SUCCESSFUL POST-SECONDARY EDUCATIONAL ATTAINMENT: THE SIMILARITIES AND DIFFERENCES BETWEEN STUDENTS WITH HIGH AND LOW EDUCATIONAL EXPECTATIONS IN ADOLESCENCE

by

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DEDICATION

This thesis is dedicated to the people in my life who have made me the person I am today. I would like to thank my mother, my grandmother, and my grandfather for the countless sacrifices they have made in their lives to give me the opportunities that I have had in mine. I am immensely grateful. I love you and miss you every single day. I would also like to thank my aunt for her continual prayers and support. You have helped me stay strong in my faith and for that I am utterly thankful. Last but certainly not least, I would like to thank all of my remaining family and friends who have offered kind words of encouragement throughout my life and academic career. I appreciate each and every one of you and wish you all the best in your own personal endeavors.

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TABLE OF CONTENTS

List of Tables	Page
List of Tables	
Chapter 1: Introduction	
-	
Chapter 2: Literature Review	
Theoretical and Conceptual Framework	
Human Capital	
Cultural Capital	
Social Capital	9
Economic Capital	
Theory of Symbolic Violence	11
Predictors of Educational Attainment	16
Individual Characteristics	16
Family Background Characteristics	21
Social Psychological Factors	24
The Present Study	26
Chapter 3: Research Methods	27
Selection Mechanism for Subsamples	30
Outcome Variable	32
Predictor Variables	32
Analytic Plan and Technique	40
Chapter 4: Results	
Descriptive Statistics	42
Bivariate Correlations	43
Students with High Educational Expectations	43
Students with Low Educational Expectations	
Logistic Regression	

Students with High Educational Expectations	46
Students with Low Educational Expectations	47
Chapter 5: Discussion	49
Results of Research Question	49
Sociological Explanation of Findings	51
Students with High Educational Expectations	51
Students with Low Educational Expectations	54
Limitations and Suggestions for Future Research	57
Implications	59
References	66

LIST OF TABLES

Table	Page
Table 1. Descriptive Statistics for Analytic Sample—Students with High Educational	
Expectations	62
Table 2. Descriptive Statistics for Analytic Sample—Students with Low Educational	
Expectations	63
Table 3. Bivariate Correlation Matrices for Predictors of Earning a 4-year Degree by	Age
30	64
Table 4. Logistic Regression of Earning a 4-year Degree by Age 30	65

ABSTRACT

SUCCESSFUL POST-SECONDARY EDUCATIONAL ATTAINMENT: THE

SIMILARITIES AND DIFFERENCES BETWEEN STUDENTS WITH HIGH AND

LOW EDUCATIONAL EXPECTATIONS IN ADOLESCENCE

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The purpose of this thesis is to supplement the empirical literature on student

post-secondary educational attainment. The present research examines students with high

educational expectations at age 16 (N = 1,335) and low educational expectations at age

16 (N = 551). It identifies the different factors among students with high expectations and

low expectations that increase their likelihood of earning a four-year degree by age 30. I

use data from the National Longitudinal Survey of Youth, 1997 Cohort (NLSY97), which

is sponsored by the Bureau of Labor Statistics, U.S. Department of Labor.

There are seven predictors (gender, race, student academic excellence, mother's

educational attainment, household structure, parent expectations, and perceived school

climate) that are included in the two models. I perform logistic regression analyses.

Model 1 analyzes students with high educational expectations and found all factors as

statistically significant in predicting receiving a four-year degree by age 30. Model 2

investigates students with low educational expectations and revealed math honors courses taken, mother's educational attainment, and parent expectations as statistically significant in predicting attaining a four-year degree by age 30. Potential explanations for these findings are addressed.

CHAPTER 1

INTRODUCTION

In recent decades, the decision to go to college has become a common rite of passage. Indeed, some students do not even question whether they will attend college because it has always been assumed or intended that they will go, a presupposition that may have been made by parents or family even before they were born. However, other students might be struggling with this decision for various reasons. Student expectations to graduate from high school and attend a post-secondary institution are often guided by several factors. These factors can make this decision very difficult for some or relatively easy for others. Nevertheless, when arriving at these crossroads, student expectations of attaining higher education could very well determine their retention at an institution as well as the degree they ultimately obtain. The literature reveals several factors that influence the educational attainment or educational outcomes of high school students. This thesis will test the extent to which these factors are indeed significant in predicting student educational attainment.

The primary distinction of this particular study is that I examined the factors among students with high expectations at age 16 as compared to those with low expectations at age 16 that significantly contribute to their educational outcomes (i.e. attainment of a four-year degree by age 30). I examined the educational attainment of students who have had high expectations of reaching their educational goals (51% chance or greater of receiving four-year degree by age 30), and conversely, those who have had

relatively low expectations of reaching their educational goals (50% chance or less of receiving four-year degree by age 30). The educational outcome examined in the present study is whether or not students received their four-year degree by age 30. The models herein also determined the factors that increase the likelihood of earning a four-year degree by age 30. In turn, this could potentially provide students from all walks of life, namely the socially and economically disadvantaged, with insight into the valuable tools that have been effective in one's educational pursuits.

This would include tools or factors that have been most beneficial in improving one's educational outcomes and ultimately identifying those to embrace, if at all possible. For instance, some of the key findings of the present study reveal that among students with high educational expectations, positive perceptions of school climate and increased academic excellence (i.e. math honors courses taken and science honors courses taken) are statistically significant and predicted earning a four-year degree by age 30.

In students with low educational expectations, increased math honors courses taken was statistically significant and predicted earning a four-year degree by age 30. This research could possibly help create outreach programs for disadvantaged youth that proactively shape attitudes and behavior (in middle and secondary school) so as to guide students down the path toward post-secondary educational attainment. For example, school programs that promote student academic excellence, particularly in the math and sciences, positive perceptions of school climate, and increased student expectations for their educational attainment could assist students in overseeing their own educational futures. This would be in opposition to allowing other factors especially those that a

student cannot change, or that are beyond their realm of control, to predict their post-secondary educational attainment. For instance, another key finding in the present study supports that parent expectations are statistically significant and predicted all students (both high and low expectations) earning a four-year degree by age 30. A student may not be able to change their parent's expectations for their educational outcome, but with this research and special programs put into place, they may help students overcome odds or factors that do not have to determine their future educational attainment.

The research question in this study is as follows: What are the differences in the factors among those with high expectations and low expectations that increase their likelihood of post-secondary educational attainment? The empirical measure for postsecondary educational attainment utilized is whether or not they received a four-year degree by age 30. The models also examined the differences in the factors, across the two groups, which have contributed to their earning a four-year degree by age 30. Moreover, I conducted this study among students whose data were collected by the National Longitudinal Survey of Youth, 1997 Cohort (NLSY97), sponsored by the Bureau of Labor Statistics, U.S. Department of Labor. The students' educational expectations were measured in 1997 (i.e. percent chance that they will earn a four-year degree by age 30). Their post-secondary educational attainment (i.e. whether or not they received a fourdegree by age 30) was measured in 2011. In the next chapter, I provide a literature review that explains the various theories, concepts, and connections found in previous research as reflected through the findings. In Chapter 3, I describe the proposed methods to be implemented in my research. Within Chapter 4, I present the results of the analysis

performed in this study, which were applied to two models. Lastly, in Chapter 5, I conclude this thesis with a discussion of the results, the sociological explanation of the findings, the limitations, and implications for future research.

CHAPTER 2

LITERATURE REVIEW

In order to determine the contribution my research would have to this field of study, it is necessary to review the theoretical and empirical findings of previous literature. This would help decipher the theoretical and conceptual ties or connections across the literature as well as help to identity certain cleavages in the literature that my present research possibly fills. The following chapter highlights the theoretical and conceptual framework regarding educational attainment.

Theoretical and Conceptual Framework

Human Capital

The concept of attaining capital—cultural or otherwise—is often at the center of theoretical discussion involving the pursuit of higher education. Capital, as Bourdieu (1986: 241) defines, "[it] is what makes the games of society—not least, the economic game—something other than simple games of chance offering at every moment the possibility of a miracle...of changing one's social status quasi-instantaneously... [and] of perfect competition or perfect equality of opportunity, a world without inertia, without accumulation, without heredity or acquired properties...so that at each moment anyone can become anything." Thus, as Bourdieu (1986) explains, capital seems to have the power or capability of allowing those who have acquired it to achieve and attain nearly anything that heritage might have otherwise predestined or predetermined. Capital works

as a leveling mechanism wherein one can acquire more of it, and as a result, they might be able to engage in the same lifestyles and opportunities as those born with greater capital.

Educational attainment is a form of human capital because it affords those who have undergone its progression with valuable skills, which are then viewed as capital. On the concept of gaining human capital, Coleman (1990:304) thoroughly elucidates, "Human capital is created by changing persons so as to give them skills and capabilities that make them able to act in new ways... human capital is less tangible, being embodied in the skills and knowledge acquired by an individual." Hence, a student's intelligence, scholastic aptitude, and academic performance in both school and standardized tests might illustrate the skills and knowledge that they hold, and in turn, serve as a reflection of the human capital that they possess. Therefore, a student's human capital might also direct their expectations of attaining post-secondary education. A student might recognize early on that they lack certain types of capital such as cultural capital, social capital, and more noticeably, economic capital. Thus, they might recognize in themselves other attributes that might contribute to their human capital, such as academic or scholarly aptitude, which could possibly provide various outlets for attaining post-secondary education. As a result, this might increase their expectations of attending college and its feasibility. Subsequently, by making the connection that educationally acquired skills increases human capital, students might take the initiative to invest in their own human capital or foster their own knowledge and skills so as to increase their likelihood of being admitted into college and earning scholarships in the process (Farkas 1996: 9). In

essence, being able to identify and cultivate human capital in its early stages is vital and could potentially determine student expectations of attaining post-secondary education.

Cultural Capital

Subsequently, theory surrounding cultural capital, in particular, expresses that academic achievement or educational attainment is a means by which one can increase their cultural capital, a concept referred to as a 'work of acquisition,' wherein one works to acquire cultural capital (Bourdieu 1986: 243-244). In turn, cultural capital is also a mechanism that facilitates the acquisition of human capital. Those born with increased cultural capital are more inclined, or rather, 'cultured' to posses the useful talents and propensities to better navigate the educational process, and thus, acquiring the skills and knowledge to increase human capital via educational attainment.

What is more, some are born or stand to inherit a certain amount of cultural capital that has already been established through their parents and families. Bourdieu (1986:243) asserts that the entire educational system supports and facilitates the perpetuation or reproduction of the social structure wherein families with high cultural capital ultimately pass on or impart their increased cultural capital to their offspring. More importantly, this social structural reproduction that Bourdieu (1986) describes is akin to the premise of Durkheim's functionalism. Coser (1977:141) quotes Durkheim as follows, "The determination of function is...necessary for the complete explanation of the phenomena... To explain a social fact it is not enough to show the cause on which it depends; we must also, at least in most cases, show its function in the establishment of social order." Thus, in accordance with Durkheim's functionalism, one might question

the exact function of the educational system's reproduction of the social structure for maintaining social order. Befitting enough, Bourdieu and Passeron (1977) also contemplated the function of this social fact. As Bourdieu and Passeron (1977:192) contend, "the educational system performs an indivisible, undifferentiated function for 'society as a whole,' all-purpose functionalism tends to conceal the fact that a system which helps to reproduce the structure of class relations indeed serves 'Society', in the sense of 'the social order', and through it the educational interests of the classes which benefit from that order." Essentially, Bourdieu and Passeron (1977) assert that the function of the educational system's reproduction of the social structure is to perpetuate class stratification and all the benefits, advantages, and potential resources that this might entail especially educational prospects.

However, for those who are not afforded such opportunities, the pursuit of increased cultural capital by means of educational attainment seems to be a route that many choose to take. Ultimately, deriving from Bourdieu's theoretical conclusions, in order to gain the same cultural capital that is inculcated in others through lineage, some students will have to work through the same educational system that supports the reproduction of a social structure that serves to stratify them so as to maintain educational disparities and the hierarchical class structure that profits from this supposed social order. In other words, it seems that the only way for these students to increase their cultural capital is to work their way through the same educational system that sets out to sabotage their equal opportunities for acquiring education. This undoubtedly relates to student

expectations of attaining post-secondary education, and if, the ways in which inherited cultural capital plays a significant role in these expectations.

Social Capital

The concept of obtaining increased social capital can best be described as the expansion or development of one's social network, social ties, and social relationships and the subsequent resources that may result from these connections (Bourdieu 1986). Furthermore, it is the reciprocity or exchanges made among these connections that sustain them and that allow for the growth of social capital to continue and thrive (Bourdieu 1986: 247-248). Thus, social capital involves a certain amount of maintenance work to actually keep these acquired or accumulated social networks and connections (Bourdieu 1986: 249). Similar to cultural capital, some are born into families who have high social capital, or their families are members of certain groups whose social connections offer them multiple avenues or accesses to potential resources. These connections might include alumni of some of the best and most prestigious universities throughout the country. References from these types of people could potentially influence admission into these select institutions. Indeed, the amount of social capital one possesses could possibly have a significant impact on student expectations of attaining postsecondary education. Hence, students who are aware of the potential resources that might be available to them as a result of their increased social capital may consequently have high expectations of attaining post-secondary education; whereas, students with diminished social capital might have lower expectations of attaining post-secondary education, or they might allow other forms of capital that they possess to guide their

expectations for attaining post-secondary education. These other forms of capital might include human capital and economic capital.

Economic Capital

What is more, Bourdieu (1986) also discusses the acquisition of economic capital. Bourdieu (1986:242) establishes that economic capital is, in essence, resources that can ultimately be converted to monetary value; however, the acquisition of economic capital can also be manifested in the rights that people have over any forms of property. These types of property might include money, real estate, family heirlooms...etc. After reflecting on Bourdieu's thoughts on the concept of obtaining capital, I ultimately think that once someone has acquired a certain amount of economic capital, it can serve as a catalyst or basis for acquiring other forms of capital. For instance, once someone has accrued a substantial amount of economic capital, this might open doors for them in terms of making various social connections, expand their social network, and thus increase their social capital, or they might be able to afford the best education for them and their family, which could result in an increase of their cultural capital. Additionally, having economic capital could also afford one a certain lifestyle that might include the best trainers, best chefs, best education...etc. This could potentially increase human capital in that one might be able to acquire or develop various skills and knowledge. For example, one might be able to afford the best tutors to help teach them and their family various languages or having the best trainers might result in excelled athletic ability and fitness, which might also be seen as a form of human capital.

Lastly, one of the most obvious advantages of having heightened economic capital is the sheer possibility of being able to afford a post-secondary education at some of the finest institutions in the U.S. and across the globe, if so desired. Essentially, I think there is an interdependent relationship between the acquisition of economic capital and the acquisition of social capital and cultural capital in that one could possibly utilize economic capital to increase social capital and cultural capital. Similarly, assuming one already possesses a great deal of economic capital, they could potentially employ social connections gained from social capital and knowledge and skills gained from cultural capital to pursue ventures for increasing economic capital. There seems to be interplay among all forms of capital in the process of their acquisition and subsequent utilization. *Theory of Symbolic Violence*

In addition, the variation is student expectations of their educational attainment can be linked to the theory of symbolic violence. Bourdieu and Passeron (1977) discuss their thoughts on the educational system in relation to the theory of symbolic violence. As Bourdieu and Passeron (1977:4) maintain, "Every power to exert symbolic violence, i.e. every power which manages to impose meanings and to impose them as legitimate by concealing the power relations which are the basis of its force, adds its own specifically symbolic force to those power relations." Moreover, as Bourdieu and Passeron (1977:5) affirm, pedagogic action or the educational system, and all it might entail, is one of those powers that imposes and legitimates meanings onto society so as to contribute to the very power relations that it is masking.

Subsequently, in reference to the class system and class stratification, Bourdieu and Passeron (1977:5) say that it is the power relations of the dominant classes, which pedagogic action attempts to hide. Thus, in attempt to perpetuate the class hierarchical structure and the potential resources derived from the class system, dominant classes seek to utilize the educational system and pedagogic actions in general to conceal their power relations and manipulation or control of the entire social system.

Furthermore, others concur with Bourdieu and Passeron (1977). For instance, Willis (1977:177) explains, "In a liberal democratic society such as ours, it would be quite wrong to assume that state institutions like the school are run in any obvious or intentional way for the benefit of the dominant class (as are private schools for instance)... [However] it is, of course, an absolute requirement for the existing social system that the same standards, ideologies and aspirations are not really passed on to all." Ultimately, Willis (1977:177) alludes that though there may not be a candid acknowledgement within schools of the preferential treatment toward the dominant class, it is certain that the sustainability of the class hierarchal structure lies heavily in eliminating expectations of upward social mobility within the working class. Moreover, Bowles and Gintis (1976:202) contend that in conjunction with family and chosen educational field, post-secondary educational attainment is utilized as a means for status maintenance and the continual acquisition of capital within the dominant class. Thus, the institution of schools has become an instrument of the dominant class to remain at the pinnacle of the social system.

Consequently, this might lead to student reluctance toward making any real attempts at surpassing their current and, oftentimes, inherent social stations. They also might inevitably and unknowingly contribute to the perpetuation of the stratified class structure in that their lives fall prey to the self-fulfilling prophecy phenomena. Hence, they believe that the educational system sets them up for failure, and so, they make no attempts of obtaining higher education which ultimately ensures that they do indeed fail or rather never succeed in attaining higher education. In order to capitalize in the social system, they would have to play into the very same educational system that works tirelessly to perpetuate disparities in their opportunities for higher education and an educational system whose entire existence and survival depends on these attempts of sabotage. This can be very disconcerting for lower classes who might feel that the educational system is 'out to get them,' so to speak, or is against them from the start. These are most often the students with low expectations of educational attainment.

Moreover, as Bourdieu and Passeron (1977) explicate, the dominant classes utilize pedagogic action in two specific ways so as to control the social system or social formation. One particular way is that pedagogic action is used as a means of cultural reproduction, namely the culture of the dominant classes and thus the structure of power relations as directed by the dominant classes (Bourdieu and Passeron 1977: 6). Another way is that pedagogic action is employed in terms of who is selected and admitted into institutions of higher learning. Bourdieu and Passeron (1977:152-153) raise a good point of "whether the freedom the educational system is given to enforce its own standards and its own hierarchies, at the expense...of the economic system, is not the quid pro quo of

the hidden services it renders to certain classes by concealing social selection under the guise of technical selection and legitimating the reproduction of the social hierarchies by transmuting them into academic hierarchies." In essence, Bourdieu and Passeron (1977) identify the reciprocal relationship between the educational system and the dominant classes, despite mutual efforts to remain cloaked; both seem to be benefitting from each other, in one form or another.

Furthermore, the dominant classes profit from this interdependence in that their hierarchical class structure remains intact and concealed under the pretense of procedural academic standards of selection as oppose to the social underpinnings that float beneath the surface. In turn, the educational system seems to profit by having the liberty to impose their own ideals and delegating their chains of command, which is essentially the manifestation of Bourdieu and Passeron's theory of symbolic violence. Ultimately, from analyzing Bourdieu and Passeron's thoughts on this process, I suspect that the power and influence that both the educational system and the dominant classes possess relies heavily on the preservation of the mutually-exploitative relationship that they have established with one another. In short, both employ each other's services to acquire what each wants. Clearly, this leaves those on the lower end of the spectrum (i.e. the lower classes and students with low expectations) at a disadvantage where they have to fend for themselves.

For instance, Lareau (2003:163) illustrates that mothers from middle-class families have the propensity to be more involved and forceful in circumstances that may arise at their children's school; whereas, mothers from working-class and poor families tend to view schools in a more authoritative light, often shying away from any

antagonistic behavior. Lareau (2003:163) further explains that upon educating their children on relationships with institutional authority, middle-class mothers more often promote the negotiation and contention of terms as oppose to immediate concession. This might stem from the mutually-beneficial relationship that developed between institutional schools and the dominant classes over time. Conversely, the working-class and poor do not have additional capital as a bartering tool and are left playing a submissive role to schools. Moreover, Lareau (2003:164) describes schools as, "arms of the state," which have the power to suggest whether one is a fit parent or engaging in questionable parental behavior; this is a heightened source of anxiety for working-class and poor parents.

In summary, the theoretical framework would suggest that students with high expectations are more likely than those with low expectations to attain higher education. This is because students with high expectations more often hail from upper social classes who have prepared them, via the acquisition of capital, to pursue post-secondary education. Social expectations (i.e. parental/familial expectations) for student post-secondary attainment are usually established and imposed from childhood so as to maintain or advance social standing. In turn, this preparation and expectation from the onset help shape student expectations and guide their educational pathways. Historical patterns of class hierarchical structure suggest that those with a surplus of the aforementioned forms of capital are more likely to expect and attain higher levels of education. Furthermore, the means in which students are able to reach or even surpass their educational expectations may differ because of other contributing factors, which had initially predicted their expectations as well. This research will help bring to light some

other key factors as well as reaffirm some empirically supported factors, and by doing so, could potentially be of beneficent use for those lacking in these arenas.

Predictors of Educational Attainment

I have chosen to focus my study on student educational expectations, as categorized into high and low, because research has shown that student educational expectations significantly predict educational attainment in adulthood (Beal and Crockett 2010; Mello 2008). Student post-secondary enrollment status (i.e. enrolled in 2-year college, enrolled in 4-year college, never enrolled, dropped out) is also said to be significantly predicted by student expectations (Sciarra and Ambrosino 2011). Overall, empirical findings in the literature uphold the contention that student expectations significantly predict student post-secondary educational attainment (Reynolds and Burge 2008). In a study that examines early childhood expectations and attainment as well as consistency of educational expectations over time and attainment, holding steady educational expectations from childhood through adolescence is a greater indicator of future post-secondary attendance (Bozick et al. 2010). This empirical review will cover the scope of the general predictors of educational attainment as well as discuss certain factors that differentially predict educational attainment according to expectation level. Individual Characteristics

Among the significant factors found to influence student educational attainment, there are certain characteristics that pertain solely to the individual respondent. There were three individual characteristics examined in this study and that were relevant in the

empirical literature. These individual characteristics were: (1) student gender; (2) student race; (3) student academic excellence. Recent empirical findings have found these individual characteristics to be significant predictors of student educational attainment.

Student gender was an individual characteristic that has been prevalently identified as a significant predictor of student educational attainment. According to the National Center for Education Statistics, from 2009-2010, women received 57.4 percent of the bachelor's degrees, 62.6 percent of the master's degrees, and 53.3 percent of the doctor's degrees conferred to U.S. residents (U.S. Department of Education, National Center for Education Statistics 2012). Furthermore, women are more likely to surpass men in post-secondary degree attainment; in other words, women are more likely than men to earn advanced degrees (Lee et al. 2008; Andres, et al. 2007; Abada and Tenkorang 2009).

Furthermore, women in certain races or ethnic groups actually exceed their counterparts (i.e. men) in terms of post-secondary educational attainment. For instance, in a recent study, gender was considered to be the most impactful and best predictor for Black post-secondary educational attainment (Thompson et al. 2006). Black women have made significant strides in post-secondary educational attainment over the years, especially when compared to Black men. However, this increase is somewhat overshadowed by the post-secondary educational improvements of White women (McDaniel et al. 2011). The overall trajectory of women's educational attainment thus seems to be moving in a positive direction (Everett et al. 2011).

Student gender was a factor that I presume would work differently in affecting educational attainment based upon expectation level. For instance, being a woman with low educational expectations might result in lesser educational outcomes in the future as compared to men. Although women are more likely to attain higher education, the likelihood of this might be negated by never having expected to do so from an earlier age. Similarly, I argue that a man with high expectations of furthering his education could more likely do so than a female with low expectations, despite statistics that reveal educational disparities between both genders.

Student race was briefly touched on in the preceding discussion of student gender. However, student race, in and of itself, is another significant predictor of student educational attainment. The four main racial groups who have been widely researched in empirical studies throughout the literature are (1) Whites, (2) Blacks, (3) Hispanics, and (4) Asian/Pacific Islanders. As stated in a 2009-2010 report from the National Center for Education Statistics, majority of the bachelor's degrees conferred to U.S. residents were conferred to Whites (72.9 percent), Blacks ranked second (10.3 percent), Hispanics third (8.8 percent), and Asian/Pacific Islanders fourth (7.3 percent) (U.S. Department of Education, National Center for Education Statistics 2012). This ranking order is the same across all four racial groups when examining the percentage distribution for master's degrees conferred. However, interestingly enough, although Whites ranked number one in doctor's degrees earned with 74.3 percent, Asian/Pacific Islanders ranked second with 11.8 percent, Blacks ranked third with 7.4 percent, and Hispanics fourth with 5.8 percent (U.S. Department of Education, National Center for Education Statistics 2012). Some

might argue that the reason Asian/Pacific Islanders do not rank higher in master's degrees conferred, but do so in doctor's degrees, is because they more often pursue professional careers that require doctor's degrees. However, without further empirical research, it would be difficult to implicate the cause of this discrepancy. Furthermore, as the rising trend of women's post-secondary education was previously discussed, women in all four racial groups earn a higher percentage of degrees conferred (associate's, bachelor's, master's, and doctor's degrees) than their counterparts (i.e. men) (U.S. Department of Education, National Center for Education Statistics 2012).

Thompson et al. (2006) find that the fraction of White and Asian high school graduates who earn a four-year degree or higher are still disproportionately higher than the amount of Black, Hispanic, and Native American students who do. The racial gap between White and Black student post-secondary educational attainment is apparent in the empirical and statistical data (McDaniel et al. 2011). Goldsmith (2009:1913) purports that in comparison to predominantly White schools, students from predominantly Black and Latino schools have a lesser chance of completing high school and earning a four-year degree. The significant underrepresentation of minorities in post-secondary educational attainment is supported empirically and statistically. Student race continues to play a key role in empirical studies of educational attainment, especially scholarly discourse on minority education and immigrant studies.

Race was another factor I anticipate would work differently in predicting educational attainment according to expectation level. The literature suggested that race helped predict educational attainment. However, I argue that race would have lesser

bearing on educational attainment once student educational expectations came into play. For example, being White, but having little or no expectations of obtaining higher education led me to think that race would be a secondary factor. If a student did not expect to pursue higher education, one might question whether race still held predictive significance at that point. Thus, I imagine that the predictability of race as a factor for educational attainment varied as per expectation level.

Student academic excellence was another individual characteristic that helps shape educational outcomes. Student academic excellence as measured in the student participation of honors courses and student Advanced Placement (AP) credits or college credits earned. As former Secretary of Education, Rod Paige (2004:35) affirms, "Advanced Placement (AP) courses have become a hallmark of excellence in this country." Furthermore, Rankin (2012:23) states that there is a direct and positive relationship between student AP exam success and college academic success, particularly in comparison to peers. AP credit attainment (AP credit vs. no AP credit) has also been found to be a significant predictor of higher first semester college GPA among students with similar high school backgrounds (SAT scores or class ranking) (Scott, Tolson, and Lee 2010: 27). Also, AP exam completion seems to be a significant predictor of 4-year college enrollment, increasing chances by up to 171% (Chajewski, Mattern, and Shaw 2011: 24). Moreover, there seems to be a gap in the literature regarding the direct link between AP credit attainment and post-secondary educational attainment (4-year degree attainment), which has potential for exploration in future empirical studies.

Student academic excellence was a factor I assumed worked differently in predicting educational attainment based on expectation level. I imagined that a student with increased academic excellence but low educational expectations could more likely attain some form of higher education. They might have been hindered by other extraneous factors (e.g. family background) that might have deterred them from expeditiously acquiring higher education, factors that might have helped shape their educational expectations to begin with. Although in the long run, I would like to have thought that students who excel in academics had a greater chance of inevitably earning higher education because their academic performance demonstrated that they value academia in one form or another. Conversely, with students who excelled in academia but showed no expectation of attaining higher education, their aptitude could have been overpowered by their expectations and caused them not to advance their education.

Family Background Characteristics

Lastly, family background characteristics were key contributors to student educational outcomes. The three family background characteristics reviewed were as follows: (1) parent educational attainment; (2) family/ household structure; and (3) parent expectation level for student educational attainment. Empirical findings supported the significant predictability of these six factors of student educational attainment.

Parent educational attainment was one family background characteristic that has been shown to predict student educational outcomes. Abada and Tenkorang (2009:580) argue that women's educational attainment is significantly driven by mother's educational attainment, and conversely, men's educational attainment is significantly

directed by father's educational attainment. There is a significant and positive association between parent educational attainment and the probability of college completion (Messersmith and Schulenberg 2008: 207). Also, in mothers with lower educational attainment, the connection between parent educational attainment and child educational attainment is most significant (Hauser-Cram 2009: 351). Empirical research helps substantiate the significant relationship between parent educational outcomes and student educational outcomes.

Parent educational attainment may have also differentially predicted attainment based on expectation level. Although parent educational attainment had a significant and positive relationship with student educational attainment, student educational expectations could have potentially superseded this factor when having determined educational outcomes. For instance, in students with increased parental education but low educational expectations, the effect of greater parental education on educational attainment could perhaps have been subdued by that of decreased expectations, which might result in lower educational outcomes.

Family/ household structure was another family background characteristic that has been shown to significantly predict student educational attainment. Among children who are raised by single mothers, those with high parental educational attainment tend not to have increased educational outcomes, unlike their two bio-parent counterparts (Martin 2012: 33). What is more, in terms of college admission and post-secondary educational attainment, students from disrupted (single parent and step parent) families tend to have to strive more so than students from intact families (Ver Ploeg 2002: 182).

Also, Cid (2008:139) argues that there is a positive and significant relationship between parent marriage and women's educational attainment. Empirical findings suggest that family/household structure is a significant indicator of student educational outcomes.

Family/household structure was a factor I thought would work differently in predicting educational attainment based upon student expectation level. For example, in students with married parents but low educational expectations, student expectation level has the potential to have offset and surpassed the effect of parent marital status when predicting student educational outcomes. Consequently, this may lead to decreased student educational attainment. What is more, some students from single-parent households might have high expectations, from an early age, of pursuing higher education, which may or may not have been a result of their own single-parent's expectations. Subsequently, high student expectation level could have potentially thwarted the negative effect of single parent marital status on student educational outcomes and increased chances for student educational attainment.

Parent expectation level for student educational attainment was another significant predictor of student educational outcomes. Among Blacks students, parent expectations as well as increased math achievement were positively and significantly associated with post-secondary educational attainment (PSE); this significant relationship between parent expectations and PSE was stronger in Black students than in White students (Thompson et al. 2006). Furthermore, as Wood et al. (2010:521) maintain, "[African American] mothers held less favorable expectations for sons and perceived sons to be less academically competent than daughters...mothers reported stereotypes

favoring girls over boys in academic domains." Wood et al. (2010:521) also argue that the gender disparity in African American educational attainment might be attributed to the perpetuation of these negative stereotypes of African American men. Lastly, parent expectations of student PSE as early as kindergarten can be significantly linked to parent expectations of student PSE in the 8th grade (Froiland, Peterson, and Davison 2012: 43). Moreover, parent expectation of student PSE in the 8th grade is significantly tied to student achievement in the 8th grade (Froiland, Peterson, and Davison 2012: 43). This study implies that parent expectations of student PSE can have a significant impact on student educational outcomes from an early onset. Empirical research upholds the significant relationship between parent expectations for student educational attainment and student educational outcomes.

Parent expectation level was another factor that might work differently depending on student expectation level. For instance, parents may have great expectations for their child's educational future; however, the student might not have expected to pursue higher education at all. They might have had other life pursuits. Student expectations could prospectively shape student educational outcomes more so than parent expectations. *Social Psychological Factors*

Lastly, social psychological factors also contributed to educational attainment.

The one social psychological factor that was examined in this present study is student perceived school climate.

Student perception of school climate was a significant predictor of student educational attainment. Although aspects of school climate have been identified and

measured differently in empirical studies throughout the literature, there are several key elements that seem to have resonated. In this study, student perceptions of school climate included four aspects (teacher-student relationships, grading satisfaction, discipline satisfaction, and school safety). As Barile et al. (2012:256) contend, "better student perceptions of the teaching climate were associated with lower student dropout rates by students' senior year." Moreover, school climate has a moderating effect on the relationship between parental expectations and grades; the intensity of this moderation is magnified in students with positive perceptions of school climate (Hopson and Weldon 2013: 45). Lastly, positive perceptions of school environment help reduce school safety trepidation; in addition, critical student educational outcomes are linked to student perceptions of school environment (Edgerton, McKechnie, and McEwen 2011: 43). Although there is room for empirical growth in observing the direct relationship between school climate and post-secondary educational attainment, previous studies imply a significant and positive association between school climate and educational outcomes.

Student perceived school climate is a factor that could work differently contingent on student expectation level. For example, in students with better perceptions of school climate but low educational expectations, better perceptions might not necessarily have sufficient bearing on future educational attainment. In forethought, student expectation level might have greater predictability on student educational outcomes. However, I postulate that students with better perceptions of school climate are more likely to have had higher educational expectations because of their good experiences in a school atmosphere. In turn, this could help determine future educational endeavors.

The Present Study

Much of the empirical literature surrounding student expectations and student educational attainment did not focus on the factors that predicted attainment in those with high expectations and low expectations. However, one particular study was most relevant to the research topic herein, as Messersmith and Schulenberg (2008:195) affirm, "high school curriculum, average grades, educational aspirations, and parents' educational level were particularly strong indicators of youth not meeting their expectation to graduate from a 4-year college, or graduating from college despite expecting not to graduate by age 25/26." This study revealed that the factors that predicted students expecting to succeed but not doing so or not expecting to succeed but doing so are actually one in the same. Ultimately, I supplement the cleavages in this area of empirical research with my own work. In the next chapter, I describe the data and analytic approach that was used to answer my research question.

CHAPTER 3

RESEARCH METHODS

The data used in this analysis was collected via the National Longitudinal Survey of Youth, 1997 Cohort (NLSY97), which is sponsored by the Bureau of Labor Statistics, U.S. Department of Labor. The survey represented the school, work, and family lives of the people living in the United States in 1997 who were born between 1980 and 1984. The NLSY97 cohort was comprised of 8,984 participants. The oldest participants were age 16 as of December 31, 1996; whereas, the youngest participants were age 12 and had not joined the work force at the time. Data from the survey also reflected the educational experiences as well as family and community backgrounds of youth in the United States in 1997.

The NLSY is a national probability sample. The sample was drawn from female and male youths between the ages of 12 and 16 as of December 31, 1996. The 1997 cohort consisted of two subsamples: (1) a cross-sectional sample of 6,748 respondents which represented people who lived within the U.S. during the first survey round who were born between January 1, 1980 and December 31, 1984; and (2) a supplemental sample of 2,236 respondents which oversampled Blacks and Hispanics (born within the same time frame) who lived in the U.S. during the first survey round.

Data was collected in fifteen rounds of interviews with the most recent round fielded in 2011-2012. Data used in the analyses was taken from the first round of surveys in 1997 and from the most recent data available which is the fifteenth round of surveys in

2011. The first round consisted of interviews that took place between the months of January and October of 1997 as well as a refielding that was done between the months of March and May of 1998 to increase the number of eligible youths surveyed. Additionally, 395 interviews were gained. A total of 8,984 respondents (4,385 females; 4,599 males) were interviewed in the initial round. Interviewers from the National Opinion Research Center (NORC) who worked in conjunction with the BLS went to households who identified as having youth residents between the ages of 12-16 to administer the survey.

The fifteenth round of interviews conducted in 2011 to 2012 resulted in a total sample size of 7,423, which is a sample size that is 1,561 short of the initial round of respondents in 1997. When examining the data collected in round 15, I focused specifically on students who have received a four-year college degree by age 30. All respondents were age 30 or older as of the survey date (2011-2012). I then divided this sample into two subsamples: (1) students with high expectations in 1997 (i.e. 51% chance or greater that they will receive a four-year college degree by age 30); and (2) students with low expectations in 1997 (i.e. 50% chance or less that they will receive a four-year college degree by age 30).

Moreover, I specifically chose to examine the responses of the oldest students (age 16) in the sample because I rationalized that this group would have been closest to pursuing their post-secondary education among those in the entire sample. Thus, the issue of pursuing post-secondary education would be most salient in their lives or most relevant at the point of being surveyed. In examining these two subsamples, I hoped to identify the factors, similar or different, found in these two groups that have attributed to

their successes despite previously having had opposing expectations of their educational futures.

Having implemented a survey design, there were five separate questionnaires that were administered in the initial round: (1) the Screener, Household Roster, and Nonresident Roster Questionnaires; (2) the Youth Questionnaire; (3) the Parent Questionnaire; (4) the School Survey; and (5) the CAT-ASVAB. The Screener, Household Roster, and Nonresident Roster Questionnaire was administered via in-person interview or in some rare cases, via telephone. The four remaining questionnaires were administered using computer software known as Computer-Assisted Personal Interview (CAPI). The interviewers had used computer laptops in their data collection. Moreover, the use of computer laptops allowed for respondents to input data themselves in sensitive portions of the survey. For instance, data from the Youth Questionnaire and the Parent Questionnaire were collected using software known as Audio Computer-Assisted Self-Interview (ACASI) wherein respondents inputted their responses directly into laptops. They had the option of listening to the questions either in English or in Spanish, or they could eliminate the audio completely and only read the questions from the screen. Also, in the winters of 1996-1997 and 2000-2001, the School Surveys were administered to 147 high schools within the primary sampling units. Data regarding the schools were collected from either school administrators or their proxies.

Subsequently, interviews for rounds two through four did not include all of the same survey instruments used in the first round of interviews. There were four

questionnaires administered during rounds 2-4: (1) the Youth Questionnaire, (2) the

Household Income Update, (3) the School Survey, and (4) the Transcript Survey.

The Parent Questionnaire was administered to one of the youth respondent's

parents only in the first round of interviews. However, a Household Income Update was

completed by one of the youth respondent's parents, typically the parent who gave

consent for their child to participate in the survey. In subsequent rounds 2 through 5, the

parent who was initially surveyed was asked to provide a Household Income Update.

Parents were no longer surveyed after the 5th round due to the fact that all respondents

were age 18 years or older by this time. Lastly, after each round, validation reinterviews

were conducted at random to verify responses and acquire feedback. Please note that all

information utilized to describe the methods of data collection was taken from the

NLSY97 User's Guide found on the official Bureau of Labor Statistics website and in

print form.

Selection Mechanism for Subsamples

The selection mechanism for determining the subsamples is student educational

expectations. This was measured in 1997. Students were asked, "Now think ahead to

when you turn 30 years old. What is the percent chance that you will have a four-year

college degree by the time you turn 30?

0:0%

1 TO 10: 1% to 10%

11 TO 20: 11% to 20%

30

21 TO 30: 21% to 30%

31 TO 40: 31% to 40%

41 TO 50: 41% to 50%

51 TO 60: 51% to 60%

61 TO 70: 61% to 70%

71 TO 80: 71% to 80%

81 TO 90: 81% to 90%

91 TO 100: 91% to 100%."

This variable was the mechanism utilized to select the two subsamples: (1) students with high expectations (i.e. 51% chance or greater that they will receive a four-year college degree by age 30); and (2) students with low expectations (i.e. 50% chance or less that they will receive a four-year college degree by age 30). Coding went as follows: high expectations = 1 and low expectations = 0. All students with high expectations or a score of 1, were in one subsample, and all students with low expectations or a score of 0, were in another subsample.

I divided the sample specifically at 50% chance or less and 51% chance or greater because those percentages are likely to be employed in everyday conversion. Individuals are probably likely to think of having more than 50/50 odds of something happening as having high odds and having less than 50/50 odds as having low odds. Therefore, I chose to split high and low expectations at 50% chance or less versus 51% chance or more because those would most effectively capture their level of educational expectation (i.e. high and low).

Outcome Variable

The highest degree received as of the survey date (Round 15, 2011-2012) was

the outcome or dependent variable that I observed. In the NLSY97, students were asked,

"The highest degree received as of the survey date." Students subsequently responded by

choosing either: None, GED, High school diploma (Regular 12 year program),

Associate/Junior college (AA), Bachelor's degree (BA, BS), Master's degree (MA, MS),

PhD, or Professional degree (DDS, JD, MD). By examining this variable, I measured the

educational attainment of each student. All students who have received at least a

bachelor's degree by age 30 will be given a score of 1; whereas, students who have not

received at least a bachelor's degree by age 30 will be given a score of 0. All students

with a score of 1 for earning a four-year degree by age 30, as subsampled into those with

high expectations and those with low expectations, were observed in the following

analyses.

Predictor Variables

All of the predictor variables that are implemented in this study were measured

in 1997. The first predictor of student educational attainment is gender. The variable that

I implemented to measure this predictor is as follows:

"COMMENT: Gender of Youth.

1 Male

2 Female

0 No Information."

32

Gender was coded as a dummy variable, where females were coded as 1 and males were coded as 0.

The second predictor of student educational attainment is race. The variable that I will utilize to measure this predictor is as follows:

"COMMENT: KEY RACE

- 1 White
- 2 Black or African American
- 3 American Indian, Eskimo, or Aleut
- 4 Asian or Pacific Islander
- 5 Something else? (SPECIFY)
- 0 No information."

Race was coded using three dummy variables: White = 1 and any other race = 0, Black = 1 and any other race = 0, and lastly, All Other Races = 1 and any other race = 0. White was the reference category in the logistic regression analyses.

The third predictor of student educational attainment is student academic excellence. The variables from the survey that I used to measure this predictor are as follows:

(1) "What subjects [are you taking/did you take and complete] in Math in grades7 through 12? Did you take...(READ EACH SUBJECT.) (SELECT ALL THAT APPLY.)... '1. Algebra I.' "

- (2) "What subjects [are you taking/did you take and complete] in Math in grades7 through 12? Did you take...(READ EACH SUBJECT.) (SELECT ALL THAT APPLY.)... '2. Geometry.' "
- (3) "What subjects [are you taking/did you take and complete] in Math in grades7 through 12? Did you take...(READ EACH SUBJECT.) (SELECT ALL THAT APPLY.)... '3. Algebra II.' "
- (4) "What subjects [are you taking/did you take and complete] in Math in grades7 through 12? Did you take...(READ EACH SUBJECT.) (SELECT ALL THAT APPLY.)... '4. Trigonometry.'"
- (5) "What subjects [are you taking/did you take and complete] in Math in grades7 through 12? Did you take...(READ EACH SUBJECT.) (SELECT ALL THAT APPLY.)... '5. Pre-calculus or advanced algebra.' "
- (6) "What subjects [are you taking/did you take and complete] in Math in grades7 through 12? Did you take...(READ EACH SUBJECT.) (SELECT ALL THAT APPLY.)... '6. Calculus.' "

Items one through six were coded as follows: yes or selected = 1, and no or not selected = 0. Students were subsequently asked if the math classes they had taken were honors courses.

- (7) "R TAKE ANY MATH HONORS COURSES? MATH CLASS 01
 Was [Algebra1/ Geometry/ Algebra 2/ Trigonometry/ Pre-calculus/
 Calculus] an honors level course?"
- (8) "R TAKE ANY MATH HONORS COURSES? MATH CLASS 02

- Was [Algebra1/ Geometry/ Algebra 2/ Trigonometry/ Pre-calculus/ Calculus] an honors level course?"
- (9) "R TAKE ANY MATH HONORS COURSES? MATH CLASS 03 Was [Algebra1/ Geometry/ Algebra 2/ Trigonometry/ Pre-calculus/ Calculus] an honors level course?"
- (10) "R TAKE ANY MATH HONORS COURSES? MATH CLASS 04
 Was [Algebra1/ Geometry/ Algebra 2/ Trigonometry/ Pre-calculus/
 Calculus] an honors level course?"
- (11) "R TAKE ANY MATH HONORS COURSES? MATH CLASS 05
 Was [Algebra1/ Geometry/ Algebra 2/ Trigonometry/ Pre-calculus/
 Calculus] an honors level course?"
- (12) "R TAKE ANY MATH HONORS COURSES? MATH CLASS 06
 Was [Algebra1/ Geometry/ Algebra 2/ Trigonometry/ Pre-calculus/
 Calculus] an honors level course?"

Items seven through twelve were coded as follows: yes = 1 and no = 0. However, if any of items one through six = 0, then the corresponding honors questions in items 7 through 12 = 0 as well. The same exact method of coding was utilized when measuring science honors courses taken.

(1) "What subjects [are you taking/did you take and complete] in Science in grades7 through 12? Did you take...(READ EACH SUBJECT.) (SELECT ALL THAT APPLY.)... '1. Biology.'"

- (2) "What subjects [are you taking/did you take and complete] in Science in grades7 through 12? Did you take...(READ EACH SUBJECT.) (SELECT ALL THAT APPLY.)... '2. Chemistry.' "
- (3) "What subjects [are you taking/did you take and complete] in Science in grades7 through 12? Did you take...(READ EACH SUBJECT.) (SELECT ALL THAT APPLY.)... '3. Physics.' "

Items one through three were coded as follows: yes or selected = 1, and no or not selected = 0. Students were then asked if the science classes they had taken were honors courses.

- (4) "R TAKE ANY SCIENCE HONORS COURSES? SCI CLASS 01
 Was [Biology/ Chemistry/ Physics] an honors level course?"
- (5) "R TAKE ANY SCIENCE HONORS COURSES? SCI CLASS 02
 Was [Biology/ Chemistry/ Physics] an honors level course?"
- (6) "R TAKE ANY SCIENCE HONORS COURSES? SCI CLASS 03
 Was [Biology/ Chemistry/ Physics] an honors level course?"

Items four through six were coded as follows: yes = 1 and no = 0. However, if any of items one through three = 0, then the corresponding honors questions in items four through six = 0 as well. Lastly, total math honors and total science honors variables were created using the sum function to determine how many math honors courses and science honors courses each respondent had taken. However, those created sum function variables were recoded to create dummy variables that measured whether or not the student had taken at least one math honors course or one science honors course.

Therefore, if the student had taken one or more math honors courses, then yes = 1 and no = 0, and if the student had taken one or more science honors courses, then yes = 1 and no = 0.

The fourth predictor of student educational attainment is mother's educational attainment. The variable I used to measure this predictor is as follows:

(1) "RESIDENTIAL MOTHER'S HIGHEST GRADE COMPLETED

Highest grade completed by respondent's residential mother (includes both biological and non-biological mothers).

- 0 None
- 1 1st Grade
- 2 2nd Grade
- 3 3rd Grade
- 4 4th Grade
- 5 5th Grade
- 6 6th Grade
- 77th Grade
- 8 8th Grade
- 9 9th Grade
- 10 10th Grade
- 11 11th Grade
- 12 12th Grade
- 13 1st Year College

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14 2<sup>nd</sup> Year College
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15 3rd Year College

16 4th Year College

17 5th Year College

18 6th Year College

19 7th Year College

20 8th Year College

95 Ungraded."

Item one was coded as follows: completed 4^{th} Year College or higher = 1 and any other education = 0.

The fifth predictor of student educational attainment is family/household structure. The variable that I employed to measure this predictor is as follows:

(1) "YOUTH, DOES R 01 LIVE WITH BOTH BIO PARENTS? (ROS ITEM)

COMMENT: Youth of the Responding Parent, Lives with both bio Does Youth live with both biological parents?"

Item one was coded as yes = 1 and no=0.

The sixth predictor of student educational attainment is parent's expectation level for student educational attainment. The variable I engaged to measure this predictor is as follows:

"Now think ahead to when [this youth] turns 30 years old. What is the percent chance that [this youth] will have a four-year college degree by the time [he/she] turns 30?

0:0%

1 TO 10: 1% to 10%

11 TO 20: 11% to 20%

21 TO 30: 21% to 30%

31 TO 40: 31% to 40%

41 TO 50: 41% to 50%

51 TO 60: 51% to 60%

61 TO 70: 61% to 70%

71 TO 80: 71% to 80%

81 TO 90: 81% to 90%

91 TO 100: 91% to 100%."

Parent expectations for student educational attainment was coded liken to student expectations (high expectations as 51% or greater = 1; and low expectations as 50% or less = 0).

The seventh and final predictor of student educational attainment is student perceptions of school climate. The variables from the survey used to measure this predictor are as follows:

(1) "Thinking about your (last) school in general, how much do you agree with each of the following statements about your school and teachers? ... The teachers are good. Do you strongly agree, agree, disagree, or strongly disagree?"

- (2) "...The teachers are interested in the students [Do you strongly agree, agree, disagree, or strongly disagree?]"
- (3) "...Students are graded fairly [Do you strongly agree, agree, disagree, or strongly disagree?]"
- (4) "...Discipline is fair [Do you strongly agree, agree, disagree, or strongly disagree?]"
- (5) "...I [feel/felt] safe at this school [Do you strongly agree, agree, disagree, or strongly disagree?]."

I reverse coded, and each response had a corresponding value. For instance, rather than strongly disagree = 4; disagree = 3; agree = 2; and strongly agree = 1, the values were reversed so that strongly disagree = 1; disagree = 2; agree = 3; and strongly agree = 4. I summed the values of these items, and created a variable that measured the total school climate score. A higher score was an indication of better or more positive student perceptions of school climate.

Analytic Plan and Technique

In my analyses, there are two specific models that I tested. I used logistic regression for binary outcomes to model the log odds of a respondent receiving a four-year college degree by age 30. The sample was all students who have earned a four-year degree by age 30. It was then divided into two subsamples, which included students with high expectations of receiving a four-year degree by age 30 and students with low expectations. All students with high expectations believed that there was a 51% chance or

greater that they would receive a four-year college degree by age 30, and students with low expectations felt that there was 50% chance or less that they would receive a four-year college degree by age 30. I fitted two separate bivariate logistic models in my analyses, one per subsample, to test the relationship between each predictor variable and student educational attainment.

Model 1 included the predictors of gender, race, student academic excellence, mother's educational attainment, household structure, parent expectation level, and student perceptions of school climate. It examined students with high expectations.

Model 2 included the same variables as Model 1, but it observed students with low expectations. All descriptive statistics, bivariate correlations, and logistic regression analyses are described in the next chapter.

CHAPTER 4

RESULTS

The following chapter expresses the results of the analyses conducted in the present study. It explains the descriptive statistics, bivariate correlations, and logistic regression analyses that were performed.

Descriptive Statistics

When examining students with high educational expectations at age 16 (*N*=1,335), Table 1 reveals that only 39% of the subsample actually earned a four-year degree by the age of 30. The subsample was 55% female and 45% male. It was also comprised of 62% Whites, 25% Blacks, and 13% Other Races. Moreover, 78% of students with high educational expectations had a parent who also held high expectations for their child's future educational attainment, and roughly 24% of students with high expectations had mothers who earned a bachelor's degree or higher. Furthermore, a little over one third of students with high educational expectations had taken math honors courses, and a quarter of them had taken science honors courses. What is more, 55% of students with high educational expectations had both biological parents living at home. Lastly, students with high educational expectations scored an average of 14.87 on the school climate scale.

When having observed students with low educational expectations at age 16 (N=551), Table 2 exhibits that only 5% of the subsample earned a four-year degree by the

age of 30. The subsample was 43% female and 57% male. The subsample consisted of 59% Whites, 26% Blacks, and 15% Other Races. Furthermore, in students with low expectations, approximately 28% of them had a parent with high educational expectations for their child's future, and only 6% of students with low expectations had mothers who earned a bachelor's degree or higher. In addition, only 12% of students with low expectations had taken math honors courses, and 9% of them had taken science honors courses. Also, about 42% of students with low educational expectations lived in a household with both biological parents. Finally, the average score of students with low educational expectations on the school climate scale was 13.87.

Bivariate Correlations

Students with High Educational Expectations

Table 3 illustrates the bivariate correlations between the dependent variable (educational attainment) and all included predictors in students with high educational expectations at age 16 and low educational expectations at age 16. Among students with high educational expectations, being White (r = .143, p < .05), household structure (i.e. two biological parents living in the home) (r = .255, p < .05), and parent expectations (r = .294, p < .05) had significant modestly positive correlations with earning a four-year degree by age 30. Conversely, being Black (r = -.147, p < .05) had a significant modestly negative correlation with earning a four-year degree by age 30.

There was a significant modestly positive correlation between being female (r = .062, p < .05) and science honors courses taken. Additionally, there was a significant

strongly positive correlation between math honors courses taken and science honors courses taken (r = .544, p < .05).

Furthermore, being female (r = -.073, p < .05) and being Black (r = -.120, p < .05) had significant modestly negative correlations with mother's educational attainment. Also, both math honors courses taken (r = .126, p < .05) and science honors courses taken (r = .100, p < .05) had significant modestly positive correlations with mother's educational attainment.

Moreover, there was a significant modestly negative correlation between being Black (r = -.283, p < .05) and household structure. Also, being White (r = .218, p < .05), math honors courses taken (r = .084, p < .05), sciences honors courses taken (r = .076, p < .05), and mother's educational attainment (r = .099, p < .05) all had significant modestly positive correlations with household structure.

Furthermore, math honors courses taken (r = .090, p < .05), science honors courses taken (r = .099, p < .05), mother's educational attainment (r = .131, p < .05), and household structure (r = .137, p < .05) had significant modestly positive correlations with parent expectations of student educational attainment.

Lastly, being White (r = .106, p < .05), being another race (r = .056, p < .05), math honors courses taken (r = .114, p < .05), science honors courses taken (r = .112, p < .05), household structure (r = .173, p < .05), and parent expectations (r = .094, p < .05) all had significant modestly positive correlations with student perceived school climate. Being female (r = .097, p < .05) and being Black (r = .161, p < .05) had significant modestly negative correlations with student perceived school climate.

Students with Low Educational Expectations

In students with low educational expectations at age 16, math honors taken (r = .167, p < .05), mother's educational attainment (r = .195, p < .05), and parent expectations (r = .187, p < .05) had significant modestly positive correlations with earning a four-year degree by age 30.

There was also a significant modestly negative correlation between household structure (r = -.151, p < .05) and being female; moreover, being Black (r = .113, p < .05) and science honors courses taken (r = .115, p < .05) both had significant modestly positive correlations with being female.

Math honors courses taken (r = -.098, p < .05) and science honors courses taken (r = -.104, p < .05) had a significant modestly negative correlation with being White. Also, mother's educational attainment (r = .107, p < .05) and household structure (r = .197, p < .05) both had significant modestly positive correlations with being White.

On the one hand, it seemed that household structure (r = -.235, p < .05) had significant modestly negative correlations with being Black. On the other hand, math honors courses taken (r = .147, p < .05) and science honors courses taken (r = .139, p < .05) had significant modestly positive correlations with being Black.

In addition, math honors courses taken and science honors courses taken (r = .494, p < .05) had a significant strongly positive correlation. Also, science honors courses taken and parent's expectations (r = .122, p < .05) had a significant modestly positive correlation. Lastly, mother's educational attainment and household structure (r = .112, p < .05) had a significant modestly positive correlation.

Logistic Regression

Table 4 presents the logistic regression analysis predicting whether students achieved a four-year degree by the time they were 30 years old for students with high expectations at age 16 and low expectations at age 16. Model 1 observed students with high educational expectations and included the following outcome variable: earning a four-year degree by age 30, as well as the predictor variables that consisted of: female, male, Whites, Blacks, all other races, math honors courses taken, science honors courses taken, mother's educational attainment, household structure (both biological parents live in the home), parent's expectations of student's educational attainment, and student perceived school climate. Model 2 consisted of the same variables as Model 1 but analyzed students with low educational expectations.

Students with High Educational Expectations

Table 4 illustrates the results of the binary logistic regression analyses for both Models 1 and 2. In Model 1, students with high educational expectations at age 16 were observed to determine the aforementioned variables predictability of earning a four-year degree by age 30. For students with high expectations, all predictors (gender, race, academic excellence, mother's educational attainment, household structure, parent expectations, and student perceived school climate) were statistically significant predictors of attaining a four-year degree by age 30.

Females were 30.1% more likely (Odds Ratio = 1.301) than males to have a four-year degree by age 30. Furthermore, Blacks were 30.1% less likely (Odds Ratio = .699) than Whites to have a four-year degree by age 30. Additionally, students who have taken

math honors courses were 45.0% more likely (Odds Ratio = 1.450) than those who have not, to receive a four-year degree by age 30, and students who have taken science honors courses were nearly twice as likely (Odds Ratio = 1.862) to gain a four-year degree by age 30 than those who have not taken science honors courses.

Students whose mothers have a bachelor's degree or higher were more than three times as likely (Odd Ratio = 3.661) than those whose mothers do not, to attain a four-year degree by age 30. Students who lived in homes with both biological parents were more than twice as likely (Odds Ratio = 2.238) to secure a four-year degree by age 30 than those who lived in homes without both biological parents.

Students with parents who had high expectations for their child's educational attainment were nearly five times more likely (Odds Ratio = 4.885) to have a four-year degree by age 30 than those whose parents had low expectations. Students with positive perceptions of school climate were 13.9% more likely (Odds Ratio = 1.139) than those with less positive perceptions of school climate, of receiving a four-year degree by age 30.

Students with Low Educational Expectations

The same analyses were performed in Model 2 of Table 4 for students with low educational expectations at age 16. In students with low educational expectations, three predictors (academic excellence, mother's educational attainment and parent expectations) were found to be statistically significant in obtaining a four-year degree by age 30.

Students who have taken math honors courses were 7.6 times more likely (Odds Ratio = 7.586) than those who have not, to have their four-year degree by age 30. Among students with low expectations, having a mother with a bachelor's degree or higher increased their chances of earning a four-year by age 30 by 8.3 times (Odds Ratio = 8.308). Although a student may have low expectations for their own educational future, having had a parent with high expectations for their education, enhanced the likelihood that they would achieve a four-year degree by age 30 by five times (Odds Ratio = 5.000), in comparison to a student whose parent had low expectations.

CHAPTER 5

DISCUSSION

The purpose of this thesis was to determine the different factors that predicted earning a four-year degree by age 30 among students with high educational expectations at age 16 and low educational expectations at age 16. I also aimed to observe the similarities and differences of these factors in both groups. The following chapter discusses the findings of the analyses, the potential sociological explanations, the limitations and suggestions for future research, and the implications of the findings.

Results of Research Question

The research question in the present study was intended to identify the differences in the factors among those with high expectations and low expectations that increase their likelihood of post-secondary educational attainment (i.e. earning a four-year degree by age 30). The logistic regression analysis indicated that among students with high educational expectations at age 16, all predictors (being female, being Black, math honors courses taken, science honors courses taken, mother's educational attainment, household structure, parent expectations, and school climate) included in Model 1 had individual predictor variables that were statistically significant.

In having examined the contrast between Black students with high expectations and White students with high expectations, there were some notable differences and patterns in the findings. For instance, the bivariate correlations analysis revealed that

being White had significant positive relationships with earning a four-year degree by age 30, mother's educational attainment, household structure, and perceived school climate whereas, being Black had significant negative relationships with those same variables.

The logistic regression analysis specified that in students with low educational expectations at age 16, only three predictor variables (math honors taken, mother's educational attainment, and parent expectations) included in Model 2 were statistically significant in obtaining a four-year degree by age 30. Moreover, the bivariate correlations analysis is consistent with the findings of the logistic regression analysis in that math honors taken, mother's educational attainment, and parent expectations were the only predictors that had significant relationships with receiving a four-year degree by age 30.

What is more, after having examined the different factors between students with high expectations and low expectations that predicted them earning a four-year degree by age 30, the common theme in the two subsamples was that students with high expectations had higher means (%) on all predictor variables included in both models, apart from gender composition (i.e. percentage of males were higher in low expectation students). In other words, all the predictors were found in a higher percentage of high expectation students than low expectation students. If all predictors were more prevalent in students with high educational expectations, this could have been an underlying contributor to the educational attainment disparity between the two subsamples.

Sociological Explanation of Findings

Students with High Educational Expectations

The present research provided insight into the factors that predict earning a four-year degree by age 30 in students with high educational expectations and low educational expectations. The study offered empirical support that maintained that among students with high educational expectations at age 16, being female was a positive predictor of receiving a four-year degree by age 30. This finding was consistent with the empirical literature that contended that females are more likely than males to attain post-secondary education (Lee et al. 2008; Andres, et al. 2007; Abada and Tenkorang 2009).

Furthermore, in students with high expectations, being Black was a negative predictor of attaining a four-year degree by age 30. This finding was also consistent with previous empirical research that stated that Black students less often complete post-secondary education in comparison to White students (Thompson et al. 2006; McDaniel et al. 2011).

Student academic excellence, which was measured via math honors courses taken and science honors courses taken was a positive indicator of obtaining a four-year degree by age 30. This finding coincided with prior empirical literature that affirmed that successful participation in advanced courses in secondary school contributed to future college academic achievements (Rankin 2012; Scott, Tolson, and Lee 2010; Chajewski, Mattern, and Shaw 2011). Also, Bourdieu's concept of human capital and its acquisition seems to be demonstrated by way of student academic excellence. The mathematical and scientific skills acquired from advanced courses can be seen as a form of capital.

Mother's educational attainment of earning a bachelor's degree or higher was also a positive predictor of receiving a four-year degree by age 30. This finding also concurred with empirical data, which asserted that increased parent educational attainment is a significant predictor of student post-secondary educational attainment (Messersmith and Schulenberg 2008). More specifically, women's educational attainment is guided significantly by mother's educational attainment (Abada and Tenkorang 2009: 580).

Household structure (two biological parent household) was another positive indicator of achieving a four-year degree by age 30. This finding also aligned with empirical research, which argued that two biological parent households had positive influence on student educational attainment as oppose to single parent (i.e. single mother) households (Martin 2012).

Increased parent expectations for their child's educational attainment also positively predicted earning a four-year degree by age 30. This finding also supported empirical studies that found that parent expectations had a significant positive relationship with student post-secondary educational attainment (Thompson et al. 2006).

Positive student perception of school climate was another significant indicator of having a four-year degree by age 30. This finding was consistent with prior empirical research wherein perceptions of school environment are directly associated with student educational outcomes (Edgerton, McKechnie, and McEwen 2011).

A potential explanation for the consistency of the findings with empirical literature might have been that students with high expectations had an additional factor

that actually helped to facilitate their earning a four-year degree by age 30. However, students with low expectations had an added factor whose nature was to directly impede upon their receiving a four-year degree by age 30.

A conceivable explanation for the findings in students with high expectations is that at age 16 they had already established a strong sense of positive direction or expectation for their educational futures. Furthermore, with nearly 78% of students in the subsample having parents with high educational expectations for their earning a four-year degree by age 30, this could have only given students with high expectations further belief and validation in themselves that they would eventually reach their post-secondary educational goals. Also, with parents having encouraged students and having expected them to earn a four-year degree by age 30, many would have suggested various options for their children to fast track this process, especially to have taken math and science honors courses. This would have explained the higher percentage of students with high expectations who had taken the advanced courses.

Moreover, students with high expectations might have had increased economic, cultural, and social capital, which would have accounted for a greater percentage of students with high expectations having had mothers with a bachelor's degree or higher. These students with increased capital might have come from families with increased socioeconomic standing and where two parent households could have been more prevalent. They would have also had the opportunity to attend private schools or public schools in more privileged communities. Essentially, this would have allowed some high expectation students to have attended schools whose sole purpose was having cultivated a

school climate that would have replicated the next generation of socioeconomic elite. This would be connected to the theory of symbolic violence and the premise that not all educational institutions would have aimed to proliferate equal educational opportunities for everyone (Bourdieu and Passeron 1977). Instead, most of these types of institutions would have taken action to maintain the status quo of the socioeconomic hierarchal structure that has always existed, namely the accelerated success of the elite classes and the diminished opportunities of the socioeconomically disadvantaged.

Students with Low Educational Expectations

Among students with low educational expectations at age 16, the predictors of math honors courses taken, mother's educational attainment, and parent expectations were all significant in predicting obtaining a four-year degree by age 30. These findings all corresponded with the previous empirical literature that was aforementioned.

These students believed that they had a 50% chance or less of earning a four-year degree by age 30. Therefore, the fact that they overcame the odds and attained post-secondary education speaks volumes, and it raises the question of what particular factors did these students with low expectations possess that lent to their post-secondary success.

For instance, student academic excellence as measured through math honors courses taken demonstrated that mathematical aptitude contributed to these students earning a four-year degree by age 30. The skills they might have gained in advanced math courses might have increased their human capital, and this could have contributed to their post-secondary educational accomplishments. This increased human capital via skills gained or aptitude acquired has the potential of offering upward social mobility

from lower social and economic standings (Bourdieu 1986; Coleman 1990). With this knowledge, students especially those with low educational expectations, might have been proactive in having cultivated their own skills and abilities so as to have increased their chances of college admissions, the acquisition of merit based scholarships, and ultimately, degree completion (Farkas 1996). In essence, students with low expectations might have lacked in either social capital, cultural capital, economic capital, or all the above, but through acquired human capital, more specifically accelerated math skills, they managed to improve their odds and earned a four-year degree by age 30.

Mother's educational attainment was another statistically significant predictor of receiving a four-year degree by age 30. Previous research has shown that the strength of this relationship (i.e. parent educational attainment and child educational attainment) is greatest in women with low educational attainment (Hauser-Cram 2009). A plausible explanation for this might be that mothers with low educational attainment more often come from socially and economically disadvantaged backgrounds that might have resulted in them being single mothers and raising their children alone. These mothers might have worked multiple jobs to provide for their children and would have left them with no time or additional resources to pursue their own post-secondary educational attainment. Subsequently, financial constraints might have prevented their children from pursuing post-secondary education as well. Oftentimes, children would have had to pursue low-paying, menial jobs in order to have contributed to the household expenses and make ends meet, so to speak. These hindrances would have attributed to low post-secondary educational attainment among students with low expectations.

Furthermore, 5.6% of students with low educational expectations had mothers with a bachelor's degree or higher and 5.0% of students with low educational expectations had earned a four-year degree by age 30. Although in this case mothers did not have low educational attainment, this mirror image of mother's educational attainment and child's educational attainment is certainly noteworthy and has supported that a significant relationship exists.

Moreover, the third and final significant predictor of gaining a four-year degree by age 30 in students with low expectations was parent expectations for student educational attainment. A parent having believed that their child had 51% chance or higher of earning a four-year degree by age 30 significantly predicted the child having done so. A possible explanation for this might be that students, despite having had low educational expectations at age 16, would have ultimately wanted to meet the expectations that their parents had for them in life. Educational expectations would have certainly been one of the most crucial. The literature implied that even as children, there is an inherent response to want to please parents, and parent expectations is significantly linked to actual student achievement (Froiland, Peterson, and Davison 2012). Therefore, the longevity of the effect of low student educational expectations at age 16 on actual student attainment by age 30 is hinged upon parent high expectations for their children's educational attainment.

What is more, a mother, with either high or low educational attainment, could have had high expectations for their children's educational futures. A parent's educational attainment does not necessarily have to dictate the parent's expectations for

their children's post-secondary education. Parents most often want their children to have and experience all of the best opportunities that they never had in their own lives. This is seen in the subsample. Although only 5.6% of students with low educational expectations had mothers with a bachelor's degree or higher, 27.9% of them had parents with high expectations of them earning a four-year degree by age 30. This helped support the notion that parents, more often than not, instinctually want their children to live better lives than they did, and greater post-secondary educational attainment is a prime example of this.

Limitations and Suggestions for Future Research

This study examined a number of factors that should be incorporated in the educational attainment literature. This study helped fill a chasm in the literature surrounding student educational expectations and student post-secondary educational outcomes. Furthermore, it examined student expectations in an unprecedented way, which was high expectations (51% chance or more) and low expectations (50% chance or less). It illuminated the significant predictors found in students with high expectations, and it also shed light on factors that remained significant in students with low expectations, despite the odds being against them. However, limitations of the present study must be identified with the intent of assisting future researchers who wish to supplement this field of empirical literature.

One key limitation of the present study was sample size. With the subsample of students with low expectations being only 551 students, I would make a suggestion to future researchers who would like to expound on this group. Because of attrition, there

were a number of potential predictor variables that were not included in the models. I would have suggested including other predictors such as socioeconomic status, other measurements of academic excellence, father's educational attainment, and parent marital status into the models. Previous research would have suggested these predictors as empirically sound choices.

Also, one of the limitations of having a small sample size is that the generalizability of the findings reduces as the sample size diminishes. The NLSY was a national probability sample and was intended to capture the youths in the United States at various points in time (i.e. in the present study, 1997 and 2011). Thus, having had a larger sample size could have only contributed to the generalizability of the findings.

Further, having a larger sample size of students with low expectations relative to students with high expectations would have also contributed to the present study in another way. Having more equivalent sample sizes would have given the findings greater predictive power, which might have allowed for different claims regarding the statistical significance of predictors when comparing across the two subsamples.

In addition, I would have suggested to future researchers that they investigate the career fields in which students with low expectations earned their four-year degree. It would have been interesting to have learned whether having exceptional math skills attributed to having obtained STEM (Science, Technology, Engineering, and Mathematics) degrees, fine arts degrees, or social science degrees, in both subsamples.

Implications

The present study provided sociological empirical research to the field of student post-secondary educational attainment by investigating the significant of predictors of earning a four-year degree by age 30, in students with high educational expectations and low educational expectations. There are also implications from the present findings that should be acknowledged.

Students could benefit from the findings of this study. Findings revealed that student academic excellence via math honors courses taken and science honors taken was statistically significant in earning a four-year degree by age 30. With this knowledge, students could identify that mathematical and scientific skills gained in these types of honors courses are vastly beneficial in post-secondary educational success. Another lesson that students can gain from the present findings is that even though increased parent expectations was a significant predictor of earning a four-year degree by age 30, it does not need to be the absolute deciding factor of their own educational outcomes. It would be a luxury if parents all believed in the post-secondary educational potential of their children. However, this is not always the case. Thus, I think students would have benefitted by knowing that regardless of their parents' expectations, they have the ability to navigate their own educational futures.

Subsequently, parents could also profit from the present findings. Just as it was important for students to know that their parents' expectations did not have to be the key factor in their educational outcomes, it was just as crucial for parents to know that their opinions and expectations for their children's futures are significant, as was supported by

the findings of the present study. For instance, if at all possible, they could choose to do this by continuing their post-secondary educational pursuits and being a personal example for their children. Also, they could choose to provide their children with a more stable household structure. Although this might not necessarily mean a two parent biological household, the comfort of a stable home environment where parents or guardians are not constantly moving in and out of the home, would only seem to benefit the children. Children who are able to trust and rely on one or more parents without reservations would possess the type of stability that would allow them to flourish in an academic setting.

Educational institutions could also gain from the findings of the present study. The findings help recognize the significant relationships that factors such as school climate, math honors courses taken, science honors taken, as well as student expectations have with post-secondary educational attainment. By learning this, educational institutions could create school programs targeted toward increasing more positive student perceptions of school climate. When students have a good outlook on their school environment, they are more inclined to stay active or involved in that school. If they enjoy the atmosphere in which they were learning in, it seems fitting that they would want to be present more often. Although many schools have math and science honors courses, I think that creating math and science after-school programs that dually emphasize the importance of these subjects and their skill-development are essential.

Finally, school programs that are created in primary school, middle school, and high school that highlight the necessity of expecting to go to college is key. If students

have had expectations to go to college since elementary school, they have no reason to doubt otherwise. My suggestion would be to eliminate low expectations of post-secondary educational attainment as early as possible. Although many students with low expectations might lack the economic, cultural, and social capital to earn four-year degrees, it would only benefit to inspire them to attain even two-year degrees. It seems reasonable that after earning a two-year degree, a student with low expectations might be inclined to believe that receiving a four-year degree might not be so inaccessible. They might feel motivated to reach their post-secondary educational goals, whatever they may be, at their own pace and in their own time. These are some suggestions that educational institutions might utilize from the present findings.

The findings in this study illuminated the significant predictors of earning a four-year degree by age 30 among students with high educational expectations and low educational expectations. This study should have assisted students in identifying some of the proactive steps they could have taken to guide their own post-secondary educational outcomes. This study should have also helped parents in having recognized the ways in which they hold significant roles in their children's educational futures. At last, the present study should have also aided educational institutions in having developed some of the essential programs needed to guide students in following through and succeeding in post-secondary educational attainment.

Table 1. Descriptive Statistics for Analytic Sample – Students with High Educational Expectations (N=1,335)

Variable Expectations (N=1,335)	Mean or	SD	Minimum	Maximum	
, 42.100.10	(%)	22	112111111111111111111111111111111111111		
Dependent Variable	` '				
Earning a 4-year Degree by Age 30	.3933	.48866	.00	1.00	
(1 = B.A. or higher, 0 = Less than B.A.)					
Independent Variables					
Gender					
Female	.5476	.49792	.00	1.00	
Male	.4524	.49792	.00	1.00	
Race					
White	.6165	.48643	.00	1.00	
Black	.2569	.43710	.00	1.00	
All Other Races	.1266	.33264	.00	1.00	
Taken Math Honors Courses	.3101	.46271	.00	1.00	
(1 = Yes, 0 = No)					
Taken Science Honors Courses	.2517	.43414	.00	1.00	
(1 = Yes, 0 = No)					
Mother's Educational Attainment	.2390	.42660	.00	1.00	
(1 = B.A. or higher, 0 = Less than B.A.)					
Household Structure – Both Biological	.5513	.49755	.00	1.00	
Parents Living in the Home					
(1 = Yes, 0 = No)					
Parent Expectations	.7775	.41606	.00	1.00	
(1 = 51-100%, 0 = 0-50%)					
School Climate	14.8764	2.28787	6.00	20.00	
(6 = low level of school attachment, 20 =					
high level of school attachment)					

Table 2. Descriptive Statistics for Analytic Sample – Students with Low Educational Expectations (N=551)

Variable	Mean or (%)	SD	Minimum	Maximum
Dependent Variable				
Earning a 4-year Degree by Age 30	.0508	.21982	.00	1.00
(1 = B.A. or higher, 0 = Less than B.A.)				
Independent Variables				
Gender				
Female	.4301	.49554	.00	1.00
Male	.5699	.49554	.00	1.00
Race				
White	.5917	.49197	.00	1.00
Black	.2595	.43877	.00	1.00
All Other Races	.1488	.35623	.00	1.00
Taken Math Honors Courses	.1216	.32712	.00	1.00
(1 = Yes, 0 = No)				
Taken Science Honors Courses	.0926	.29008	.00	1.00
(1 = Yes, 0 = No)				
Mother's Educational Attainment	.0563	.23064	.00	1.00
(1 = B.A. or higher, 0 = Less than B.A.)				
Household Structure – Both Biological	.4192	.49388	.00	1.00
Parents Living in the Home				
(1 = Yes, 0 = No)				
Parent Expectations	.2795	.44916	.00	1.00
(1 = 51-100%, 0 = 0-50%)				
School Climate	13.8748	2.47105	5.00	20.00
(5 = low level of school attachment, 20 =				
high level of school attachment)				

Table 3. Bivariate Correlation Matrices for Predictors of Earning a 4-year Degree by Age 30 (N=1,886) **High Student Educational Expectations** (N=1,335)

	High Student Educational Expectations (N=1,335)										
	4yr Deg.	Female	White	Black	All	Math	Science	Mother's	Household	Parent	School
	by Age 30				Other	Honors	Honors	Education	Structure	Expects.	Climate
					Races						
4yr Deg. by Age 30		.029	.143	147	016	.203	.215	.300	.255	.294	.188
Female	.016		.029	.008	052	.021	.062	073	018	001	097
White	.024	076		746	483	.009	036	.120	.218	.030	.106
Black	005	.113	713		224	009	.030	120	283	048	161
All Other Races	027	034	503	248		002	.013	018	.054	.019	.056
Math Honors	.167	.002	098	.147	046		.544	.126	.084	.090	.114
Science Honors	.040	.115	104	.139	028	.494		.100	.076	.099	.112
Mother's Education	.195	.011	.107	055	080	019	.058		.099	.131	.033
Household Structure	.071	151	.197	235	.017	057	005	.112		.137	.173
Parent Expects.	.187	.031	001	.019	022	.065	.122	.076	005		.094
School Climate	.065	014	.075	081	004	.008	.011	064	.059	.082	

Low Student Educational Expectations (N=551)

p < .05

Table 4. Logistic Regression of Earning a 4-year Degree by Age 30 (N=1,886)

High Student Low Student									
	Educational	ι	Low Student Educational						
		(NI 1 225)							
	Expectations (N=1,335)		Expectation						
	e ^B	Odds	e ^B	Odds					
	(S.E.)	Ratio	(S.E.)	Ratio					
Gender ^a									
Female	.263	1.301*	.444	1.558					
	(.132)		(.443)						
Race ^b									
Black	358	.699*	015	.985					
	(.166)		(.531)						
All Other Races	305	.737	119	.888					
	(.196)		(.695)						
Taken Math Honors Courses	.371	1.450*	2.026	7.586**					
	(.161)		(.510)						
Taken Science Honors Courses	.621	1.862**	811	.444					
	(.172)		(.666)						
Mother's Educational	1.298	3.661**	2.117	8.308**					
Attainment	(.152)		(.548)						
Household Structure	.806	2.238**	.831	2.295					
	(.137)		(.448)						
Parent Expectations	1.586	4.885**	1.609	5.000**					
	(.197)		(.435)						
School Climate	.130	1.139**	.141	1.152					
	(.030)		(.090)						

^aReference category is Male. ^bReference category is White. *p < .05; **p < .01

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CURRICULUM VITAE

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