sup> For parental encouragement the predicted probability is for students receiving encouragement to attend college from both parents.



Panel A displays the predicted probability that a student perceives encouragement from both of their parents. The results from Model 1, which includes only demographic characteristics, indicates that there is significant racial/ethnic variation in the levels of parental encouragement. African American, Native American, and Mexican students perceive lower levels of encouragement than do white students, while Korean, Chinese/Japanese, and Vietnamese students perceive higher levels of encouragement. In model 2, family background characteristics are added to the model and the variation in levels of parental encouragement is partially constricted. African American, Native American, and Mexican students, after adjusting for family resources and family structure, receive the same levels of parental encouragement as white students. The higher levels of encouragement displayed by Korean, Chinese/Japanese, and Vietnamese students remain. Model 2 also illustrates that Cambodian students receive higher levels of parental encouragement than white students from similar family backgrounds. Model 3 includes a control for academic performance (GPA). The aforementioned racial/ethnic patterns do not change greatly with the inclusion of GPA, though the Chinese/Japanese advantage is slightly attenuated. Also, although the magnitude is small, Mexican and African American students display a significant advantage over white students, after adjusting for academic performance.

The variation in the levels of encouragement from parents is partially due to differential family background and structure across racial/ethnic groups. However, after controlling for family background and academic performance, Vietnamese, Cambodian, and Korean receive modestly higher levels of encouragement and Mexican and African American students receive slightly higher levels of encouragement from their parents than comparable white students.

Panel B displays the probabilities that the students' friends encouraged college attendance. In Model 1 Korean, Chinese/Japanese, Cambodian, Vietnamese, and Filipino students receive higher levels of encouragement than their white peers. Mexican and other Hispanic students receive lower levels of encouragement from their friends. However, the lower levels of encouragement for Mexican and other Hispanic students are attenuated in Model 2, with the inclusion of the family background variables. The higher levels of encouragement that Korean, Chinese/Japanese, Cambodian, Vietnamese, and Filipino

students receive from their friends remain constant across Models 2 and 3. Again, after controlling for GPA, African American students display a small but significant advantage relative to whites.

The results from Panels A and B are noteworthy in that they are contrary to what the Oppositional Culture framework would predict. The involuntary minority groups—African American, Mexican, Native American—perceive roughly the same level of college encouragement from their peers and parents as white students, after controlling for financial resources and family structure. In fact, African American students, after controlling for academic performance, receive slightly higher levels of college encouragement (more pro school attitudes). Clearly, African American, Mexican, Native American students are not perceiving mixed or anti-educational signals from their parents and friends. Rather, the lower levels of perceived encouragement can be explained by their SES and family structure disadvantage. On the other end of the spectrum, Korean, Chinese/Japanese, Cambodian, and, in particular, Vietnamese, students are more likely than white students to perceive pro-educational signals from their parents and friends.

Panel C contains the predicted probabilities that an adult mentor encouraged college attendance. Across the models there appears to be some variation. African American and Mexican students, relative to whites, appear to receive higher levels of encouragement from Mentors (as shown in the bivariate case in table 2). Cheng and Starks (2002) and Salazar and Spina (2003) noted that adult mentors or close relatives can play an important role in the lives of young African American and Mexican American youth. One of the ways in which they influence these students is through increased levels of college encouragement. Also, mentors appear to provide increased levels of encouragement to Korean, Cambodian, Vietnamese, Filipino, NHOPI, and Other Asian youth.

Panel D displays the predicted probabilities that the student's favorite teacher encouraged the student to attend college. Overall, the range of the differences between racial/ethnic groups is relatively modest. However, some significant differences exist. African American, Cambodian, Vietnamese, NHOPI, Mexican, and other Hispanic students are more likely than white students to perceive college encouragement from their favorite teacher.

## **Returns to Encouragement**

The last component of this analysis is to examine whether the returns to encouragement vary across racial/ethnic group. It is possible that some significant others have a more influential effect on the formation of student's college plans and attendance (Cheng and Starks 2002). To test this hypothesis, a series of interactions terms were constructed between each of the measures of significant others and the racial/ethnic groups. The significant other by race/ethnicity interactions, along with the demographic, family background, academic performance, and parenting style measures, were included in logistic regressions on college plans and both measures of college attendance. None of the interaction terms displayed consistent and significant effects on the outcome measures, indicating that the returns to encouragement do not vary across detailed racial/ethnic groups. Thus, it is possible to conclude that the positive and powerful effect of encouragement on college plans and attendance operates similarly for all students, regardless of race/ethnicity. As the results were not significant, they are not displayed.

## **CONCLUSIONS**

One of the major questions facing high school students is whether they should attend college. With the changes to the structure in the economy that began occurring in the second half of the twentieth century, most 'middle-class' jobs and nearly all well-paying jobs require a college degree, if not an advanced degree. Thus the answer to the question facing many youth as they finish high school is becoming increasingly clear; if they want to live the American Dream they must continue their education. Despite the opportunity for social mobility that college affords students, not all students have college ambitions or attend a post-secondary institution. Understanding the determinants of college plans and attendance is important given the amount of variation in plans and enrollment that exists across racial/ethnic groups.

This analysis attempted to better understand the processes that lead students to form college plans and attend college by examining how significant others encouragement influenced students' college plans and attendance one year after high school. Specifically, this analysis attempted to answer a few questions  
What is role of encouragement in mediating the variation in social origins, specifically race/ethnicity?

What is the net impact of encouragement that is uncorrelated with social origins? Lastly, do the levels of and returns to significant others' influence vary across racial/ethnic groups?

The results indicate that encouragement from significant others is an extremely powerful predictor of college plans and attendance. In nearly all instances, the inclusion of these measures provided the greatest improvement in model fit. Parental, friends, and mentors encouragement all have a large and positive effect on both college plans and attendance, and favorite teachers encouragement is significantly related to attending a four year college. Sewell, Hauser, and colleagues noted significant others encouragement had an independent effect on educational aspirations and attainment; however, they also noted that it was one of the major mediators of social class. This analysis finds that significant others encouragement does mediate the social class effect, though only modestly. The effect of significant others encouragement appears to be largely independent of social class, as well as academic performance. In sum, these results affirm that significant others encouragement is a very important component of the educational attainment process.

Significant others encouragement not only displays a strong independent relationship to educational outcomes, it also mediates a sizable fraction of the racial/ethnic variation in college plans and attendance. In some instances significant others encouragement was able to completely mediate the racial/ethnic variation between minority groups and whites. However, in instances when these measures were not able to completely attenuate the racial/ethnic variation, they were often able to explain between 15 and 30% of the difference between the given racial/ethnic groups and whites. Significant others encouragement was particularly useful in helping to explain the increased levels of college plans and attendance of Vietnamese, Cambodian, and Korean students.

The levels of encouragement from significant others vary across racial/ethnic groups. Limited familial financial resources and not living with both parents explains the lower observed levels of encouragement for African American, Native American, Cambodian, NHOPI and Mexican students relative to white students. Conversely, the increased levels of encouragement that Vietnamese, Korean, Filipino, and, to a lesser extent, Japanese/Chinese students receive, relative to white students, are less

dependent upon family background and family structure. After adjusting for background factors and academic performance, Cambodian, Vietnamese, Korean, and African American students generally received the highest levels of encouragement from their significant others.

The examination of the racial/ethnic variation in parents and friends levels of encouragement provides results contradictory to those anticipated by the oppositional culture framework. African American, Native American, and Mexican students are as likely, if not slightly more likely, than white students to receive encouragement from their parents and friends, after adjusting for family background and school performance. In fact, after controlling for family background, all racial/ethnic groups receive equal or higher levels of parental encouragement than whites. African American and Mexican youth receive higher levels of encouragement from an adult mentor, which supports prior work that notes the importance of an adult mentor in the lives of African American and Mexican youth (Cheng and Stark, 2002; Salazar and Spina, 2003). Despite the differential levels of encouragement across racial/ethnic groups, the powerful positive effect of encouragement from significant others on college plans and attendance does not vary across racial/ethnic groups.

This analysis clearly illustrates that significant others encouragement to attend college is an important predictor of college plans and attendance. Further significant others encouragement is an important causal mechanism that can help to explain racial/ethnic variation in educational outcomes. One policy orientated implication of these findings is that increasing levels of significant others encouragement could significantly increase the levels educational ambitions and plans of high school students and attenuate the racial/ethnic achievement gap, at a relatively modest cost. Future work in this area could examine whether variations in the consistency of perceived encouragement from significant others is related to levels of educational ambitions, as the development of educational ambitions occur over the life course through repeated interactions with significant others.

**Table 1. Percentile Distributions and Means for the Socio-Economic Characteristics and Educational Outcomes of High School Seniors in UWBHS Sample.**

<b>Social and Economic Characteristics</b>	<b>Proportions/Mean</b>	<b>Std Dev</b>
GENDER: Male	.45	--
GENDER: Female	.55	--
<b>RACE/ETHNICITY</b>		
White	.61	--
African American	.14	--
Native American	.01	--
Pan, Multi, and Other Asian	.02	--
Cambodian	.03	--
Vietnamese	.03	--
Filipino	.03	--
Korean	.04	--
Japanese & Chinese	.02	--
Native Hawaiian/ Other Pacific Islanders	.02	--
Pan, Multi, and Other Hispanic	.03	--
Mexican	.03	--
<b>GENERATIONAL STATUS</b>		
First Generation (Student born out of US)	.14	--
Second Gen. (At least one of parents born outside US)	.17	--
Third Gen. and higher (Student and parent born in US)	.69	--
AVG LEVEL OF MATERNAL EDUCATION (5 is high)	2.90	1.16
% of Students Without a Maternal Figure	.01	--
AVG LEVEL OF PATERNAL EDUCATION (5 is high)	3.01	1.21
% of Students Without a Paternal Figure	.05	--
HOME OWNERSHIP :Rents	.30	--
HOME OWNERSHIP: Owns home	.70	--
<b>FAMILY STRUCTURE</b>		
Lives with both birth/adoptive parents	.60	--
Does not live with both birth/adoptive parents	.40	--
<b>SIGNIFICANT OTHER'S INFLUENCE</b>		
Parental Encouragement	1.39	1.02
Friend's Encouragement	.61	.68
Mentor's Encouragement	.74	.61
Favorite Teacher's Encouragement	.77	.54
Self Reported Cumulative GPA	3.14	.68
<b>PARENTING STYLES</b>		
Parental-Student Communciation	3.04	.58
Parental Control	2.47	.88
Parents Know Friends	2.65	.75
<b>Educational Outcomes</b>		
College Plans for Coming Year	.80	--
Attended a 2- or 4-Year Degree College	.70	--
Attended a 4 -Year Degree College	.39	--
N of high school seniors	9,623	
N of follow up resonidents	8,864	

<b>Table 2. Means and Proportions for Encouragement from Significant Others and Educational Outcomes by Race/Ethnicity.</b>												
<b>BACKGROUND MEASURES</b>	<b>White</b>	<b>African American</b>	<b>Native American</b>	<b>Other Asian</b>	<b>Cambodian</b>	<b>Vietnamese</b>	<b>Filipino</b>	<b>Korean</b>	<b>Japanese &amp; Chinese</b>	<b>NHOPI</b>	<b>Other Hispanic</b>	<b>Mexican</b>
<b>SIGNIFICANT OTHERS</b>												
Parental Encouragement (Std Dev)	1.39 (1.03)	1.27 (1.02)	1.25 (1.12)	1.38 (1.00)	1.36 (1.06)	1.76 (.67)	1.52 (.91)	1.74 (.68)	1.64 (.79)	1.27 (1.12)	1.31 (1.05)	1.23 (1.10)
Friend's Encouragement (Std Dev)	.60 (.69)	.58 (.71)	.45 (.80)	.67 (.66)	.73 (.59)	.77 (.57)	.76 (.58)	.79 (.52)	.80 (.52)	.55 (.75)	.52 (.73)	.53 (.73)
Mentor's Encouragement (Std Dev)	.71 (.64)	.75 (.61)	.65 (.71)	.81 (.54)	.78 (.56)	.89 (.39)	.86 (.45)	.87 (.43)	.85 (.42)	.75 (.63)	.74 (.61)	.73 (.63)
Favorite Teacher's Encouragement (Std Dev)	.75 (.57)	.79 (.51)	.69 (.67)	.77 (.55)	.84 (.43)	.91 (.30)	.82 (.45)	.83 (.39)	.90 (.32)	.77 (.57)	.77 (.58)	.82 (.48)
<b>EDUCATIONAL OUTCOMES</b>												
College Plans for Coming Year	.79	.79	.76	.80	.88	.93	.86	.91	.91	.71	.75	.72
Attended a 2- or 4-Year College	.71	.65	.60	.70	.62	.89	.75	.87	.79	.49	.61	.53
Attended a 4-Year College	.41	.32	.23	.32	.23	.40	.38	.64	.59	.23	.33	.23
Sample Size	5,828	1,335	141	210	260	282	264	369	158	192	254	330

**Table 3. Odds-Ratios from Logistic Regressions of Social, Economic, and Encouragement on College Plans with Robust S.E. (N=9,457).**

	Model 1		Model 2		Model 3		Model 4		Model 5	
	<i>e<sup>B</sup></i>	P> z	<i>e<sup>B</sup></i>	P> z	<i>e<sup>B</sup></i>	P> z	<i>e<sup>B</sup></i>	P> z	<i>e<sup>B</sup></i>	P> z
Female	<b>1.90</b>	.00	<b>2.01</b>	.00	<b>1.88</b>	.00	<b>1.58</b>	.00	<b>1.40</b>	.00
Male (Referent)	--	--	--	--	--	--	--	--	--	--
African American	.94	.41	<b>1.27</b>	.00	<b>1.24</b>	.01	<b>1.41</b>	.00	<b>1.24</b>	.02
Native American	.78	.23	1.11	.62	1.13	.58	1.17	.46	1.16	.52
Other Asian	.97	.87	1.19	.36	1.36	.13	1.30	.18	1.10	.62
Korean	<b>2.61</b>	.00	<b>2.71</b>	.00	<b>2.90</b>	.00	<b>2.76</b>	.00	<b>2.01</b>	.00
Chinese/Japanese	<b>2.46</b>	.00	<b>2.37</b>	.00	<b>2.55</b>	.00	<b>2.23</b>	.01	<i>1.84</i>	.05
Cambodian	<b>1.71</b>	.01	<b>3.19</b>	.00	<b>3.72</b>	.00	<b>3.69</b>	.00	<b>2.71</b>	.00
Vietnamese	<b>3.58</b>	.00	<b>5.59</b>	.00	<b>6.42</b>	.00	<b>4.98</b>	.00	<b>3.27</b>	.00
Filipino	<i>1.44</i>	.06	1.38	.11	<b>1.49</b>	.05	<i>1.49</i>	.05	1.23	.33
NHOPI	<b>.57</b>	.00	.77	.15	.77	.15	.85	.41	.76	.16
Other Hispanic	<b>.71</b>	.03	.88	.43	.91	.54	.98	.89	.89	.50
Mexican	<b>.63</b>	.00	1.02	.90	.96	.79	1.05	.73	.94	.68
White (Referent)	--	--	--	--	--	--	--	--	--	--
1st Generation	.93	.43	1.03	.74	1.08	.41	1.03	.75	.90	.30
2nd Generation	<b>1.35</b>	.00	<b>1.36</b>	.00	<b>1.40</b>	.00	<b>1.35</b>	.00	<b>1.31</b>	.01
3rd Generation (Referent)	--	--	--	--	--	--	--	--	--	--
Non-Intact Family			<b>.73</b>	.00	<b>.79</b>	.00	<b>.83</b>	.00	<b>.86</b>	.02
Intact Family (Referent)			--	--	--	--	--	--	--	--
Own Home			<b>1.36</b>	.00	<b>1.31</b>	.00	<b>1.26</b>	.00	<b>1.20</b>	.01
Does Not Own Home (Ref)			--	--	--	--	--	--	--	--
Level of Maternal Education			<b>1.22</b>	.00	<b>1.18</b>	.00	<b>1.15</b>	.00	<b>1.10</b>	.00
Missing a Mother Figure			<b>.52</b>	.00	.66	.08	<b>.62</b>	.03	.72	.14
Level of Paternal Education			<b>1.24</b>	.00	<b>1.21</b>	.00	<b>1.18</b>	.00	<b>1.10</b>	.00
Missing a Father Figure			.90	.39	1.01	.95	1.03	.82	<i>1.25</i>	.08
Parental Comm./Support					<b>2.01</b>	.00	<b>1.66</b>	.00	<b>1.37</b>	.00
Parental Control					.97	.44	1.02	.51	1.00	.94
Parent's know friends					1.01	.86	.99	.80	1.04	.41
GPA							<b>1.96</b>	.00	<b>1.64</b>	.00
Parental Encouragment									<b>1.49</b>	.00
Friend's Encouragment									<b>1.43</b>	.00
Mentor's Encouragement									<b>1.44</b>	.00
Fav. Teacher's Encrgmnt									1.06	.32
BIC/ Pseudo R <sup>2</sup>	-169	.03	-477	.07	-655	.09	-914	.12	-1,666	.20



**Table 4. Odds-Ratios from Logistic Regressions of Social, Economic, and Encouragement on Two- or Four-Year College Attendance with Robust S.E. (N=8,864).**

	Model 1		Model 2		Model 3		Model 4		Model 5	
	$e^B$	P> z	$e^B$	P> z	$e^B$	P> z	$e^B$	P> z	$e^B$	P> z
Female	<b>1.31</b>	.00	<b>1.42</b>	.00	<b>1.33</b>	.00	1.04	.47	.92	.14
Male (Referent)	--	--	--	--	--	--	--	--	--	--
African American	<b>.73</b>	.00	1.04	.58	1.01	.86	<b>1.23</b>	.01	1.12	.19
Native American	<b>.58</b>	.00	.96	.83	.98	.93	1.04	.85	1.00	.99
Other Asian	.92	.62	1.18	.37	1.33	.13	1.29	.16	1.09	.63
Korean	<b>2.90</b>	.00	<b>3.17</b>	.00	<b>3.36</b>	.00	<b>3.26</b>	.00	<b>2.50</b>	.00
Chinese/Japanese	<b>1.51</b>	.05	1.40	.13	1.45	.11	1.21	.43	1.00	.99
Cambodian	<b>.67</b>	.01	<b>1.58</b>	.01	<b>1.79</b>	.00	<b>1.74</b>	.00	1.27	.18
Vietnamese	<b>3.73</b>	.00	<b>7.74</b>	.00	<b>8.77</b>	.00	<b>6.54</b>	.00	<b>4.59</b>	.00
Filipino	1.23	.19	1.17	.35	1.22	.23	1.23	.24	1.02	.91
NHOPI	<b>.37</b>	.00	<b>.52</b>	.00	<b>.51</b>	.00	<b>.56</b>	.00	<b>.51</b>	.00
Other Hispanic	<b>.61</b>	.00	.76	.07	.76	.07	.84	.28	.75	.11
Mexican	<b>.46</b>	.00	.88	.35	.83	.17	.93	.63	.83	.23
White (Referent)	--	--	--	--	--	--	--	--	--	--
1st Generation	<b>.84</b>	.03	.98	.85	1.02	.81	.95	.55	.84	.08
2nd Generation	<b>1.19</b>	.02	<b>1.22</b>	.01	<b>1.26</b>	.00	<b>1.20</b>	.03	1.15	.10
3rd Generation (Referent)	--	--	--	--	--	--	--	--	--	--
Non-Intact Family			<b>.70</b>	.00	<b>.76</b>	.00	<b>.80</b>	.00	<b>.81</b>	.00
Intact Family (Referent)			--	--	--	--	--	--	--	--
Own Home			<b>1.51</b>	.00	<b>1.46</b>	.00	<b>1.41</b>	.00	<b>1.37</b>	.00
Does Not Own Home (Ref)			--	--	--	--	--	--	--	--
Level of Maternal Education			<b>1.37</b>	.00	<b>1.33</b>	.00	<b>1.30</b>	.00	<b>1.26</b>	.00
Missing a Mother Figure			<b>.61</b>	.04	.75	.24	.66	.08	.78	.28
Level of Paternal Education			<b>1.34</b>	.00	<b>1.31</b>	.00	<b>1.27</b>	.00	<b>1.21</b>	.00
Missing a Father Figure			<b>.78</b>	.04	.85	.16	.85	.19	1.03	.84
Parental Comm./Support					<b>1.80</b>	.00	<b>1.40</b>	.00	<b>1.14</b>	.03
Parental Control					1.03	.34	<b>1.10</b>	.00	<b>1.08</b>	.03
Parent's know friends					1.01	.70	.99	.88	1.05	.22
GPA							<b>2.61</b>	.00	<b>2.28</b>	.00
Parental Encouragement									<b>1.49</b>	.00
Friend's Encouragement									<b>1.53</b>	.00
Mentor's Encouragement									<b>1.36</b>	.00
Fav. Teacher's Encrgmnt									1.08	.25
BIC/ Pseudo R <sup>2</sup>	-158	.03	-894	.10	-1,039	.12	-1,594	.17	-2,279	.23

**Table 5. Odds-Ratios from Logistic Regressions of Social, Economic, and Encouragement on Four-Year College Attendance with Robust S.E. (N=8,864).**

	Model 1		Model 2		Model 3		Model 4		Model 5	
	<i>e<sup>B</sup></i>	P> z	<i>e<sup>B</sup></i>	P> z	<i>e<sup>B</sup></i>	P> z	<i>e<sup>B</sup></i>	P> z	<i>e<sup>B</sup></i>	P> z
Female	<b>1.30</b>	.00	<b>1.42</b>	.00	<b>1.32</b>	.00	.91	.07	<b>.83</b>	.00
Male (Referent)	--	--	--	--	--	--	--	--	--	--
African American	<b>.66</b>	.00	.99	.90	.98	.82	<b>1.45</b>	.00	<b>1.41</b>	.00
Native American	<b>.41</b>	.00	.71	.10	.72	.14	.83	.41	.80	.33
Other Asian	<b>.71</b>	.04	.86	.39	1.00	.99	.99	.95	.87	.45
Korean	<b>2.89</b>	.00	<b>3.39</b>	.00	<b>3.69</b>	.00	<b>3.76</b>	.00	<b>3.14</b>	.00
Chinese/Japanese	<b>2.07</b>	.00	<b>1.97</b>	.00	<b>2.08</b>	.00	<b>1.68</b>	.02	<i>1.49</i>	.06
Cambodian	<b>.46</b>	.00	1.15	.44	<i>1.43</i>	.06	<i>1.40</i>	.08	1.15	.48
Vietnamese	1.24	.14	<b>2.74</b>	.00	<b>3.39</b>	.00	<b>2.24</b>	.00	<b>1.64</b>	.01
Filipino	.92	.55	.85	.29	.92	.61	.92	.62	.82	.24
NHOPI	<b>.41</b>	.00	<b>.63</b>	.02	<b>.65</b>	.03	.81	.35	.80	.36
Other Hispanic	<b>.70</b>	.02	.88	.43	.91	.54	1.03	.88	1.04	.83
Mexican	<b>.46</b>	.00	.94	.69	.89	.48	1.06	.72	1.00	.98
White (Referent)	--	--	--	--	--	--	--	--	--	--
1st Generation	<b>.66</b>	.00	<b>.75</b>	.00	<b>.79</b>	.01	<b>.70</b>	.00	<b>.63</b>	.00
2nd Generation	<b>1.15</b>	.04	<b>1.19</b>	.02	<b>1.24</b>	.00	<i>1.17</i>	.06	1.12	.16
3rd Generation (Referent)	--	--	--	--	--	--	--	--	--	--
Non-Intact Family			<b>.70</b>	.00	<b>.73</b>	.00	<b>.81</b>	.00	<b>.82</b>	.00
Intact Family (Referent)			--	--	--	--	--	--	--	--
Own Home			<b>1.63</b>	.00	<b>1.59</b>	.00	<b>1.53</b>	.00	<b>1.44</b>	.00
Does Not Own Home (Ref)			--	--	--	--	--	--	--	--
Level of Maternal Education			<b>1.40</b>	.00	<b>1.38</b>	.00	<b>1.36</b>	.00	<b>1.32</b>	.00
Missing a Mother Figure			.72	.24	.86	.59	.79	.43	1.03	.92
Level of Paternal Education			<b>1.36</b>	.00	<b>1.34</b>	.00	<b>1.30</b>	.00	<b>1.27</b>	.00
Missing a Father Figure			.81	.11	.89	.39	.89	.41	1.14	.38
Parental Comm./Support					<b>1.99</b>	.00	<b>1.39</b>	.00	<b>1.16</b>	.01
Parental Control					<b>.92</b>	.01	1.01	.66	.97	.43
Parent's know friends					1.01	.69	.98	.65	1.06	.19
GPA							<b>5.36</b>	.00	<b>4.93</b>	.00
Parental Encouragment									<b>1.49</b>	.00
Friend's Encouragment									<b>1.70</b>	.00
Mentor's Encouragement									<b>1.65</b>	.00
Fav. Teacher's Encrgmnt									<b>1.35</b>	.00
BIC/ Pseudo R <sup>2</sup>	-204	.03	-1180	.11	-1,360	.13	-2,634	.24	-3,181	.29

**Table 6. Predicted Probability of Receiving Encouragement from Significant Others by Race/Ethnicity**

	Panel A: Parents			Panel B: Friends		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
African American	.61	.83	.84	.75	.81	.82
Native American	.66	.85	.84	.70	.77	.76
Other Asian	.68	.84	.83	.80	.84	.83
Korean	.84	.93	.92	.87	.88	.87
Chinese/Japanese	.81	.87	.85	.88	.89	.87
Cambodian	.69	.91	.90	.82	.89	.88
Vietnamese	.87	.96	.95	.86	.90	.88
Filipino	.75	.84	.83	.85	.87	.86
NHOPI	.69	.84	.84	.74	.80	.81
Other Hispanic	.67	.83	.83	.70	.75	.75
Mexican	.63	.85	.85	.71	.79	.79
White	.73	.82	.81	.77	.79	.78
BIC'	-29	-1,608	-1,894	-55	-192	-463
	Panel C: Mentor			Panel D: Favorite Teacher		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
African American	.88	.91	.92	.86	.90	.91
Native American	.83	.88	.88	.84	.89	.89
Other Asian	.90	.92	.92	.85	.88	.88
Korean	.93	.93	.93	.84	.86	.84
Chinese/Japanese	.91	.91	.89	.91	.92	.90
Cambodian	.87	.93	.92	.87	.92	.91
Vietnamese	.94	.96	.95	.92	.94	.92
Filipino	.92	.93	.93	.85	.87	.86
NHOPI	.88	.92	.92	.87	.90	.91
Other Hispanic	.87	.90	.90	.87	.90	.91
Mexican	.86	.92	.92	.87	.92	.92
White	.86	.87	.86	.85	.87	.86
BIC'	-5	-182	-463	-1	-115	-369

Notes: Model 1 includes race, gender, and generational status.  
 Model 2 includes Model 1 + social class indicators and family structure  
 Model 3 includes: Model 2 + cumulative grade point average.  
 The predicted probabilities were computed using the mean and modal categories for all variables, which are displayed in Table 1.

## References

- Allison, Paul D. 2002. *Missing Data*. Sage University Papers Series on Quantitative Applications in the Social Sciences, 07-136. Thousand Oaks, CA: Sage.
- Astone, Nan Marie and Sara S. McLanahan. 1994. "Family Structure, Residential Mobility, and School Dropout: A Research Note". *Demography* 31(4):575-584.
- Astone, Nan Marie and Sara S. McLanahan. 1991. "Family Structure, Parental Practices and High School Completion." *American Sociological Review* 56(3):309-32
- Bourdieu, Pierre and Jean Claude Passeron. 1977. *Reproduction in Education, Society and Culture*. Beverly Hills: Sage.
- Bowles, Samuel and Hebert Gintis. 1976. *Schooling in Capitalist America: Educational Reform and the Contradictions of Economic Life*. New York: Basic Book
- Cheng, Simon and Brian Starks. 2002. "Racial Differences in the Effects of Significant Others on Students' Educational Expectations." *Sociology of Education* 75: 306-327.
- Cheeseman-Day, Jennifer and Eric Newburger. 2002. "The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings." *Current Population Reports*, P23; No. 210. Washington, D.C. Census Bureau.
- Fejgin, Naomi. 1995. "Factors Contributing to the Academic Excellence of American Jewish and Asian Studies." *Sociology of Education* 68(1):18-30.
- Ferguson, Robert. 1998. Teacher's Perceptions and Expectations and the Black-White Test Score Gap. In *The Black White Test Score Gap*. Editor: Jencks and Phillips. Pgs. 55-86. Washington D.C.: Brookings Institute.
- Fordham, Signithia and John C Ogbu. 1986 "Black Students' Success: Coping with the Burden of 'Acting White'." *Urban Review* 18: 276-306.
- Freeman, C., and Fox, M. 2005. *Status and Trends in the Education of American Indians and Alaska Natives* (NCES 2005-108). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Goyette, Kim and Yu Xie. 1999. "Educational Expectations of Asian American Youths: Determinants and Ethnic Differences." *Sociology of Education* 72:22-36.
- Hauser, Robert M. and Megan M. Sweeney. 1997. "Does Poverty in Adolescence Affect the Life Chances of High School Graduates?" Pp. 541-595 in *Consequences of Growing Up Poor*, edited by J. Brooks-Gunn and G. Duncan. New York: Russell Sage Foundation.
- Hirschman, Charles. 2001. "The Educational Enrollment of Immigrant Youth: A Test of the Segmented-Assimilation Hypothesis" *Demography* 38: 317-336.
- Heck, Ronald H and Rochelle Mahoe. 2006. "Student Transitions to High School and Persistence: Highlighting the Influences of Social Divisions and School Contingencies" *American Journal of Education* 112:418-446

- Kao, Grace. 2001. "Race and Ethnic Differences in Peer Influences on Educational Achievement." In *The Problem of the Century: Racial Stratification in the U.S. at the Millennium*. (Edited by Douglas Massey and Elijah Anderson). Pp. 437-460. New York: Russell Sage.
- Kao, Grace and Jennifer S. Thompson. 2003. "Race and Ethnic Stratification in Educational Achievement and Attainment." *Annual Review of Sociology* 29:417-442.
- MacLeod, Jay. 1995. *Ain't No Making It: Aspirations and Attainment in a Low Income Neighborhood*. Boulder, CO: Westview Press.
- Massey, Douglas, Camille Charles, Garvey Lundy, and Mary J. Fischer. *The Source of the River: The Origins, Aspirations, and Values of Freshmen at America's Elite Colleges and Universities*. New York: Russell Sage Foundation.
- Matute-Bianchi, ME. 1986. "Ethnic Minorities and Patterns of School Success and Failure Among Mexican-Descent and Japanese-American Students in a California High School: An Ethnographic Analysis." *American Journal of Education* 95: 233-5.
- McNeal Jr., Ralph B. 1999. "Parental Involvement as Social Capital: Differential Effectiveness on Science Achievement, Truancy, and Dropping Out." *Social Forces* 78: 117-144.
- Ogbu, John U. 1978. *Minority Education and Caste*. New York: Academic Press.
- Ogbu, John U. 1991. "Minority Responses and School Experiences." *The Journal of Psychohistory* 18: 433-456.
- Ogbu, John U. 1991. Immigrant and Involuntary Minorities in Comparative Perspective. In *Minority Status and Schooling*. Editor: Gibson and Ogbu. Pgs 3-33. New York: New Press.
- Peters, H. Elizabeth and Natalie C. Mullis. 1997. "The Role of Family Income and Sources of Income in Adolescent Achievement?" Pp. 340-381 in *Consequences of Growing Up Poor*, edited by J. Brooks-Gunn and G. Duncan. New York: Russell Sage Foundation.
- Rumberger, Russell W. 1995. "Dropping Out of Middle School: A Multilevel Analysis of Students and Schools." *American Educational Research Journal* 32(3):583-625.
- Rumberger, Russell W and Katherine A. Larson. 1998. "Student Mobility and the Increased Risk of High School Dropout." *American Journal of Education* 107:1-35.
- Rumberger, Russell W., Rita Ghatak, Gary Poulus, Philip L. Ritter and Stanford M. Dornbusch. 1990. "Family Influences on Dropout Behavior in One California High School." *Sociology of Education* 63(4):283-299
- Sewell, William H. 1971. "Inequality of Opportunity for Higher Education." *American Sociological Review*: 36: 793-809.
- Sewell, William H., Archibald O. Haller, and Alejandro Portes. 1969. "The Education and Early Occupational Attainment Process". *American Sociological Review* 34:82-92.
- Sewell, William and Robert Hauser. 1972. "Causes and Consequences of Higher Education: Models of the Status Attainment Process." *American Journal of Agricultural Economics* 54: 851-861

Sewell, William and Robert Hauser. 1975. *Education, Occupation, and Earnings*. New York: Academic Press

Sewell, William, Robert Hauser, and Wendy C. Wolf. 1980. "Sex, Schooling, and Occupational Status." *American Journal of Sociology* 86:551-583.

Snyder, T.D., Dillow, S.A., and Hoffman, C.M. 2008. *Digest of Education Statistics 2007* (NCES 2008 022). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

Stoops, Nicole. 2004. "Educational Attainment in the United States: 2003." *Current Population Reports*, P20; No. 550. Washington, D.C. Census Bureau.

Sue, S., & Okazaki, S. 1990. "The Asian-American educational achievement: A phenomenon in search of an explanation". *American Psychologist*, 45, 913-920.

The College Board. 2006. *Trends in College Pricing: 2006*. Washington, DC: The College Entrance Examination Board.

U.S. Department of Education. National Center for Education Statistics. *What Students Pay for College: Changes in the Net Price of College Between 1992-93 to 1999-2000*, NCES 2002-174, by Laura Horn, Christina Chang Wei, and Ali Berker. Project Officer: Dennis Carroll. Washington, DC: 2002.

Woelfel, Joseph and Archibald O. Haller. 1971. "Significant Others, The Self-Reflexive Act and the Attitude Formation Process". *American Sociological Review* 36:74-87.

Wong, Morrison. 1990. "The Education of White, Chinese, Filipino and Japanese Students: A Look at High School and Beyond." *Sociological Perspectives* 33: 355-74.

Zhou, Min and Carl L. Bankston III. 1998. *Growing Up American: How Vietnamese Children Adapt to Life in the United States*. New York: Russell Sage

## Appendix

- I. 'Parents Know Friends' is the mean of an index based upon the sum of the responses:
1. "My parent(s) or guardians know many of the parent(s) or guardian(s) of my closest school friends." (strongly agree, agree, disagree, strongly disagree)
  2. "My parent(s) or guardians know many of my closest school friends." (strongly agree, agree, disagree, strongly disagree)
- II. 'Parental Monitoring' is the mean of an index based upon the sum of the responses:
1. "How often do your parent(s) or guardian(s) help with or check whether you have done your homework?" (never, rarely, sometimes, often)
  2. "How often do your parent(s) or guardian(s) limit the amount of time you go out with friends on school nights?" (never, rarely, sometimes, often)
- III. 'Parental Communication' is the mean of an index based upon the sum of the responses:
1. "How often have you and your parent(s) or guardian(s) discussed school activities or events of particular interest to you?" (never, rarely, sometimes, often)
  2. "How often have you and your parent(s) or guardian(s) discussed going to college?" (never, rarely, sometimes, often)
  3. "My parent(s) or guardian(s) are usually unhappy or disappointed with what I do" (strongly agree, agree, disagree, strongly disagree)
  4. "My family will support me in whatever I do after high school" (strongly agree, agree, disagree, strongly disagree) *Reverse coded*
  5. "I have frequent, in-depth conversations with my parent(s) or guardians(s)" (strongly agree, agree, disagree, strongly disagree) *Reverse coded*
  6. "I can go to my parent(s) or guardian(s) for advice and support." (strongly agree, agree, disagree, strongly disagree) *Reverse coded*

<b>Table A1. 95% Confidence Intervals for Predicted Probabilities of Receiving Encouragement from Significant Others by Race/Ethnicity.</b>						
	<b>Panel A: Parents</b>			<b>Panel B: Friends</b>		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
	95% CI	95% CI	95% CI	95% CI	95% CI	95% CI
African American	(.58 - .64)	(.81 - .86)	(.82 - .86)	(.73 - .78)	(.79 - .84)	(.79 - .84)
Native American	(.58 - .74)	(.80 - .90)	(.79 - .89)	(.62 - .77)	(.71 - .84)	(.70 - .83)
Other Asian	(.61 - .75)	(.80 - .89)	(.79 - .88)	(.74 - .85)	(.79 - .89)	(.78 - .88)
Korean	(.80 - .89)	(.90 - .95)	(.89 - .95)	(.83 - .90)	(.85 - .92)	(.83 - .91)
Chinese/Japanese	(.75 - .88)	(.82 - .92)	(.80 - .91)	(.84 - .93)	(.85 - .94)	(.82 - .93)
Cambodian	(.63 - .75)	(.88 - .94)	(.87 - .93)	(.77 - .87)	(.86 - .93)	(.85 - .92)
Vietnamese	(.83 - .91)	(.95 - .98)	(.93 - .97)	(.82 - .90)	(.87 - .94)	(.84 - .92)
Filipino	(.70 - .81)	(.79 - .88)	(.78 - .88)	(.81 - .90)	(.83 - .91)	(.82 - .90)
NHOPI	(.62 - .76)	(.79 - .88)	(.80 - .89)	(.68 - .80)	(.75 - .86)	(.75 - .86)
Other Hispanic	(.61 - .73)	(.78 - .87)	(.78 - .87)	(.64 - .76)	(.70 - .81)	(.69 - .80)
Mexican	(.58 - .69)	(.82 - .89)	(.82 - .89)	(.66 - .76)	(.75 - .84)	(.75 - .84)
White (Referent)	(.71 - .74)	(.81 - .83)	(.79 - .82)	(.75 - .78)	(.78 - .81)	(.76 - .79)
	<b>Panel C: Mentor</b>			<b>Panel D: Favorite Teacher</b>		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
	95% CI	95% CI	95% CI	95% CI	95% CI	95% CI
African American	(.86 - .90)	(.90 - .93)	(.90 - .93)	(.85 - .88)	(.88 - .92)	(.89 - .92)
Native American	(.77 - .89)	(.84 - .93)	(.83 - .93)	(.78 - .90)	(.85 - .93)	(.84 - .93)
Other Asian	(.86 - .94)	(.89 - .96)	(.89 - .95)	(.80 - .90)	(.84 - .93)	(.83 - .92)
Korean	(.90 - .95)	(.91 - .96)	(.90 - .95)	(.80 - .89)	(.82 - .90)	(.79 - .89)
Chinese/Japanese	(.86 - .95)	(.87 - .95)	(.84 - .94)	(.87 - .96)	(.88 - .96)	(.85 - .95)
Cambodian	(.83 - .92)	(.90 - .96)	(.90 - .95)	(.83 - .92)	(.89 - .95)	(.88 - .95)
Vietnamese	(.91 - .97)	(.94 - .98)	(.92 - .97)	(.88 - .95)	(.91 - .97)	(.89 - .96)
Filipino	(.89 - .95)	(.90 - .96)	(.90 - .96)	(.81 - .90)	(.83 - .91)	(.82 - .91)
NHOPI	(.84 - .93)	(.89 - .95)	(.89 - .96)	(.82 - .91)	(.87 - .94)	(.87 - .94)
Other Hispanic	(.83 - .91)	(.87 - .93)	(.87 - .94)	(.83 - .91)	(.87 - .94)	(.87 - .94)
Mexican	(.82 - .90)	(.89 - .94)	(.89 - .94)	(.84 - .91)	(.89 - .94)	(.89 - .94)
White (Referent)	(.85 - .87)	(.86 - .89)	(.85 - .88)	(.84 - .86)	(.86 - .88)	(.85 - .87)
Notes: Model 1 includes race, gender, and generational status. Model 2 includes Model 1 + social class indicators and family structure Model 3 includes: Model 2 + cumulative grade point average.						