SOCIAL NETWORK AND BLACK STUDENTS: RELATIVE EFFECTS OF MEMBER

EXPECTATIONS ON ACADEMIC ACHIEVEMENT

by

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Abstract

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The University of Texas at Arlington, 2018

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Objective: The purpose of this study is to examine the relationship between social network member college expectations of Black students and the college expectations and college attendance of the students. Methods: This study conducted secondary analysis of the nationally representative data from the Educational Longitudinal Study of 2002. Selected variables were recoded into binary variables and binary logistic regression was conducted on the independent and control variables and the dependent variables of student college expectations and student college attendance. Results: Some of the independent variables were found to be predictors of student college expectations and college attendance. Conclusions: Members of Black students' social networks should strive to espouse positive expectations for them. Discussion and suggestions for future research are provided.

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Finally, I want to especially thank my dissertation committee chair Dr. Vijayan Pillai. Your goal to help students "get out of here" matched my desire to complete my degree. Thank you for your patience, genius, and midnight meetings, without which I could not have reached my goal.

Dedication

I dedicate this dissertation to all students who look like me, may see my

accomplishments, and may be inspired to believe that they can accomplish the same and more

academically and otherwise.

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CHAPTER 1

INTRODUCTION TO THE STUDY

The question of education for Black people in America is a question of life and death.

—Lerone Bennett (as cited in Hale, 1982, p. 1)

Statement of the Problem

The purpose of this study is to examine the academic achievement gap among Black students with a view to investigate the impact the academic expectations of a constellation of influential people in their lives has on their academic success.

Gaps between Whites and Blacks in the U.S. exist in many areas such as income, assets, health, life expectancy, employment, and more (Do, Frank, & Finch, 2012; Geruso, 2012; Hamilton, Darity, Price, Sridharan, & Tippett, 2015; Wilson, 2015). As early as 1858 education was dubbed "the great equalizer" in American society (Holmes & Zajacova, 2014; Rohde, Cooke, & Ojiha, 2012). Unfortunately, another one of the gaps between Blacks and Whites is in educational attainment, the very mechanism dubbed "the great equalizer". While Blacks make up 13% of the U.S. population, Black men make up 60% of the incarcerated population (Blackdemographics.com, 2014; Sakala, 2014). According to Snyder and Dillow (2013) and the U.S. Department of Education (2012) in 2012, women (57-58%) earned more bachelor's degrees than men (43-42%) in the United States. This breaks down to women earning 56% of the bachelor's degrees earned by Whites, 66% of those earned by Blacks, 60% of those earned by Hispanics, 54% for Asians, and 61% for American Indians. For associate degrees women earned 60.9% of those awarded to Whites, 68.3% of those earned by Blacks, 62.4% of those earned by Hispanics, 58.5% of those earned by Asians, and 64.9% of those earned by American Indians (U.S. Department of Education, 2012). The preceding numbers show that the greatest gaps

between men and women for associate's and bachelor's degrees exist among Blacks. College enrollment gains are lowest among Black men, they come to college less prepared than their peers, and their college completion rates are the lowest among all racial and ethnic groups in the U.S. (Harper, 2006, 2012; Lederman, 2012). Ginder and Kelly-Reid (2013) reported that of African Americans who enter four-year colleges, only 40% graduate within six years compared to 63% for whites. Like the preceding authors, Harper (2005, 2006) and Lederman (2012) reported that Black male students have the lowest graduation rates among all gender and racial/ethnic groups with more than two-thirds of those who start college never finishing. Education may have never been "the great equalizer" but research does show a correlation between educational attainment and income, earning power, and upward mobility (Barro & Lee, 2001; Dittman & Stephens, 2017; Kuhn & Rios-Rull, 2016; Wax, 2017). Education is still a major factor in reducing racial disparities in America (Schiller, 2008).

The racial gap in education is commonly known as the academic achievement gap, and it is overwhelmingly investigated as a divide between Whites and minorities (Carpenter & Ramirez, 2007). In addition to efforts to understand and address the achievement gap between racial groups, it may be beneficial to understand the differences between genders within racial groups. Kirp (2010) called the achievement gap between Black boys and girls the widest achievement gap, and Matthews and Williams (2007) declared that "Ensuring, that young Black men are afforded equal educational opportunities, access, and outcomes in education remains the most pressing challenge of modern schooling" (p.1). While the race gap in academic achievement between Blacks and Whites is well established, far less is known about the determinants that contribute to the gender gap in academic achievement among Black students. A second purpose of this study is to investigate the differential effects of role models and social

network member's (SNM) on the academic expectations and achievement of Black male students in comparison with their counterparts, Black female students.

Studies that examine the relationship between the academic expectations of parents, teachers, peers and the academic expectations of students on the academic achievement gap dominate the literature (Chen & Lan, 1998; Hill, Castellino, Lansford, Nowlin, Dodge, Bates, & Pettit, 2004; Piciullo, 2009; Rainey, 2010; Sciarra & Ambrosino, 2011; Wilder, 2014). These studies have been limited by a narrow scope of SNM in a child's life. They have looked at parental expectations alone, a combination of parent and teacher expectations, or possibly parent, teacher, and peer expectations (Sciarra & Ambrosino, 2011). But few, if any have gone beyond these to include more key SNM in a child's life. In defining family, they have relied on more traditional configurations such as a mother, father, and two or three children. In this traditional configuration the parents have largely been married to each other, are both the biological parents of all their children, and reside at the same dwelling (Golombak, 2015; Qualls, 1982). This traditional definition of family is not sufficiently relevant to contemporary configurations of families. For instance, in modern times there are more single mothers, grandparents, step parents & step siblings, same sex parents, and extended family members that make up the constellation of SNM in a modern child's life (Golombak, 2015). When race is considered, these family compositions become even more nuanced. Black children are more likely to be born to and raised by a single female head of household (72%) than White children (36%) (Haskin, 2014). This study will look at the "village" as it were and examine the relationship between the academic expectations of a broader range of key SNM in a child's life beyond only married, co-residential, biological mothers and fathers, on their academic expectations and academic success.

Importance of the Study to Social Work

Social work in America is primarily concerned with fashioning a welfare state by achieving equality for members of vulnerable groups such as women, minorities, children, older persons, members of the LGBTQ population, persons with mental health or substance abuse issues, those accused of crimes, and those currently or formerly incarcerated to name some (Jansson, 2009). Male Americans are not typically included in a list of vulnerable groups, but the history of Black men in America warrants them a place on the list. It is estimated that 21-33% of Black male citizens will go to prison, and 70 percent of Black boys that drop out of high school will be in prison by age 30 (Jacobson, 2015; Kearney, Harris, Jácome, & Parker, 2014). Black male inmates also make up nearly 34% of the prison population but only 6% of the nation's population (Blackdemographics.com, 2017, Carson & Anderson, 2016; Rastogi, 2011). The dismal societal outcomes experienced by Black men in American society has given rise to the term "endangered species" in referring to them (Gibbs, 1988, p. 1; Guy, 2014, p. 21). Not only has "endangered species" been associated with Black men, but many of the schools that primarily serve them are considered incubators to feed the "school to prison pipeline". Such a list of problems clearly depicts problems the "person" in question is experiencing, that is Black men, but a social work approach calls for a look at the "environment" as well. Social work asks, "What factors in the environment could be contributing to the negative outcomes the person is experiencing?" Scholars in the fields of business, sociology, economics, psychology, criminal justice, and of course education have taken on the challenge of pondering the plight of Black men in American society. If bringing a social work perspective to understanding and removing impediments to the academic achievement of Black male students can help at all, the effort must be made.

Furthermore, the concept of social network is germane to social work and to research on addictions treatment and prison recidivism. It follows that it is appropriate to employ the concept of social network to an inquiry into academic achievement.

The outcomes of this study could contribute to identifying best practices for primary caretakers of Black boys, and school faculty and administrators in schools that serve them. The study also contributes to approaches that include a broader view of the factors affecting the academic achievement of children and extends the research that considers within group differences when studying the academic achievement gap.

CHAPTER 2

LITERATURE REVIEW

Though the achievement gap is often investigated cross-racially, there exists large

amounts of evidence suggesting that early life experiences such as poverty play a significant role

in the academic expectations of Black students (Rose & Dyer, 2008). Therefore, the traditional

cross-racial studies of the achievement gap must control for socioeconomic factors, within race

comparisons are less likely to have to do so. Apart from the cumulative effects of poverty and

family disorganization, there are ongoing factors that impact the academic expectations of young

Black students (Kafele, 2009; Noguera, 2003). These sources of influence include role models

and academic performance expectations of socializers such as peers and teachers who may

encourage or deter Black students from having high academic expectations (Gershenson, Holt, &

Papageorge, 2016; Stark, Leszczensky, & Pink, 2017). Yet, only a few studies have examined

the relationship of these factors on students' academic expectations and academic achievement

along the lines of gender within racial groups (Carpenter & Ramirez, 2007; Garibaldi, 2014;

Goldin, Katz, & Kuziemko, 2006; Kirp, 2010; Rainey, 2010). Another major trend in the

literature is almost exclusively looking at the relationship between parent and teacher

expectations and student academic expectations and achievement (Baker, & Entwisle, 1987; Dee,

2005; Gershenson, Holt, & Papageorge, 2016; Wilder, 2014). Baker and Entwisle (1987) and

Smith and Fleming (2006) went a step further and explored how gender differences arise in

parents' academic expectations of their children. Some studies have considered school counselor

and peer expectations (e.g. Poynton & Lapan, 2017; Stark, Leszczensky, & Pink, 2017).

The goal of this study is to address these gaps in the current models of studying the

academic achievement gap. This study will examine how the achievement gap that exists among

Black students, along gender lines, relates to an expanded view of the impact that the academic expectations of influential people in their lives has.

Intraracial vs Cross-Racial Achievement Gap

Carpenter, Ramirez, and Sevrn (2006) and Carpenter and Ramirez (2007) proposed that rather than an achievement gap, there are achievement gaps. In two similar studies they explored the achievement gaps that exist within racial groups, not just across racial groups, and they encouraged further inquiry into within race academic achievement gaps. The largest of these within race academic achievement gaps is between Black male students and Black female students. Kirp (2010) called it the widest achievement gap. According to Snyder and Dillow (2013) and the U.S. Department of Education (2012) in 2012, women (57-58%) earned more bachelor's degrees than men (42-43%) in the United States. More specifically women earned 56% of bachelor's degrees earned by Whites, 66% of those earned by Blacks, 60% of those earned by Hispanics, 54% for Asians, and 61% for American Indians. For associates degrees women earned 60.9% of those awarded to Whites, 68.3% of those earned by Blacks, 62.4% of those earned by Hispanics, 58.5% of those earned by Asians, and 64.9% of those earned by American Indians (U.S. Department of Education, 2012). The preceding numbers show that the greatest gaps between male and female students for associates and bachelor's degrees exist among Blacks. Black male students come to college less prepared than their peers, and their college completion rates are the lowest among all racial and ethnic groups in the U.S. (Harper, 2006, 2012; Lederman, 2012). Ginder and Kelly-Reid (2013) reported that of African Americans who enter four-year colleges, only 40% graduate within six years compared to 63% of Whites. Like the preceding authors, Harper (2005, 2006) and Lederman (2012) reported that Black male students have the lowest graduation rates amongst all racial groups with less than one-third of

those who start college ever finishing. Clearly Black male students are in last place in academic achievement. It follows that understanding and closing within racial group gaps might help with further understanding and closure of cross-racial group achievement gaps. Dee (2005) stated that the cross-racial achievement gap is likely America's greatest education problem, and Carpenter and Ramirez (2007) argue that gaps within groups may be the most significant.

Expansion of Expectations

Dee (2005) used data from the Educational Longitudinal Study of 1988 to examine the significance of teachers and students having matching race, ethnicity, and gender. The data set allowed the author to compare the assessments of two demographically different teachers on a single student. It was determined that the more demographically dissimilar teachers were from their students, the more negative their perceptions and expectations were for the students. In a more recent, but similar study Gershenson, Holt, and Papageorge (2016) found comparable results. These authors concluded that when teachers of different races evaluated the same Black student, White teachers were nine percentage points less likely than their Black colleagues to expect that student to earn a college degree. This gap was more pronounced for Black male students than for Black female students. Gershenson, et. al (2016) also looked at how much teacher expectations matter. They found that White or Black students with similar preparation are more likely to graduate from college if their high school teachers believe that they will.

Teacher expectations are suspected to have a significant impact on student academic success in general and Black male academic success specifically (Gershenson, 2015). Garibaldi (2014) cited a study he conducted in the New Orleans school system that revealed sixty percent of teachers believed Black males were not interested in going to college while ninety percent of the young men indicated that they did aspire to attend college.

In support of the inclusion of the perception of expectation of school counselors, Poynton and Lapan (2017) found a significant correlation between early postsecondary aspirations and career counseling services in high school and later postsecondary aspirations and initial college enrollment. Their results bolster the notions that high school counselors' expectations and high school students' postsecondary aspirations both have a significant bearing upon a student's future academic achievement.

A prime example of the influence of community forces can be seen in the rate of college enrollment by Black students. Smith and Fleming (2006) showed that Black parents realize the importance of education and are very supportive during the search stage of colleges for their children. However, findings from the study suggest Black parents unknowingly contribute to the college enrollment gap where Black female student enrollment is nearly twice that of their male counterparts. The authors of this study show that despite equivalent levels of support for both sons and daughters, African-American parents have higher academic expectations for their daughters. Black parents strongly encourage their daughters to consider four-year colleges and universities whereas the expectations for their sons are more modest. The study explored qualitative data gathered from a sample of African-American parents whose children were enrolled in high schools located in South Central Los Angeles. The consensus was that parents raised their daughters out of fear of dependence while they raised their sons out of fear of survival.

The effects of parental expectations on child academic achievement have been studied extensively (Baker, & Entwisle, 1987; Hill, et. al, 2004; Perrakis, 2008; Piciullo, 2008; Wilder, 2014). These studies are limited by their traditional definition of family. The traditional definition of a family holds that a family consists of a father and mother who have never been

married to anyone else and whose children are their shared biological offspring (Golombok, 2015). This traditional definition goes along with the long held White western pattern that held steady through the 1960s. In modern times families of all racial and ethnic make ups consist of a variety of configurations. More parents are on their second marriages and have children from prior relationships making up their families (Golombok, 2015). In view of these variations in family configurations, it follows that investigations into parental influence on child academic achievement need to be broadened.

Previous studies have exhaustively examined the association of parental and teacher expectation and child academic achievement, but there is a dearth of studies that have taken an expansive view of the various SNM in a typical child's life. There is need to consider the expectations of a broader array of SNM in a child's life, beyond the definition of a traditional family. Those other associations can include close relatives, friends, coaches, and favorite teachers. ELS:2002 data provides a means to consider an expansion of expectations.

Programs and Initiatives

The Campaign for Black Male Achievement

Founded by Shawn Dove, The Campaign for Black Male Achievement is a national network of leaders and professionals who are involved in efforts to improve the outcomes for Black men and boys in the United states. Highschool excellence is the outcome the organization has chosen as the means to measure their impact (Blackmaleachievement.org, n.d.).

White House Initiative on Educational Excellence for African Americans

This executive order was signed by former President Barack Obama on July 26, 2012. The initiative seeks to establish collaborations that result in policies, programs, and practices that contribute to the academic success of African American students. A major component of the

initiative is providing a platform for input from the students and impacted communities

(WHIEEAA, n.d.).

My Brother's Keeper

At the beginning of 2014, then current President of the United States, Barack Obama, launched a White House initiative named the My Brother's Keeper Task Force (Whitehouse.gov, 2014). The purpose of the task force is to partner with allied entities that are committed to empowering Black and Latino boys and young men and removing barriers that keep them from thriving. One of the initiative's primary areas of focus is "to help men of color overcome barriers to education and education opportunity" (Jackson, 2015, para. 2). Furthermore, the program seeks to raise funds for local programs that are committed to education, mentoring, job creation, and job training for men of color. The head of the organization, Joe Echevarria said he wants the program to address opportunity gaps and achievement gaps. Former President Obama shared that some of his post-presidential work would be dedicated to efforts like My Brother's Keeper. He said, "this will remain a mission for me and for (wife) Michelle not just for the rest of my presidency but for the rest of my life" (Jackson, 2015, para. 7).

Descriptions of the program suggest that its proponents do not subscribe to the belief that the problems men of color are facing are of their own creation; rather, they seem to view the barriers that impede these men from thriving as external barriers that need removal.

The Three Doctors

Sampson Davis, MD, Rameck Hunt, MD, and George Jenkins, DMD are three African American male doctors. They grew up in the inner-city of Newark New Jersey which is notorious for its high crime, high drug trafficking, poor schooling, high incarceration, absent fathers, and other high-risk factors for African American males. When the men were younger

they made an improbable pact to support each other and all become doctors. After overcoming the odds and reaching their goal of becoming doctors they remain in the Newark area practicing medicine and dentistry and formed The Three Doctors Foundation (threedoctors.com, n.d.). The purpose of the foundation is to inspire youth to achieve educationally, become positively active in their communities and encourage positive peer and mentoring relationships. The doctors regularly travel the nation giving seminars, have written three books, and produced a documentary which details their stories of becoming successful African American men.

Texas Education Consortium for Male Students of Color

In Texas, a statewide network of fourteen educational entities including two K-12 school districts, eight community colleges and four public universities was formed during the summer of 2014. Housed in the University of Texas at Austin's Division of Diversity and Community Engagement, the consortium plans to increase college participation and improve overall educational opportunities and outcomes for Hispanic and African American males. An article on the University of Texas at Austin's website stated that these efforts are similar to efforts in Georgia and Ohio, and that they will contribute to educational improvements for Latinos and African American men nationally (UT Austin, 2013).

Barack Obama Male Leadership Academy

The Barack Obama Male Leadership Academy began in 2011 in Dallas Texas. Since its inception its almost all Black male graduates have been accepted at over 50 colleges and universities and received more than $2.9 million dollars in scholarships. It was the first school in Texas to receive 3D printers (BOMLA, n.d.).

Chicago's Urban Prep Academy

Chicago's Urban Prep Academy is a charter school with multiple campuses in Chicago. It primarily serves Black males. This school was established in 2009 and boasts eight consecutive years of 100% graduation and acceptance at four-year colleges of all its senior classes (King 2011; Urban Prep Academies, 2017).

Harvard Achievement Gap Initiative

This initiative began in 2006 at Harvard University. It was established to reduce the effects of race and socioeconomic status on academic achievement, and to inform the national movement on achievement gap emphasis through research, publications, and gatherings that are helpful to that end (AGI, 2015).

A growing number of Black fraternities, sororities, and service organizations are doing more to support Black male academic achievement through the creation of scholarships, mentoring programs, and summer and school-year enrichment programs (Girabaldi, 2014).

Gaps in Literature

Most research on the academic achievement gap is limited to making cross-racial comparisons. These studies overlook the larger achievement gaps that exist within racial groups between genders (Carpenter & Ramirez, 2007; Carpenter, Ramirez, & Sevrn, 2006). Much of the literature on the relationship between expectations and academic achievement is limited to parent, teacher, and student expectations. Additional insight can be gained by considering a larger circle of SNM in a student's life. Many of the studies on the academic achievement of Black students are cross-sectional, and qualitative with small sample sizes. This body of research will benefit from large, nationally representative samples that employ a longitudinal component.

Theoretical Framework

Social Capital Theory

For the purposes of this study the concepts within social capital theory help to identify

the academic expectations of key role players in the lives of children as resources or hindrances.

Belanger (2003) explained that, "Social capital refers to resources available to people by

virtue of their membership in a social network and includes nonmaterial (i.e., social) forms of

capital such as trust, norms, and networks that are built through obligations, expectations, and

trustworthiness" (as cited in Robbins, Chatterjee, & Canda, 2011, p. 363). Outside of the home

and in the school setting both boys and girls have the same potential of being influenced by their

close relative, friends, favorite teacher, school counselor, and coach. However, the influence in

the home setting is likely to be different. Given that most Black households are headed by single

mothers, it stands to reason that Black girls may have more social capital in the home setting

than Black boys due to the strong biological and social similarities the girls share with their

primary caregiver. It follows that Black girls are more likely to see Black women exercising

decision making power by leading households, managing resources, pursuing upward mobility,

and asserting social power in general. Thus, Black girls may have an advantage over Black boys

in that they are socialized to utilize their power and gain more social capital than boys.

Intersectionality Theory

Patricia Collins' intersectionality theory was born in the vacuum of oversights by White,

middle-class women early in the feminist movement and feminist theory (Robbins, Chatterjee, &

Canda, 2011). Women of color, including Collins, noticed that being lumped in with White

women resulted in ignoring unique, oppression related differences in race, class, and gender

(Robbins, et al., 2011). Intersectionality theory holds that a person's subordinate-group identities

"operate not as unitary, mutually exclusive entities, but as reciprocally constructing phenomena that in turn shape complex social inequalities" (Collins, 2015, p. 2).

Prior to 1989 when Kimberlé Crenshaw coined the term 'intersectionality' the concepts that make it up had been in use by feminist theorists to describe the concurrent identities of women (Phoenix, 2006). Feminism had long been acknowledging the multiple roles that a woman might have. Patricia Collins (Collins, 1990) posits, intersectionality theory considers the complexity of the interplay amongst race, gender, and class, and that together they constitute a "complex inequality".

The concepts of intersectionality theory are applicable to the study of the academic achievement gap between Black students because such a study takes gender and race into consideration. Furthermore, intersectionality theory has an inherent adaptability that positions it to be applied to the unique experience of Black male students in academic settings.

Intersectionality theory is originally a Black feminist theory that has typically been applied to understanding the oppressive experiences that women of color endure due to their multiple identities that make them members of more than one subordinate group. In describing the travails of Black women in America St. Jean and Feagin (1998) describe gendered racism and gendered discrimination both of which inform the definition of intersectionality theory.

Since its inception the theory has seen a much wider application. Veenstra (2013) compared The Subordinate Male Target Hypothesis (SMTH) to Intersectionality Theory. "The Subordinate Male Target Hypothesis claims that the discrimination experienced by men of subordinate groups…is greater than that experienced by the women of the same subordinate groups" (Veenstra, 2011, p.1). While larger society is patriarchal, and affords many advantages to men, the classroom could be considered a woman dominated microcosm. In school settings

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Black male students don't benefit from the typical advantages that are afforded men in larger society. Women make up 90% of K-12 teachers, and over 70% of them are White (U.S. Department of Education, 2016). Although the White student population in U.S. schools dipped below 50% in 2014 for the first time, the teacher demographic hasn't changed much in the last 15 years (U.S. Department of Education, 2016). These factors combine to make schools places where Black male students have low social capital, especially when it is considered that White teachers have the lowest academic expectations for Black male students compared to all other students (Gershenson, Holt, & Papageorge, 2016).

CHAPTER 3

RESEARCH METHODOLOGY

Purpose

The purpose of this study is to examine and compare the relationship of the academic

expectations of friends, school counselors, favorite teachers, coaches, close relatives, mothers,

and fathers to the academic expectations, and academic achievement of Black students.

Hypotheses

The proposed model (see Appendix A) views the perceived academic expectations of

each social network member as directly affecting the academic expectations of students, and

directly and indirectly affecting the academic achievement of the students they are connected to.

Figure 1.

Hypothesized Model of Expectations and College Attendance
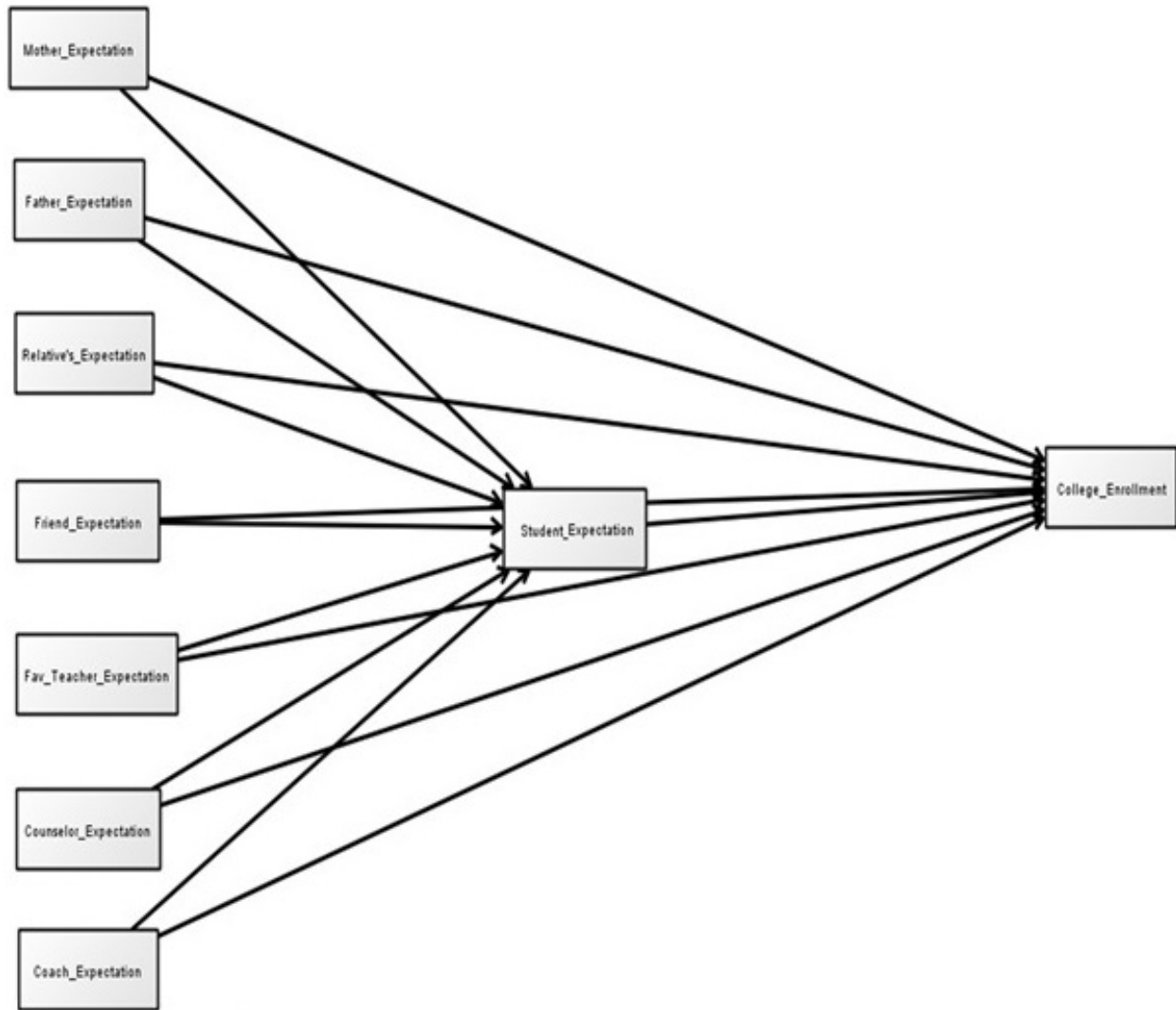
It is hypothesized that:

1. All students' expectations to attend college will increase as total social network expectations increase. (H1)

2. As total social network academic expectations increase the greater the academic achievement of all students will be. (H2)

3. The total social network expectation scores and impact of those scores on female

students' academic expectations will both be greater than those of male students. (H3)

4. Total social network expectation scores will have a greater impact on the academic achievement of female students than male students. (H4)

Research Questions

Several subsequent research questions will be explored:

1. Is there a significant, positive relationship between individual SNMs' expectations and all students' academic expectations?

2. Is there a significant, positive relationship between individual SNM's expectations and all students' academic achievement?

3. Is there a significant, positive relationship between all students' academic expectations and all students' academic achievement?

4. Is there a significant, positive relationship between female student academic expectations and their academic achievement?

5. Is there a significant, positive relationship between male student academic expectations and their academic achievement?

6. Which SNM's expectation has the strongest, positive relationship with the academic expectations of all students?

7. Which SNM's expectation has the strongest, positive relationship with the academic achievement of all students?

8. Which SNM's expectation has the strongest, positive relationship with the academic expectations of male students?

9. Which SNM's expectation has the strongest, positive relationship with the academic expectations of female students?

10. Which SNM's expectation has the strongest, positive relationship with the academic achievement of male students?

11. Which SNM's expectation has the strongest, positive relationship with the academic achievement of female students?

Data Source

This study analyzes portions of the data from the Educational Longitudinal Study of 2002 (ELS:2002). The ELS:2002 was sponsored by the U.S. Department of Education and conducted by the National Center for Education Statistics.

Sampling

The data comes from a nationally representative sample of 15,362 students, their parents, teachers, principals, and librarians, in a national probability sample of 752 public, Catholic, and private schools from all 50 states, when the students were high school sophomores, in 2002 (U.S. Department of Educations, 2016). The aim of the data collection was to capture information related to the experiences of students as they transitioned through high school, their learning, predictors of dropping out, and factors related to them enrolling in and persisting through postsecondary education, and other paths that they took beyond high school and postsecondary education. Extensive demographic data was collected as well.

Follow up surveys were given to students in two-year intervals even if they transferred from one school to another, switched to homeschool, dropped out, or graduated. The follow ups took place in 2004, 2006, and 2012. The second follow up in 2006, was administered by using a web-based instrument for self-administration, computer-assisted telephone interviews, or computer-assisted personal interviews. The 2006 follow up had an 88 percent response rate. This

study focuses on the 2,020 students who identified as African American in the base year. There were 1,016 female students, and 1,004 male students in that sample.

Operationalization of Variables

Student Academic Expectation. Student academic expectation is a common variable in studies on academic achievement. For the purposes of this study, it functions as an independent variable to measure its relationship to academic achievement, and it functions as the first of two outcome variables impacted by the academic expectations of the SNM's in each student's circle of influence (see Appendix A). In the base year survey of the ELS:2002 each student was asked: "As things stand now, how far in school do you think you will get? (MARK ONE RESPONSE) 1) "Less than high school graduation", 2) "High school graduation or GED only", 3) "Attend or complete 2-year college/school", 4) "Attend college, 4-year degree incomplete", 5) "Graduate from college", 6) "Obtain Master's degree or equivalent", 7) "Obtain PhD, MD, or other advanced degree", 8) "Survey component legitimate skip/NA", and 9) "Don't know". This ordinal variable was recategorized into a dichotomous nominal variable that considered selection of options 1 or 2 above as a "No" or "0" to the operationalized question "Did student expect to attend a postsecondary institution after high school?" Selection of any option between 3 and 7 above was considered a "Yes" or "1" to the operationalized question "Did student expect to attend a postsecondary institution after high school?". The answers to this question also included coding for neutral or missing responses such as "I don't know", "missing", "not applicable", and "skipped". If a response could not be coded as yes or no, it was removed from the sample, and not considered in the analysis.

Academic Expectations of Social Network Members (SNM). Each student was asked what the people in their circle thought was most important for them to do after high school. For

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the purposes of this study the students' answers to this question is operationalized as "Academic expectations of SNM". The survey worded the question as such: "What do the following people think is the most important thing for you to do right after high school?" The people listed were: 1) "your mother", 2) "your father", 3) "your friends", 4) "a close relative", 5) "school counselor", 6) "your favorite teacher", and 7) "your coach". [It should be noted that "friends" is non-descript and "favorite teacher" is very specific. Referring to friends in general, could result in some loss of specificity compared to options like "best friend" or "two closest friends". The specific option of "favorite teacher" could offset some of the negativity that might creep in if the option referred to teachers in general.] The options provided for mother, father, friends, and close relative were: 1) "go to college", 2) "get a full-time job", 3) "enter a trade school or an apprenticeship", 4) "enter military service", 5) "get married", 6) "they think I should do what I want". The options provided for coach, counselor, and favorite teacher were: 1) "go to college", 2) "get a full-time job", 3) "enter a trade school or an apprenticeship", 4) "enter military service", 5) "get married", 6) "they think I should do what I want", 7) "they don't care". The seven plus responses above were recoded into a dichotomous nominal variable. If the student stated that their SNM expected them to 1) "Go to college" or 3) "Enter trade school or apprenticeship" this was recoded as a "Yes"/"1" response to the operationalized question "Does your SNM expect you to go to college after high school?" [Note: It was necessary to group the option "Enter trade school or apprenticeship" with "Go to college" because the ELS:2002 study designers included "vocational-technical or trade school" in their definition of postsecondary institution (see Academic Achievement below).] The remaining options, numbers 2, 4, 5, 6, or 7 were all coded as a "No"/"0" response to the operationalized question "Does your SNM expect you to go to college after high school?" It is acknowledged that the responses "they think I

should do what I want" and "they don't care" could be considered neutral or non-descript. Since the aim of this study was to examine the relationship of SNM's academic expectations on the students' academic expectations and achievement, it was decided to only consider responses that were a clear expectation to attend college or not. Thus, those two responses were coded as a lack of expectation to attend college. The answer options for SNM also included coding for neutral or missing responses such as "I don't know", "Missing", "Not applicable", and "Skipped". Any responses that could not be coded as "Yes" or "No" because they were missing, were removed from the sample and not considered in the analysis.

While the students were asked relatively the same question about each SNM's expectations for them after high school, there was an additional, distinct question posed about parents. This parent question is identical in phrasing and response options to the student self-expectation question above, and thus was recoded in the exact same manner.

Total Network Expectation Score. Total network expectation was operationalized by creating a score that adds the expectations of all SNM. If a student indicated that a given SNM expected them to attend college, that SNM's expectation was scored "1". A score of zero was assigned for SNM that did not expect a student to attend college. Thus, the score for total network expectation ranges from 0-7 (see Figure 2). As with the previous variables, nonresponses were excluded from the sample and analysis.

Figure 2.

Total Social Network Expectation Score

Total Social Network Expectation Score

	Social Network Member	College "No"	College "Yes"
1	Mother	0	1
2	Father	0	1
3	Friends	0	1
4	Close relative	0	1
5	Favorite Teacher	0	1
6	Counselor	0	1
7	Coach	0	1
		score range 0-7	

Academic Achievement (College Attendance). Academic achievement is the second

and yet paramount outcome variable in this study. Academic achievement has been measured in

several ways, including GPA, persistence from one grade to another, graduation from high

school, persistence from the first year of postsecondary school to the next, and graduation from

postsecondary school. For the purposes of this study academic achievement will be defined as

enrolling in a postsecondary institution within 2-4 years (2004 to 2006) after sophomore year in

high school. In the proposed model and henceforth in this paper, it is used interchangeably with

"academic success" and "College Attendance" (Figure 1 from page 18). The 2nd follow up

survey of the ELS:2002, in 2006 asked the participants: "Since you [received your high school

diploma/received your high school certificate of attendance/received your GED or other

equivalency/completed high school/left high school], have you attended a college, university,

vocational-technical or trade school where you took courses for credit?" (Please include all

schools, even if you have not completed a course.) 1 = Yes 0 = No". This dichotomous variable

remained as such in this study. A student's answer to this question relates back to the academic

expectations of the SNM in their lives and the academic expectations they indicated in the base

year in a way that is consistent with the purpose of this study. Academic achievement is intentionally being limited to whether the student enrolled in a postsecondary institution after high school because other measures such as "Did you earn a 2-year associates degree?", the key word being *earn*, for instance, goes beyond the scope of this study.

Control variables

Several variables were identified as controls for this study due to the likelihood of them affecting the outcomes of the model. These variables were: 1) total family income, 2) parents level of education, 3) public or private school, and 4) student gender.

Total Family Income. The total family income question was included in the parent questionnaire that was matched to each student. The instructions for the parent questionnaire specified that it was to be answered by the care provider with whom the student lived with most of the time. The question was worded as such: "Which category does your total family income from all sources in 2001 fall into? (If you are not sure about the amount, please estimate.) (MARK ONE RESPONSE). The 13 income ranges included in the ELS:2002 were "none", "$1,000 or less", "$1,001 - $5,000", "$5,001 - $10,000", "$10,001 - $15,000", "$15,001 - $20,000", "$20,001 - $25,000", "$25,001 - $35,000", "$35,001 - $50,000", "$50,001 - $75,000", "$75,001 - $100,000", "$100,001 - $200,000", and "$200,001 or more". The average household income for 2001 was $42,900. This average household income fell within the "$35,001-$50,000" range. Therefore, this study's binary variable for family income was created by grouping the original 13 ranges of income into: "below $35,000", and "above $35,001".

Parents' Education. Parents' level of education was asked on the base year student questionnaire. The question was worded as such: "How far in school did your parents go? Indicate your mother's and father's highest level of education. (MARK ONE RESPONSE IN

EACH COLUMN). The question allowed the option of choosing mother or female guardian and father or male guardian. The education levels were: 1) "did not finish high school", 2) "graduated from high school or equivalent (GED)", 3) "graduated from high school and attended a two-year school (such as a vocational or technical school, a junior college, or a community college), but did not complete a degree", 4) "graduated from a two-year school (such as a vocational or technical school, junior college, or a community college)", 5) "graduated from high school and went to college, but did not complete a four-year degree", 6) "graduated from college", 7) "completed a master's degree or equivalent", 8) "completed a Ph.D., M.D., or other advanced professional degree", 9) "don't know," and 10) "does not apply". Since this question is identical in phrasing and response options to the student self-expectation question above, it was recoded in the exact same manner. This recoding resulted in a dichotomous variable: "Did mother/father attend college, yes or no?" The missing responses to this question were handled in the same manner as the previous similar variables.

High School Type. The type of school the students attended accompanied the base year sample. It was ascertained from the source data for sampling. The choices for school type included "public", "Catholic", or "other private". For the purposes of this study the variable was dichotomized into "public" or "private" by grouping "Catholic" and "other private" into "private".

Student Gender. The designers of the ELS:2002 limited the response options for student gender to male or female. When gender was found to be significant in an all-students analysis a subsequent comparison was done between the logistic binary regression results of each gender analyzed separately.

Data Analysis Strategy

Since the two successive outcome variables: "Did student expect to attend college?" and "Did student attend college?" became binary after recoding, and all the independent variables were also binary, the model met the assumptions for logistic binary regression (Peng, Lee, & Ingersoll, 2002). Logistic binary regression analysis was conducted to determine and compare the significance and direction of the relationships between the predictor variables (total social network expectations, individual SNM expectations, and student expectations) and the outcome variables (student expectations, and student academic achievement). The control variables were also included in the analysis using IBM SPSS Statistics version 24. Gender was also included in the regression analysis to determine if the hypothesis which predicted that gender will affect the relationship between SNM expectations, student expectations, and academic achievement proved true (Norusis, 2004).

CHAPTER 4

STATISTICAL ANALYSIS

IBM SPSS Statistics version 24 uses list-wise deletion for missing cases by default. This

means that a case is "omitted from an analysis because it contains one or more missing values in

the variables being analyzed" (IBM Support, 2016, para. 2). The original ELS:2002 sample

included 2,020 Black students. After list-wise deletion was performed on the data set,

specifically on the college attendance variable, the sample size was reduced to 411 students.

Other iterations of the sample were considered by creating dummy variables and imputations for

the missing responses, but it was concluded that the 411 cases that remained after list-wise

deletion provided the most accurate depiction of the phenomenon of college attendance.

Descriptive statistics and binary logistic regression results are provided in this chapter.

Descriptive Statistics for Total Network Expectation Score

Table 1.1

Descriptive for statistics for Total Network Expectation Score

Total Network Expectation Score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	.2	.2	.2
	1	3	.7	.7	1.0
	2	18	4.4	4.4	5.4
	3	6	1.5	1.5	6.8
	4	14	3.4	3.4	10.2
	5	42	10.2	10.2	20.4
	6	70	17.0	17.0	37.5
	7	257	62.5	62.5	100.0
	Total	411	100.0	100.0	

62.5% of the cases had a total network expectation score of 7, meaning that 257 of
411 cases had all 7 members of their social network expect them to attend college.

The most frequently observed category of total network expectation score was "7" (*n* =

257, 62.5%). Frequencies and percentages are presented in Table 1.1.

Table 1.2

Descriptive for statistics for Total Network Expectation Score for Male Students

Total Network Expectation Score for Male Students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	.5	.5	.5
	1	3	1.5	1.5	2.0
	2	8	4.1	4.1	6.1
	3	1	.5	.5	6.6
	4	11	5.6	5.6	12.2
	5	23	11.7	11.7	24.0
	6	32	16.3	16.3	40.3
	7	117	59.7	59.7	100.0
	Total	196	100.0	100.0	

The most frequently observed category of total network expectation score for male

students was "7" ($n = 117$, 59.7%). Frequencies and percentages are presented in Table 1.2.

Table 1.3

Descriptive for statistics for Total Network Expectation Score for Female Students

Total Network Score for Female Students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	10	4.7	4.7	4.7
	3	5	2.3	2.3	7.0
	4	3	1.4	1.4	8.4
	5	19	8.8	8.8	17.2
	6	38	17.7	17.7	34.9
	7	140	65.1	65.1	100.0
	Total	215	100.0	100.0	

The most frequently observed category of total network expectation score for female

students was "7" ($n = 140$, 65.1%). Frequencies and percentages are presented in Table 1.3.

Descriptive Statistics for Individual Social Network Members' Expectations

Frequencies and percentages were calculated for Individual Social Network Members'
academic expectations for all students, male students, and female students.

Frequencies and Percentages. For all students the most frequently observed category of
Mothers' Expectations was "Yes" ($n = 382$, 93%). The most frequently observed category of
Fathers' Expectations was "Yes" ($n = 375$, 91%). The most frequently observed category of
Close Relative's Expectations was "Yes" ($n = 365$, 89%). The most frequently observed category
of Friends' Expectations was "Yes" ($n = 316$, 77%). The most frequently observed category of
Favorite Teachers' Expectations was "Yes" ($n = 372$, 91%). The most frequently observed
category of Counselors' Expectations was "Yes" ($n = 369$, 90%). The most frequently observed
category of Coaches' Expectations was "Yes" ($n = 363$, 88%). For male students the most
frequently observed category of Mothers' Expectations was "Yes" ($n = 178$, 91%). The most
frequently observed category of Fathers' Expectations was "Yes" ($n= 176$, 90%). The most
frequently observed category of Friends' Expectations was "Yes" ($n = 148$, 76%). The most
frequently observed category of Close Relatives' Expectations was "Yes" ($n = 167$, 85%). The
most frequently observed category of Counselors' Expectations was "Yes" ($n = 175$, 89%). The
most frequently observed category of Favorite Teachers' Expectations was "Yes" ($n =$
177, 90%). The most frequently observed category of Coaches' Expectations was "Yes" ($n =$
171, 87%). For female students the most frequently observed category of Mothers' Expectations
was "Yes" ($n = 204$, 95%). The most frequently observed category of Fathers' Expectations was
"Yes" ($n= 199$, 93%). The most frequently observed category of Friends' Expectations was
"Yes" ($n = 168$, 78%). The most frequently observed category of Close Relatives' Expectations

was "Yes" ($n = 198$, 92%). The most frequently observed category of Counselors' Expectations was "Yes" ($n = 194$, 90%). The most frequently observed category of Favorite Teachers' Expectations was "Yes" ($n = 195$, 91%). The most frequently observed category of Coaches' Expectations was "Yes" ($n = 192$, 89%). Frequencies and percentages are presented in Tables 2.1, and 2.2.

Table 2.1

Descriptive Statistics for Social Network Members' Expectations for College Attendance

SNM Expected College Attendance?		Frequency	Percent
Mother	No	29	7.1
	Yes	382	92.9
Father	No	36	8.8
	Yes	375	91.2
Friends	No	95	23.1
	Yes	316	76.9
Close Relative	No	46	11.2
	Yes	365	88.8
Counselor	No	42	10.2
	Yes	369	89.8
Favorite Teacher	No	39	9.5
	Yes	372	90.5
Coach	No	48	11.68
	Yes	363	88.3

Note. Due to rounding errors, percentages may not equal 100%.

Table 2.2

Descriptive Statistics for Social Network Members' Expectations for College Attendance
Comparing Male & Female Students

Comparison of SNMs' Expectations for College Attendance by Gender

SNM	Expectation	Male Student Frequency	Male Student Percent	Female Student Frequency	Female Student Percent
Mother	No	11	5.12	18	9.18
	Yes	204	94.88	178	90.82
Father	No	16	7.44	20	10.20
	Yes	199	92.56	176	89.80
Friends	No	47	21.86	48	24.49
	Yes	168	78.14	148	75.51
Close Relative	No	17	7.91	29	14.80
	Yes	198	92.09	167	85.20
Counselor	No	21	9.77	21	10.71
	Yes	194	90.23	175	89.29
Favorite Teacher	No	20	9.30	19	9.69
	Yes	195	90.70	177	90.31
Coach	No	23	10.70	25	12.76
	Yes	192	89.30	171	87.24

Note. Due to rounding errors, percentages may not equal 100%.

Descriptive Statistics for Students' Expectations

Frequencies and percentages were calculated for All Student Expectations, Male Student

Expectations, Female Student Expectations.

Frequencies and Percentages. The most frequently observed category of All Student

Expectations was "yes" ($n = 362$, 88%). The most frequently observed category of Males Student

Expectations was "yes" (n=166, 84.7%). The most frequently observed category of Female

Student Expectations was "yes" (n=215, 91.2%). Frequencies and percentages are presented

in Tables 3.1, 3.2, and 3.3.

Table 3.1

Descriptive statistics for All Student Expectations

All Student College Expectations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	19	4.6	5.0	5.0
	Yes	362	88.1	95.0	100.0
	Total	381	92.7	100.0	
Missing		30	7.3		
Total		411	100.0		

Table 3.2

Descriptive statistics for Male Students' Expectations

Male Student Expectations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Missing	15	7.7	7.7	7.7
	No	15	7.7	7.7	15.3
	Yes	166	84.7	84.7	100.0
	Total	196	100.0	100.0	

Table 3.3

Descriptive statistics for Female Students' Expectations

Female Student Expectations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Missing	15	7.0	7.0	7.0
	Expect College "No"	4	1.9	1.9	8.8
	Expect College "Yes"	196	91.2	91.2	100.0
	Total	215	100.0	100.0	

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Descriptive Statistics for Academic Achievement

Frequencies and percentages were calculated for All Student College Attendance, Male Student College Attendance, and Female Student College Attendance.

Frequencies and Percentages. The most frequently observed category of all student academic achievement was "attended college" ($n = 312$, 76%). The most frequently observed category of academic achievement for male students was "attended college" (n=140, 71%). The most frequently observed category of college attendance for female students was "attended college" (n=172, 80%). Frequencies and percentages are presented in Tables 4.1, 4.2, and 4.3.

Table 4.1

Descriptive statistics of Academic Achievement for all students

All Student College Attendance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Did not attend	99	24.1	24.1	24.1
	Attended college	312	75.9	75.9	100.0
	Total	411	100.0	100.0	

Table 4.2

Descriptive statistics for Academic Achievement for male students

Male Student College Attendance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Did not attend	56	28.6	28.6	28.6
	Attended college	140	71.4	71.4	100.0
	Total	196	100.0	100.0	

Table 4.3

Descriptive statistics of Academic Achievement for female students

Female Student College Attendance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Did not attend	43	20.0	20.0	20.0
	Attended college	172	80.0	80.0	100.0
	Total	215	100.0	100.0	

Descriptive Statistics for Control Variables

Descriptive statistics are provided below for the four control variables: family income, parent education, type of high school, and gender.

Table 5.1

Descriptive statistics for Family Income

The most frequently observed category of Income was "above \$35,001" ($n = 214$, 52%). Frequencies and percentages are presented in Table 5.1.

Total Family Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< \$35,000	197	47.9	47.9	47.9
	> \$35,001	214	52.1	52.1	100.0
	Total	411	100.0	100.0	

Note. Due to rounding errors, percentages may not equal 100%.

Table 5.2

Descriptive statistics for Mothers' Education

The most frequently observed category of Mothers' Education was "attended college"

($n = 256$, 62%). Frequencies and percentages are presented in Table 5.2.

Mothers' Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Did not attend	155	37.7	37.7	37.7
	Attended college	256	62.3	62.3	100.0
	Total	411	100.0	100.0	

Note. Due to rounding errors, percentages may not equal 100%.

Table 5.3

Descriptive statistics for Fathers' Education

The most frequently observed category of Father's Education was "attended college" ($n = 228$, 55.5%). Frequencies and percentages are presented in Table 5.3.

Fathers' Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Did not attend	183	44.5	44.5	44.5
	Attended college	228	55.5	55.5	100.0
	Total	411	100.0	100.0	

Note. Due to rounding errors, percentages may not equal 100%.

Table 5.4

Descriptive statistics for High School type

The most frequently observed category of high school type was "public" (*n* =

346, 84.2%). Frequencies and percentages are presented in Table 5.4.

High School Type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Public	346	84.2	84.2	84.2
	Private	65	15.8	15.8	100.0
	Total	411	100.0	100.0	

Note. Due to rounding errors, percentages may not equal 100%.

Type of high school was excluded as a control variable since the reduced sample size

resulted in over 84% of the students being from public schools.

Table 5.5

Descriptive statistics for Student Gender

The most frequently observed category of student gender was "female student" (*n* =

215, 52.3%). Frequencies and percentages are presented in Table 5.5.

Student Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	196	47.7	47.7	47.7
	Female	215	52.3	52.3	100.0
	Total	411	100.0	100.0	

Note. Due to rounding errors, percentages may not equal 100%.

Total Network Expectation Score Predicting All Students' Expectations

      Intellectus Statistics (2017) was used to conduct all binary logistic regressions. A binary logistic regression was conducted to examine whether Total Network Score had a significant effect on the odds of observing All Students' Expectations = "Yes". The reference category was All Students' Expectations = "No".

Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was examined.

Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model have VIFs less than 10. Table 6.1 presents the VIF for each predictor in the model.

Table 6.1

Variance Inflation Factors for Total Network Score Predicting on All Students' Expectations

Variable	VIF
Total Network Score	1.02
Mothers' Education	1.22
Fathers' Education	1.08
Total Family Income	1.21
Students' Gender	1.00

Parents' Education, Family Income, and Student Gender were control variables

Results. The overall model was significant, $\chi^2(5) = 16.73$, $p = .005$, suggesting that Total Social Network Score had a significant effect on the odds of observing Students' Expectations = "Yes". McFadden's R-squared was calculated to examine the model fit, where values greater than .2 are indicative of models with excellent fit (Louviere, Hensher, & Swait, 2000).

The McFadden R-squared value calculated for this model was 0.11. The regression coefficient for Total Network Score was significant, $B = 0.31$, OR = 1.37, $p = .025$, indicating that for a one unit increase in Total Network Score, the odds of observing All Students' Expectations = "Yes" would increase by approximately 37%. The regression coefficient for Mothers' Education was not significant, $B = 0.76$, OR = 2.15, $p = .156$, indicating that Mothers' Education, did not have a significant effect on the odds of observing the category of Students' Expectation = "Yes". The regression coefficient for Fathers' Expectations was not significant, $B = 0.48$, OR = 1.61, $p = .351$, indicating that Fathers' Expectations, did not have a significant effect on the odds of observing Students' Expectation = "Yes". The regression coefficient for Total Family Income was not significant, $B = -0.19$, OR = 0.82, $p = .717$, indicating that Total Family Income, did not have a significant effect on the odds of observing the Students' Expectations = "Yes". The regression coefficient for Students' Gender was significant, $B = 1.47$, OR = 4.35, $p = .011$, indicating that for a one unit increase in Students' Gender, the odds of observing Students' Expectations = "Yes" would increase by approximately 335%. Tables 6.2 summarizes the results of the regression model.

Table 6.2

Logistic Regression Results with Total Network Score Predicting All Students' Expectations

Variable	B	SE	χ^2	p	OR
(Intercept)	0.03	0.90	0.00	.976	
Total Network Score	0.31	0.14	5.05	.025	1.37
Mothers' Education	0.76	0.54	2.01	.156	2.15
Fathers' Education	0.48	0.51	0.87	.351	1.61
Total Family Income	-0.19	0.53	0.13	.717	0.82
Students' Gender	1.47	0.58	6.45	.011	4.35

Note. $\chi^2(5) = 16.73$, $p = .005$, McFadden $R^2 = 0.11$. Parents' Education, Family Income, and Students' Gender were control variables.

H1

This hypothesis proposed that all students' expectations to attend college would increase as total social network academic expectations increased. The relationship is both positive and significant at the .05 level. The table above illustrates the association.

A binary logistic regression was conducted to examine whether Total Network Score had a significant effect on the odds of observing Male Students' Expectations = "Yes". The reference category was Male Students' Expectations = "No".

Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was examined.

Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model have VIFs less than 10. Table 6.3 presents the VIF for each predictor in the model.

Table 6.3

Variable Inflation Factors for Total Network Expectation Score Predicting Male Students' Expectations

Variable	VIF
Total Network Score	1.03
Mothers' Education	1.24
Fathers' Education	1.11
Total Family Income	1.22

Parents' Education, and Family Income were controls.

Results. The overall model was not significant, $\chi^2(4) = 8.18$, $p = .085$, suggesting that Total Network Score did not have a significant effect on the odds of observing Male Students'

Expectations "Yes". McFadden's R-squared was calculated to examine the model fit, where values greater than .2 are indicative of models with excellent fit (Louviere, Hensher, & Swait, 2000). The McFadden R-squared value calculated for this model was 0.08. Since the overall model was not significant, the individual predictors were not examined further. Table 6.4 summarizes the results of the regression model.

Table 6.4

Binary Logistic Regression for Total Network Expectation Score Predicting Male Students'
Expectations

Variable	B	SE	χ2	p	OR
(Intercept)	-0.44	1.00	0.19	.659	
Total Network Score	0.40	0.16	6.56	.010	1.49
Mothers' Education	0.41	0.62	0.44	.506	1.51
Fathers' Education	0.68	0.59	1.30	.253	1.97
Total Family Income	-0.06	0.61	0.01	.918	0.94

Note. $\chi^2(4) = 8.18$, $p = .085$, McFadden $R^2 = 0.08$. Parents' Education, and Family Income were controls.

A binary logistic regression was conducted to examine if Total Network Expectation Score had a significant effect on the odds of observing Female Students' Expectations. The reference category for Students' Expectations = "No".

Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was examined.

Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model have VIFs less than 10. Table 6.5 presents the VIF for each predictor in the model.

Table 6.5

Variance Inflation Factors for Total Network Expectation Score Predicting Female Students'
Expectations

Variable	VIF
Total Network Score	1.02
Mothers' Education	1.11
Fathers' Education	1.08
Total Family Income	1.12

Parents' Education, and Family Income were controls.

Results. The overall model was not significant, $\chi^2(4) = 2.73$, $p = .603$, suggesting that Total

Network Score did not have a significant effect on the odds of observing Female Students'

Expectations = "Yes". McFadden's R-squared was calculated to examine the model fit, where

values greater than .2 are indicative of models with excellent fit (Louviere, Hensher, & Swait,

2000). The McFadden R-squared value calculated for this model was 0.07. Since the overall

model was not significant, the individual predictors were not examined further. Table 6.6

summarizes the results of the regression model.

Table 6.6

Logistic Regression Results with Total Network Expectation Score Predicting Female Students'
Expectations

Variable	B	SE	χ^2	p	OR
(Intercept)	3.38	2.55	1.76	.185	
Total Network Score	-0.02	0.38	0.00	.955	0.98
Mothers' Education	1.83	1.23	2.24	.134	6.26
Fathers' Education	-0.02	1.06	0.00	.984	0.98
Total Family Income	-0.30	1.08	0.08	.782	0.74

Note. $\chi^2(4) = 2.73$, $p = .603$, McFadden $R^2 = 0.07$. Parents' Education, and
Family Income were controls.

H3

   This hypothesis proposed that the total social network scores and impact of network scores on female students' academic expectations would be greater than those of male students. We look to the descriptive statistics to assess the first part of this hypothesis. Tables 1.2 & 1.3 on page 29, offer a comparison of the total social network expectation scores for male and female students. Seventy-six percent of male students had total social network scores of 6-7, while 83% of female students had total social network scores of 6-7. The scores ranged from 0-7. The first assumption of this hypothesis is correct. Regarding the second part of this hypothesis, the overall models for total social network expectation scores for male and female students were not significant. Therefore, the individual predictors were not examined further. Tables 6.4 and 6.6 above illustrate the models that lacked significance.

Total Network Expectation Score Predicting College Attendance

   A binary logistic regression was conducted to examine whether Total Social Network Expectation Score had a significant effect on the odds of observing All Students' College Attendance. The reference category was All Students' College Attendance = "No".
Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was examined.
Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model have VIFs less than 10. Table 7.1 presents the VIF for each predictor in the model.

Table 7.1

Variance Inflation Factors for Total Social Network Expectation Score Predicting All Students'
College Attendance

Variable	VIF
Total Network Score	1.01
Mothers' Education	1.15
Fathers' Education	1.08
Total Family Income	1.16
Student Gender	1.00

Parents' Education, Family Income, and Students'
Gender were control variables.

Results. The overall model was significant, $\chi^2(5) = 28.00$, $p < .001$, suggesting that Total Social

Network Score and the control variables had a significant effect on the odds of observing All

Students' College Attendance = "Yes". McFadden's R-squared was calculated to examine the

model fit, where values greater than .2 are indicative of models with excellent fit (Louviere,

Hensher, & Swait, 2000). The McFadden R-squared value calculated for this model was 0.06.

The regression coefficient for Mothers' Education was not significant, $B = 0.49$, OR $= 1.63$, $p =$

.057, indicating that Mothers' Education, did not have a significant effect on the odds of

observing College Attendance. The regression coefficient for Fathers' Education was

significant, $B = 0.57$, OR $= 1.78$, $p = .021$, indicating that for a one unit increase in Fathers'

Education, the odds of observing College Attendance would increase by approximately 78%.

The regression coefficient for Total Family Income was not significant, $B = 0.46$, OR$= 1.59$, $p =$

.076, indicating that Total Family Income, did not have a significant effect on the odds of

observing College Attendance. The regression coefficient for Student Gender was not

significant, $B = 0.44$, OR $= 1.55$, $p = .069$, indicating that Student Gender, did not have a

significant effect on the odds of observing College Attendance. The regression coefficient for

Total Social Network Expectation Score was not significant, $B = 0.11$, OR $= 1.12$, $p = .161$,

indicating that this variable, did not have a significant effect on the odds of observing student

College Attendance. Table 7.2 summarizes the results of the regression model.

Table 7.2

Logistic Regression Results with Total Network Score Predicting All Students' College Attendance

Variable	B	SE	χ^2	p	OR
(Intercept)	-0.54	0.53	1.05	.306	
Total Network Score	0.11	0.08	1.96	.161	1.12
Mothers' Education	0.49	0.26	3.62	.057	1.63
Fathers' Education	0.57	0.25	5.33	.021	1.78
Total Family Income	0.46	0.26	3.15	.076	1.59
Student Gender	0.44	0.24	3.30	.069	1.55

Note. $\chi^2(5) = 28.00$, $p < .001$, McFadden $R^2 = 0.06$. Parents' Education, Family Income, and Students' Gender were control variables.

H2

This hypothesis proposed that the academic achievement of all students would increase as

total social network academic expectations increased. There was not statistical significance

found in the relationship between total social network expectation score and all students'

academic achievement. The table above illustrates the lack of relationship.

A binary logistic regression was conducted to examine if Total Network Score had a

significant effect on the odds of observing Male Students' College Attendance = "Yes". The

reference category for Male Students' College Attendance = "No".

Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was

examined.

Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the

presence of multicollinearity between predictors. High VIFs indicate increased effects

of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10

should be considered the maximum upper limit (Menard, 2009). All predictors in the regression

model have VIFs less than 10. Table 7.3 presents the VIF for each predictor in the model.

Table 7.3

Variable Inflation Factors for Total Network Expectation Score Predicting Male Students'
College Attendance

Variable	VIF
Total Network Score	1.01
Mothers' Education	1.21
Fathers' Education	1.08
Total Family Income	1.18

Parents' Education, Family Income, and Students' Gender
were control variables.

Results. The overall model was significant, $\chi^2(4) = 17.36$, $p = .002$, suggesting that, with the

control variables, Total Network Score had a significant effect on the odds of observing Male

Students' College Attendance = "Yes". McFadden's R-squared was calculated to examine the

model fit, where values greater than .2 are indicative of models with excellent fit (Louviere,

Hensher, & Swait, 2000). The McFadden R-squared value calculated for this model was 0.07.

The regression coefficient for Mothers' Education was not significant, $B = 0.20$, OR = 1.22, $p =$

.584, indicating that Mothers' Education, did not have a significant effect on the odds of

observing College Attendance = "Yes". The regression coefficient for Fathers' Education was

significant, $B = 0.76$, OR = 2.15, $p = .027$, indicating that for a one unit increase in Fathers'

Education, the odds of observing the Male Students' College Attendance = "Yes" would increase

by approximately 115%. The regression coefficient for Total Family Income was significant, $B =$

0.80, OR = 2.22, $p = .031$, indicating that for a one unit increase in Total Family Income, the

odds of observing Male Students' College Attendance = "Yes" would increase by approximately

122%. The regression coefficient for Total Network Score was not significant, $B = 0.11$, OR =

1.11, p = .328, indicating that Total Network Score, did not have a significant effect on the odds

of observing Male Students' College Attendance = "Yes". Table 7.4 summarizes the results of

the regression model.

Table 7.4

Binary Logistic Regression for Total Network Expectation Score Predicting Male Students'
College Attendance

Variable	B	SE	χ^2	p	OR
(Intercept)	-0.57	0.70	0.66	.416	
Total Network Score	0.11	0.11	0.96	.328	1.11
Mothers' Education	0.20	0.36	0.30	.584	1.22
Fathers' Education	0.76	0.35	4.87	.027	2.15
Total Family Income	0.80	0.37	4.68	.031	2.22

Note. $\chi^2(4)$ = 17.36, p = .002, McFadden R^2 = 0.07. Parents' Education and Family
Income were control variables.

A binary logistic regression was conducted to examine if Total Network Score had a

significant effect on the odds of observing the Female Students' College Attendance = "Yes".

The reference category was Female Students' College Attendance = "No".

Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was

examined.

Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the

presence of multicollinearity between predictors. High VIFs indicate increased effects

of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10

should be considered the maximum upper limit (Menard, 2009). All predictors in the regression

model have VIFs less than 10. Table 7.5 presents the VIF for each predictor in the model.

Table 7.5

Variable Inflation Factors for Total Network Expectation Score Predicting Female Students'
College Attendance

Variable	VIF
Network Score	1.00
Mothers' Education	1.11
Fathers' Education	1.07
Total Family Income	1.16

Parents' Education, Family Income, and Students'
Gender were control variables.

Results. The overall model was not significant, $\chi^2(4) = 9.34$, $p = .053$, suggesting that Total

Network Score did not have a significant effect on the odds of observing Female Students'

College Attendance. McFadden's R-squared was calculated to examine the model fit, where

values greater than .2 are indicative of models with excellent fit (Louviere, Hensher, & Swait,

2000). The McFadden R-squared value calculated for this model was 0.04. Since the overall

model was not significant, the individual predictors were not examined further. Table 7.6

summarizes the results of the regression model.

Table 7.6

Binary Logistic Regression for Total Network Expectation Score Predicting Female Students'
College Attendance

Variable	B	SE	χ^2	p	OR
(Intercept)	-0.21	0.80	0.07	.796	
Total Network Score	0.14	0.12	1.39	.238	1.15
Mothers' Education	0.74	0.37	4.10	.043	2.10
Fathers' Education	0.41	0.36	1.30	.254	1.51
Total Family Income	0.13	0.38	0.12	.724	1.14

Note. $\chi^2(4) = 9.34$, $p = .053$, McFadden $R^2 = 0.04$. Parents' Education and Family
Income were control variables.

H4

This hypothesis proposed that total social network expectation scores would have a greater impact on the academic achievement of female students than male students. Neither the overall model for female students or male students was significant. This suggests that Total Social Network Expectation Scores did not have a significant effect on college attendance for either male or female students. Since the overall models were not significant the individual predictors were not examined further.

Individual SNM's Expectations Predicting All Students' Expectations

Binary logistic regressions were conducted to examine whether Individual Social Network Members' Expectations had a significant effect on the odds of observing "Yes" for All Students' Expectations to attend college. The control variables were also included in the regression. The reference category was All Students' Expectations = "No".

Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was examined.

Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model have VIFs less than 10. Table 8.1 presents the VIF for each predictor in the model.

Table 8.1

Variance Inflation Factors for Social Network Members' Expectations Predicting All Students'
Expectations

Variable	VIF
Mother Expectations	1.54
Father Expectations	1.66
Friends Expectations	1.76
Close Relative Expectations	2.00
Counselor Expectations	1.89
Favorite Teacher Expectations	1.99
Coach Expectations	2.17
Mother Education	1.31
Father Education	1.31
Total Family Income	1.28
Student Gender	1.03

Note. Control Variables included Parents' Education, Family
Income, and Student Gender.

Results. The overall model was significant, $\chi^2(11) = 26.60$, $p = .005$, suggesting that, as whole

all, seven social network members' expectations, with controls accounted for, had a significant

effect on the odds of observing All Students' Expectations = "Yes". McFadden's R-squared was

calculated to examine the model fit, where values greater than .2 are indicative of models with

excellent fit (Louviere, Hensher, & Swait, 2000). The McFadden R-squared value calculated for

this model was 0.18. The regression coefficient for Mother Expectations was not significant, $B =$

1.17, OR = 3.23, $p = .112$, indicating that Mother Expectations, did not have a significant effect

on the odds of observing All Students' Expectations = "Yes". The regression coefficient for

Fathers' Expectations was not significant, $B = 0.89$, OR = 2.44, $p = .237$, indicating that Fathers'

Expectations, did not have a significant effect on the odds of observing All Students'

Expectations= "Yes". The regression coefficient for Friends' Expectations was not

significant, $B = -0.64$, OR = 0.53, $p = .409$, indicating that Friends' Expectations, did not have a

significant effect on the odds of observing Student Expectations= "Yes". The regression

coefficient for Close Relatives' Expectations was not significant, $B = 1.38$, OR = 3.96, $p = .104$,

indicating that Close Relatives' Expectations, did not have a significant effect on the odds of

observing All Students' Expectations= "Yes". The regression coefficient for Counselors'

Expectations was not significant, $B = -0.59$, OR = 0.55, $p = .602$, indicating that Counselors'

Expectations, did not have a significant effect on the odds of observing Students' Expectations=

"Yes". The regression coefficient for Teachers' Expectations was not significant, $B = -$

1.34, OR = 0.26, $p = .248$, indicating that Teachers' Expectations, did not have a significant

effect on the odds of observing All Student Expectations= "Yes". The regression coefficient for

Coaches' Expectations was significant, $B = 1.74$, OR = 5.69, $p = .045$, indicating that for a one

unit increase in Coaches' Expectations, the odds of observing Students' Expectations= "Yes"

would increase by approximately 469%.

Regression results for control variables predicting Students' Expectations

The regression coefficient for Mothers' Education was not significant, $B = 0.70$, OR =

2.01, $p = .226$, indicating that Mothers' Education, did not have a significant effect on the odds

of observing Student Expectations= "Yes". The regression coefficient for Fathers' Education was

not significant, $B = 0.22$, OR = 1.25, $p = .701$, indicating that Fathers' Education, did not have a

significant effect on the odds of observing Student Expectations= "Yes". The regression

coefficient for Total Family Income was not significant, $B = -0.19$, OR = 0.82, $p = .733$,

indicating that Total Family Income, did not have a significant effect on the odds of observing

Students' Expectations= "Yes". The regression coefficient for Student Gender was

significant, $B = 1.33$, OR = 3.77, $p = .026$, indicating for female students, the odds of expecting

to attend college are 277% greater than for male students. This outcome warrants a gender

comparison of the effect of individual SNM's expectations. Table 8.2 summarizes the results of

the regression model.

Table 8.2

Logistic Regression Results with Individual SNM Expectations Predicting All Student Expectations

Variable	B	SE	χ^2	p	OR
(Intercept)	-0.02	1.08	0.00	.983	
Mother Expects College	1.17	0.74	2.52	.112	3.23
Father Expects College	0.89	0.75	1.40	.237	2.44
Friends Expect College	-0.64	0.77	0.68	.409	0.53
Close Relative Expects College	1.38	0.85	2.65	.104	3.96
Counselor Expects College	-0.59	1.13	0.27	.602	0.55
Favorite Teacher Expects College	-1.34	1.16	1.34	.248	0.26
Coach Expects College	1.74	0.87	4.00	.045	5.69
Mother Attended College	0.70	0.58	1.47	.226	2.01
Father Attended College	0.22	0.57	0.15	.701	1.25
Total Family Income	-0.19	0.57	0.12	.733	0.82
Student Gender	1.33	0.60	4.95	.026	3.77

Note. $\chi^2(11) = 26.60$, p = .005, McFadden $R^2 = 0.18$. Parents' education, Family Income, and Student Gender were control variables.

A binary logistic regression was conducted to examine whether Individual Social

Network Members' expectations had a significant effect on the odds of observing Male Students'

Expectations to attend college. The reference category was Male Students' Expectations for

college = "No".

Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was

examined.

Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the

presence of multicollinearity between predictors. High VIFs indicate increased effects

of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10

should be considered the maximum upper limit (Menard, 2009). All predictors in the regression

model have VIFs less than 10. Table 8.3 presents the VIF for each predictor in the model.

Table 8.3

Variable Inflation Factors for Individual Social Network Members' Expectations Predicting Male Students' Expectations

Variable	VIF
Mothers' Expectations	1.86
Fathers' Expectations	2.00
Friends' Expectations	1.74
Close Relatives' Expectations	2.08
Counselors' Expectations	1.95
Favorite Teachers' Expectations	2.22
Coaches' Expectations	2.38
Mothers' College Attendance	1.44
Fathers' College Attendance	1.41
Total Family Income	1.37

Parents' education, Family Income were control variables.

Results. The overall model was not significant, $\chi^2(10) = 15.99$, $p = .100$, suggesting that

Individual Social Network Members' expectations did not have a significant effect on the odds

of observing Male Students' Expectations to attend college being "Yes". McFadden's R-

squared was calculated to examine the model fit, where values greater than .2 are indicative of

models with excellent fit (Louviere, Hensher, & Swait, 2000). The McFadden R-squared value

calculated for this model was 0.15. Since the overall model was not significant, the individual

predictors were not examined further. Table 8.4 summarizes the results of the regression model.

Table 8.4

Binary Logistic Regression for Individual Social Network Members' Expectations Predicting Male Students' Expectations

Variable	B	SE	χ^2	p	OR
(Intercept)	-0.22	1.20	0.03	.853	
Mothers' Expectations	2.21	0.89	6.21	.013	9.12
Fathers' Expectations	-0.38	1.05	0.13	.719	0.69
Friends' Expectations	-0.05	0.83	0.00	.952	0.95
Close Relatives' Expectations	1.31	0.94	1.94	.164	3.70
Counselors' Expectations	-0.39	1.22	0.10	.747	0.67
Favorite Teachers' Expectations	-1.03	1.31	0.63	.429	0.36
Coaches' Expectations	1.23	1.06	1.35	.245	3.41
Mothers' Education	0.19	0.69	0.08	.783	1.21
Fathers' Education	0.70	0.70	1.00	.318	2.00
Total Family Income	-0.10	0.68	0.02	.881	0.90

Note. $\chi^2(10) = 15.99$, $p = .100$, McFadden $R^2 = 0.15$. Parents' education, Family Income were control variables.

Individual Social Network Members' Expectations Predicting Female Students' Expectations

A binary logistic regression for individual social network members' expectations predicting female student expectations was not necessary due to the nature of the outcome variable. That is, female students' expectations to attend college rendered an outcome as follows: of 215 cases, 15 were missing a response, 196 indicated "Yes" they expected to attend college, and a mere 4 indicated that they did not expect to attend college. An occurrence of only 4 female students indicating that they don't expect to attend college leaves an overwhelming majority (91%) expecting to attend college regardless of SNM's expectations, thus making a regression unnecessary. According to IBM SPSS Statistics (2017) had 10 or more students indicated they didn't expect to attend college, a regression could provide meaningful insight.

Individual SNM's Expectations Predicting All Students' College Attendance

A binary logistic regression was conducted to examine whether Individual Social

Network Members' expectations had significant effects on the odds of observing College

Attendance. The reference category was College Attendance = "No".

Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was

examined.

Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the

presence of multicollinearity between predictors. High VIFs indicate increased effects

of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10

should be considered the maximum upper limit (Menard, 2009). All predictors in the regression

model have VIFs less than 10. Table 9.1 presents the VIF for each predictor in the model.

Table 9.1

Variance Inflation Factors for Individual Social Network Members' Expectations Predicting
College Attendance

Variable	VIF
Mothers' Expectations	1.49
Fathers' Expectations	1.51
Friends' Expectations	1.50
Close Relatives' Expectations	1.85
Counselors' Expectations	2.55
Favorite Teachers' Expectations	3.58
Coaches' Expectations	2.62
Mothers' Education	1.19
Fathers' Education	1.13
Total Family Income	1.18
Students' Gender	1.02

Parents' Education, Family Income and Student
Gender were control variables.

Results. The overall model was significant, $\chi^2(11) = 38.80$, $p < .001$, suggesting that, collectively the seven social network members' expectations had a significant effect on the odds of observing College Attendance. McFadden's R-squared was calculated to examine the model fit, where values greater than .2 are indicative of models with excellent fit (Louviere, Hensher, & Swait, 2000). The McFadden R-squared value calculated for this model was 0.09. The regression coefficient for Mothers' Expectations was significant, $B = 1.25$, OR $= 3.48$, $p = .013$, indicating that for a one unit increase in Mothers' Expectations, the odds of observing College Attendance would increase by approximately 248%. The regression coefficient for Fathers' Expectations was not significant, $B = -0.22$, OR $= 0.80$, $p = .645$, indicating that Fathers' Expectations did not have a significant effect on the odds of observing College Attendance. The regression coefficient for Friends' Expectations was not significant, $B = 0.28$, OR $= 1.32$, $p = .418$, indicating that Friends' Expectations, did not have a significant effect on the odds of observing College Attendance. The regression coefficient for Close Relatives' Expectations was not significant, $B = 0.64$, OR $=$ 1.90, $p = .187$, indicating that Close Relatives' Expectations, did not have a significant effect on the odds of observing College Attendance. The regression coefficient for Counselors' Expectations was not significant, $B = -0.14$, OR $= 0.87$, $p = .823$, indicating that Counselors' Expectations, did not have a significant effect on the odds of observing College Attendance. The regression coefficient for Favorite Teachers' Expectations was not significant, $B = 0.49$, OR $=$ 1.63, $p = .523$, indicating that Favorite Teachers' Expectations, did not have a significant effect on the odds of observing College Attendance. The regression coefficient for Coaches' Expectations was not significant, $B = -1.01$, OR $= 0.36$, $p = .115$, indicating that Coaches' Expectations, did not have a significant effect on the odds of observing College Attendance. The regression coefficient for Mothers' Education was not significant, $B = 0.39$, OR $= 1.47$, $p = .144$,

indicating that Mothers' Education, did not have a significant effect on the odds of observing

College Attendance. The regression coefficient for Fathers' Education was significant, $B =$

0.58, OR = 1.79, p = .026, indicating that for a one unit increase in Fathers' Education, the odds

of observing College Attendance would increase by approximately 79%. The regression

coefficient for Total Family Income was not significant, B= 0.49, OR = 1.63, p = .066, indicating

that Total Family Income, did not have a significant effect on the odds of observing College

Attendance. The regression coefficient for Student Gender was not significant, B = 0.38, OR =

1.47, p = .119, indicating that Student Gender, did not have a significant effect on the odds of

observing College Attendance. Table 9.2 summarizes the results of the regression model.

Table 9.2

Logistic Regression Results with Individual Social Network Members' Expectations Predicting All Students' College Attendance

Variable	B	SE	χ^2	p	OR
(Intercept)	-0.91	0.62	2.15	.142	
Mothers' Expectations	1.25	0.50	6.23	.013	3.48
Fathers' Expectations	-0.22	0.49	0.21	.645	0.80
Friends' Expectations	0.28	0.34	0.66	.418	1.32
Close Relatives' Expectations	0.64	0.49	1.74	.187	1.90
Counselors' Expectations	-0.14	0.64	0.05	.823	0.87
Favorite Teachers' Expectations	0.49	0.77	0.41	.523	1.63
Coaches' Expectations	-1.01	0.64	2.49	.115	0.36
Mothers' Education	0.39	0.27	2.13	.144	1.47
Fathers' Education	0.58	0.26	4.97	.026	1.79
Total Family Income	0.49	0.27	3.37	.066	1.63
Students' Gender	0.38	0.25	2.43	.119	1.47

Note. $\chi^2(11)$ = 38.80, p < .001, McFadden R^2 = 0.09. Parents' Education, Family Income, and Student Gender were control variables.

A binary logistic regression was conducted to examine whether Individual Social Network Members' expectations had a significant effect on the odds of observing Male Students' College Attendance. The reference category was Male Students' College Attendance = "No".

Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was examined.

Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model have VIFs less than 10. Table 9.3 presents the VIF for each predictor in the model.

Table 9.3

Variable Inflation Factors for Individual Social Network Members' Expectations Predicting Male Students' College Attendance

Variable	VIF
Mothers' Expectations	1.43
Fathers' Expectations	1.47
Friends' Expectations	1.55
Close Relatives' Expectations	2.19
Counselors' Expectations	2.12
Favorite Teachers' Expectations	3.22
Coaches' Expectations	2.30
Mothers' Education	1.26
Fathers' Education	1.22
Total Family Income	1.22

Parents' Education, and Family Income were control variables.

Results. The overall model was significant, $\chi^2(10) = 26.05$, $p = .004$, suggesting that Individual Social Network Members' Expectations had a significant effect on the odds of observing Male

Students' College Attendance. McFadden's R-squared was calculated to examine the model fit, where values greater than .2 are indicative of models with excellent fit (Louviere, Hensher, & Swait, 2000). The McFadden R-squared value calculated for this model was 0.11. The regression coefficient for Mothers' Expectations was significant, $B = 1.46$, OR = 4.32, $p = .022$, indicating that for a one unit increase in Mothers' Expectations, the odds of observing Male Student College Attendance would increase by approximately 332%. The regression coefficients for the expectations of Fathers, Friends, Close Relatives, Counselors, Favorite Teachers, and Coaches were not significant. The regression coefficient for the control variable Mothers' Education was not significant. The regression coefficient for the control variable Fathers' Education was significant, $B = 0.88$, OR = 2.42, $p = .020$, indicating that for a one unit increase in Fathers' Education, the odds of observing Male Students' College Attendance would increase by approximately 142%. The regression coefficient for the control variable Total Family Income was significant, $B = 0.85$, OR = 2.33, $p = .027$, indicating that for a one unit increase in Total Family Income, the odds of observing Male Student College Attendance would increase by approximately 133%. Table 9.4 summarizes the results of the regression model.

Table 9.4

Binary Logistic Regression for Individual Social Network Members' Expectations Predicting Male Students' College Attendance

Variable	B	SE	χ^2	p	OR
(Intercept)	-0.73	0.83	0.78	.378	
Mothers' Expectations	1.46	0.64	5.24	.022	4.32
Fathers' Expectations	-0.53	0.64	0.69	.406	0.59
Friends' Expectations	0.49	0.49	1.00	.317	1.63
Close Relatives' Expectations	0.31	0.69	0.20	.657	1.36
Counselors' Expectations	0.17	0.81	0.05	.828	1.19
Favorite Teachers' Expectations	0.37	1.05	0.12	.726	1.45
Coaches' Expectations	-1.28	0.85	2.24	.134	0.28
Mothers' Education	0.04	0.38	0.01	.912	1.04
Fathers' Education	0.88	0.38	5.45	.020	2.42
Total Family Income	0.85	0.38	4.86	.027	2.33

Note. $\chi^2(10) = 26.05$, $p = .004$, McFadden $R^2 = 0.11$. Parents' education, Family Income were control variables.

A binary logistic regression was conducted to examine whether Individual Social Network Members' expectations had a significant effect on the odds Female College Attendance = "Yes". The reference category was Female College Attendance = "No".

Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was examined.

Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model have VIFs less than 10. Table 9.5 presents the VIF for each predictor in the model.

Table 9.5

Variable Inflation Factors for Individual Social Network Members' Expectations Predicting Female Students' College Attendance

Variable	VIF
Mothers' Expectations	1.75
Fathers' Expectations	1.75
Friends' Expectations	1.62
Close Relatives' Expectations	2.03
Counselors' Expectations	4.52
Favorite Teachers' Expectations	6.79
Coaches' Expectations	3.74
Mothers' Education	1.16
Fathers' Education	1.08
Total Family Income	1.17

Parents' Education, and Family Income were control variables.

Results. The overall model was not significant, $\chi^2(10) = 14.81$, $p = .139$, suggesting that the individual Social Network Members' Expectations did not have a significant effect on the odds of observing Female Students' College Attendance. McFadden's R-squared was calculated to examine the model fit, where values greater than .2 are indicative of models with excellent fit (Louviere, Hensher, & Swait, 2000). The McFadden R-squared value calculated for this model was 0.07. Since the overall model was not significant, the individual predictors were not examined further. Table 9.6 summarizes the results of the regression model.

Table 9.6

Binary Logistic Regression for Individual Social Network Members' Expectations Predicting Female Students' College Attendance

Variable	B	SE	χ2	p	OR
(Intercept)	-0.76	0.97	0.61	.434	
Mothers' Expectations	1.09	0.85	1.64	.200	2.98
Fathers' Expectations	-0.08	0.80	0.01	.922	0.92
Friends' Expectations	0.11	0.53	0.05	.829	1.12
Close Relatives' Expectations	1.37	0.80	2.96	.085	3.95
Counselors' Expectations	-1.38	1.31	1.11	.291	0.25
Favorite Teachers' Expectations	1.55	1.49	1.07	.300	4.69
Coaches' Expectations	-1.00	1.11	0.81	.368	0.37
Mothers' College Attendance	0.63	0.38	2.70	.101	1.87
Fathers' College Attendance	0.35	0.37	0.90	.344	1.42
Total Family Income	0.17	0.38	0.20	.655	1.19

Note. $\chi^2(10) = 14.81$, $p = .139$, McFadden $R^2 = 0.07$. Parents' Education, and Family Income were control variables.

Students' Expectations Predicting College Attendance

A binary logistic regression was conducted to examine whether Students' Expectations = "Yes", had a significant effect on the odds of observing College Attendance = "Yes". The reference category was College Attendance = "No". Parents' Education, Total Family Income, and Student Gender were controlled for.

Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was examined.

Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10

should be considered the maximum upper limit (Menard, 2009). All predictors in the regression

model have VIFs less than 10. Table 10.1 presents the VIF for each predictor in the model.

Table 10.1

Variance Inflation Factors for All Students' Expectations Predicting College Attendance

Variable	VIF
All Students' Expectations	1.02
Mothers' Education	1.15
Fathers' Education	1.08
Family Income	1.18
Students' Gender	1.02

Parents' Education, Family Income,
and Student Gender were controls.

Results. The overall model was significant, $\chi^2(5) = 46.89$, $p < .001$, suggesting that Student

Expectations, Parents' Education, Total Family Income, and Student Gender had a significant

effect on the odds of observing College Attendance = "Yes". McFadden's R-squared was

calculated to examine the model fit, where values greater than .2 are indicative of models with

excellent fit (Louviere, Hensher, & Swait, 2000). The McFadden R-squared value calculated for

this model was 0.11. The regression coefficient for Student Expectation = "Yes" was

significant, $B = 2.18$, OR = 8.85, $p < .001$, indicating that for a one unit increase in Student

Expectations = "Yes", the odds of observing College Attendance = "Yes" would increase by

approximately 785%. The regression coefficient for Mothers' Education was significant, $B =$

0.69, OR = 1.99, $p = .013$, indicating that for a one unit increase in Mothers' Education, the odds

of observing College Attendance would increase by approximately 99%. The regression

coefficient for Fathers' Education was significant, $B = 0.61$, OR = 1.83, $p = .025$, indicating that

for a one unit increase in Fathers' Education, the odds of observing College Attendance would

increase by approximately 83%. The regression coefficient for Total Family Income was not

significant. The regression coefficient for Student Gender was not significant. Table

101.2 summarizes the results of the regression model.

Table 10.2

Logistic Regression Results with All Students' Expectations Predicting College Attendance

Variable	B	SE	χ^2	p	OR
(Intercept)	-1.91	0.58	10.92	< .001	
All Students' Expectations	2.18	0.56	15.04	< .001	8.85
Mothers' Education	0.69	0.28	6.18	.013	1.99
Fathers' Education	0.61	0.27	5.06	.025	1.83
Total Family Income	0.40	0.28	1.99	.158	1.49
Student Gender	0.27	0.26	1.10	.295	1.31

Note. $\chi^2(5) = 46.89$, $p < .001$, McFadden $R^2 = 0.11$. Parents' Education, Family
Income and Student Gender were control variables.

A binary logistic regression was conducted to examine whether Male Students'

Expectations, had a significant effect on the odds of observing Male Student College Attendance.

The reference category was Male College Attendance = "No".

Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was

examined.

Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the

presence of multicollinearity between predictors. High VIFs indicate increased effects

of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10

should be considered the maximum upper limit (Menard, 2009). All predictors in the regression

model have VIFs less than 10. Table 10.3 presents the VIF for each predictor in the model.

Table 10.3

Variable Inflation Factors for Male Students' Expectations Predicting College Attendance

Variable	VIF
Male Students' Expectations	1.02
Mothers' Education	1.26
Fathers' Education	1.09
Total Family Income	1.24

Parents' Education, and Family Income were control variables.

Results. The overall model was significant, $\chi^2(4) = 36.64$, $p < .001$, suggesting that Male

Students' Expectations, had a significant effect on the odds of observing Male Students' College

Attendance = "Yes". McFadden's R-squared was calculated to examine the model fit, where

values greater than .2 are indicative of models with excellent fit (Louviere, Hensher, & Swait,

2000). The McFadden R-squared value calculated for this model was 0.17. The regression

coefficient for Male Students' Expectations was significant, $B = 3.15$, OR $= 23.23$, $p < .001$,

indicating that for a one unit increase in Male Students' Expectations, the odds of observing

Male Student College Attendance would increase by approximately 2223%. The regression

coefficient for Mothers' Education was not significant, $B = 0.42$, OR $= 1.52$, $p = .314$, indicating

that Mothers' Education, did not have a significant effect on the odds of observing Male Student

College Attendance. The regression coefficient for Fathers' Education was not significant, $B =$

0.65, OR $= 1.91$, $p = .095$, indicating that Fathers' Education, did not have a significant effect on

the odds of observing Male Student College Attendance. The regression coefficient for Total

Family Income was not significant, $B = 0.65$, OR $= 1.91$, $p = .127$, indicating that Total Family

Income, did not have a significant effect on the odds of observing Male Student College

Attendance. Table 10.4 summarizes the results of the regression model.

Table 10.4

Binary Logistic Regression for Male Students' Expectations Predicting College Attendance

Variable	*B*	*SE*	χ^2	*p*	*OR*
(Intercept)	-2.79	0.84	10.88	< .001	
Male Students' Expectations	3.15	0.81	15.06	< .001	23.23
Mothers' Education	0.42	0.42	1.01	.314	1.52
Fathers' Education	0.65	0.39	2.78	.095	1.91
Total Family Income	0.65	0.42	2.33	.127	1.91

Note. $\chi^2(4) = 36.64$, $p < .001$, McFadden $R^2 = 0.17$. Parents' Education, and Family Income were control variables.

A binary logistic regression was conducted to examine whether Female Students' Expectations, had a significant effect on the odds of observing Female Students' College Attendance = "Yes". The reference category was Female College Attendance = "No".

Assumptions. Prior to the analysis, the assumption of absence of multicollinearity was examined.

Variance inflation factors. Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model have VIFs less than 10. Table 10.5 presents the VIF for each predictor in the model.

Table 10.5

Variable Inflation Factors for Female Students' Expectations Predicting College Attendance

Variable	VIF
Students' Expectations	1.01
Mothers' Education	1.10
Fathers' Education	1.08
Total Family Income	1.14

Parents' Education, and Family Income were control variables.

Results. The overall model was significant, $\chi^2(4) = 13.55$, $p = .009$, suggesting that Female Students' Expectations along with the control variables, had a significant effect on the odds of observing Female Students' College Attendance. McFadden's R-squared was calculated to examine the model fit, where values greater than .2 are indicative of models with excellent fit (Louviere, Hensher, & Swait, 2000). The McFadden R-squared value calculated for this model was 0.07. The regression coefficient for Female Students' Expectations was not significant, $B = -0.06$, OR $= 0.94$, $p = .958$, indicating that Female Students' Expectations, did not have a significant effect on the odds of observing Female Students' College Attendance. The regression coefficient for Mothers' Education was significant, $B = 0.99$, OR $= 2.69$, $p = .010$, indicating that for a one unit increase in Mothers' Education, the odds of observing Female Student College Attendance would increase by approximately 169%. The regression coefficient for Fathers' Education was not significant, $B = 0.59$, OR $= 1.81$, $p = .122$, indicating that Fathers' Education, did not have a significant effect on the odds of observing Female Student College Attendance = "Yes". The regression coefficient for Total Family Income was not significant, $B = 0.23$, OR $= 1.26$, $p = .560$, indicating that Total Family Income, did not have a significant effect on the odds of observing Female Student College Attendance = "Yes". Table 10.6 summarizes the results of the regression model.

Table 10.6

Binary Logistic Regression for Female Students' Expectations Predicting College Attendance

Variable	B	SE	χ^2	p	OR
(Intercept)	0.48	1.19	0.16	.690	
Students' Expectations	-0.06	1.19	0.00	.958	0.94
Mothers' Education	0.99	0.38	6.63	.010	2.69
Fathers' Education	0.59	0.38	2.39	.122	1.81
Total Family Income	0.23	0.39	0.34	.560	1.26

Note. $\chi^2(4) = 13.55$, $p = .009$, McFadden $R^2 = 0.07$. Parents' Education, and Family Income were control variables.

CHAPTER 5

RESULTS

Hypotheses results based on analyses

 H1. This hypothesis proposed that all students' expectations to attend college would increase as total social network academic expectations increased. The null hypothesis was rejected, total social network members' expectation score is an indicator of students' expectations to attend college.

 H2. This hypothesis proposed that the academic achievement of all students would increase as total social network academic expectations increased. We failed to reject the null hypothesis. There was not statistical significance found in the relationship between total social network expectation score and all students' academic achievement.

 H3. This hypothesis proposed that the total social network scores and impact of network scores on female students' academic expectations would be greater than those of male students. The descriptive statistics in Tables 1.2 & 1.3 on page 29 show that female students had higher total social network expectation scores than male students. However, we failed to reject the null hypothesis because the overall models for total social network expectation scores for male and female students were not significant.

 H4. This hypothesis proposed that total social network expectation scores would have a greater impact on the academic achievement of female students than male students. We failed to reject the null hypothesis since neither the overall model for female students nor male students was significant. This suggests that Total Social Network Expectation Scores did not have a significant effect on college attendance for either male or female students.

Answers to research questions

1. Is there a significant, positive relationship between individual SNM's expectations and all

    students' academic expectations?

    The regression for this question could not be run since less than 10 female students (4)

indicated that they did not expect to attend college. Descriptive statistics revealed that 91% of the

female students expected to attend college without an examination of factors.

2. Is there a significant, positive relationship between individual SNM's expectations and all

    students' academic achievement?

    Overall, students whose mothers expected them to attend college were 2.5 times more likely

to attend college than those whose mothers did not expect them to attend college.

3. Is there a significant, positive relationship between all students' academic expectations and

    all students' academic achievement?

    Overall, students who expected to go to college were almost 8 times more likely to attend

college than students that did not expect to attend college.

4. Is there a significant, positive relationship between female student academic expectations and

    their academic achievement?

    No significant relationship between these variables was found.

5. Is there a significant, positive relationship between male student academic expectations and

    their academic achievement?

    When male students expected to attend college, they were 22 times more likely to do so than

male students that did not expect to attend college.

6. Which SNM's expectation has the strongest, positive relationship to the academic

    expectations of all students?

    Coaches' expectations had the only significant, positive relationship with all students'

academic expectations.

7. Which SNM's expectation has the strongest, positive relationship to the academic

    achievement of all students?

    Mothers' expectations had the only significant positive relationship with overall student

college attendance.

8. Which SNM's expectation has the strongest, positive relationship to the academic

    expectations of male students?

    There were no significant findings to address this question.

9. Which SNM's expectation has the strongest, positive relationship to the academic

    expectations of female students?

    The regression for this question could not be run since less than 10 female students (4)

indicated that they did not expect to attend college. Descriptive statistics revealed that 91% of the

female students expected to attend college without an examination of factors.

10. Which SNM's expectation has the strongest, positive relationship to the academic

    achievement of boys?

    Mother expectations had the only significant positive relationship with male student

academic achievement.

11. Which SNM's expectation has the strongest, positive relationship to the academic

    achievement of female students?

    The overall model that would answer this question was not significant. Therefore, no

individual predictors could be further examined.

CHAPTER 6

DISCUSSION/IMPLICATIONS, LIMITATIONS, AND CONCLUSION

Discussion/Implications

This study extends the burgeoning body of works that addresses the academic achievement gap within groups more so than across groups. More insight is needed to understand the factors that contribute to the large academic achievement gap between Black male and female students. The major findings of this study are: (1) Mothers' expectations had a significant positive relationship with male students' college attendance. (2) Mothers' expectations had a significant positive relationship with overall students' college attendance. (3) Coaches were the only social network members whose expectations of students had a significant positive relationship with all students' academic expectations. (4) Black male students who expected to attend college were more than 22 times more likely to attend college than those who did not expect to attend.

Mothers' expectations and male students' college attendance. This finding could serve to bolster the notion that the efforts of Black mothers, who often find themselves raising sons without co-residential fathers, are not in vain. Single Black mothers need to be encouraged that their efforts have significant impact on the likelihood of their sons attending college. Everything that can be done to support these mothers needs to be implemented.

Mothers' expectations and all students' college attendance. Again mothers, single or married (as well as fathers) need to be encouraged that their attitudes toward school for their children, have a significant effect on if their students attend college.

School social workers, who are often part of retention efforts, student success, and individual education plans, would do well to note the impact that positive expectations from members of students' social network have on their academic achievement. With this knowledge

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school social workers could work to target their interventions in a students' case plan, in such a way that they inform, encourage, and facilitate these important relationships.

Black male students' expectations. It is not surprising that higher student academic expectations correlate with higher college attendance. However, this study's finding that Black male students who expected to attend college were 22 times more likely to attend college than those who did not expect to, is striking. These results are encouraging and give impetus to foster more pervasive positive academic expectations among Black male students.

Higher educational aspirations don't always translate into academic achievement. A national study conducted by the University of Texas at Austin Center for Community College Student Engagement found that despite Black male students and their parents having higher academic aspirations than their White peers, Whites graduated at a rate 6 times that of Blacks in 3 years (For Men of Color, 2014). Nevertheless, shining examples like Chicago's Urban Prep Academy, which has had 100% graduation, and 100% college acceptance, with scholarships for 8 consecutive years, for all its predominately Black male student graduates is telling. Apparently, these campuses have been able to create a culture of high academic expectations and achievement for their Black male students. What can be done to foster more positive academic expectations among Black male students at co-ed schools? What are the factors that determine if a Black male student has expectations to attend college or not?

Coaches' expectations. Only coaches' expectations had a significant positive relationship with all students' academic expectations. Perhaps coaches spend more time with students than individual teachers or counselors. It may also be that coaches emphasize academic achievement so that students can maintain their eligibility to participate in sports and possibly secure scholarships for college. The positive influence of coaches on academic expectations

needs to be encouraged. Often coaches serve as surrogate parents. Qualitative research could help determine if coaches' expectations represent an investment in the total well-being of the students and go beyond immediate benefit to their schools' athletic interests.

It should also be noted that expectations alone are not enough. Motivation may be present, but know-how may be lacking. Minority students need effective and engaged counselors to help guide them through the intricate path to successful college admissions, as they are more likely to be first generation college attenders.

Limitations

Other factors influence college attendance. There are myriads of reasons why a student does not attend college, including financial barriers, lack of knowledge about the process, and life altering events. This study only looked at the relationship of social network members' expectations & students' expectations.

Age of the data. The base year data for this study was collected in 2002, and the follow up college attendance data was collected in 2006; 16 and 12 years ago respectively. It is reasonable to question the applicability of data from more than 10 years ago. Nevertheless, longitudinal studies, such as the ELS:2002, can provide rich trend data that often requires large amounts of time and money to implement.

Definition of college. The ELS:2002 questionnaire designers included what appears to be an unintended overlap in the questions about post-secondary attendance. In the question posed to students about whether they had enrolled in post-secondary school, "vocational – technical or trade school" was included. However, in the question about post high school expectations from social network members the option "trade school or apprenticeship" was given. The inclusion of trade school in both of these options made it necessary to include "trade school or

apprenticeship" in the definition of college/post-secondary school despite it not being a widespread practice. The inconsistency of these definitions resulted in an unknown portion of the students who indicated that they had attended college in the second follow up, having only attended a trade school.

More inclusive social network. It is widely known that African-American culture includes extensive and meaningful kinship ties with non-blood relatives. It is not uncommon for children to refer to unrelated adults as "uncle" or "aunty". Church attendance is also a major component in African-American culture. This study did well to include coaches, counselors, favorite teachers, and close relatives, but future research would do well to include "friends that are like family", mentors, clergy, and faith community members (i.e. "church family") when studying social network impact on African-American student academic achievement.

Gender definitions. As stated earlier, this study's data was collected some 16 years ago. Recent times have seen some progress in the way of sensitivity to gender identification. The social media service, Facebook, for example, offers at least 58 gender identification options. Future research would do well to include non-binary gender options for survey participants, in doing so, such studies would be more inclusive and perhaps yield more informative and nuanced results.

Future Research

At least two major questions arise: (1) Why does the largest gender academic gap exist between Black male and female students? (2) How do we close that gap? Future research, that builds on the findings of this study, will probe to find answers to these questions.

Future research should investigate the reasons why Black female students were not impacted by mothers' expectations, and why the likelihood of them attending college was not significantly related to their college attendance.

Qualitative inquiry. This study made use of rich quantitative data. Future research would do well to explore the nuances of perceived academic expectations of social network members through qualitative inquiry. Such studies might shed light on why coaches' expectations were related to student expectations but not college attendance, and if coaches' interests in students' academic achievement go beyond sports.

Conclusion

The finding that Black male students who expected to attend college are 22 times more likely to attend college than those who did not expect to, is noteworthy. This suggests that any effective interventions that can increase the expectations of Black male students to attend college, are likely to be successful in helping to close the academic achievement gap between Blacks and Whites, and between Black male students and female students.

The persistence of gaps between Blacks and Whites means many negative consequences that have a detrimental effect on the life expectancy and quality of life for Black Americans. Closing the academic achievement or academic opportunity gap between Blacks and Whites may contribute to closing many of the other gaps that exist. Research to understand and close the academic achievement gap between Blacks and Whites needs to continue. However, research that seeks to better understand and close the achievement gap that exists between Black male and female students, building on the findings of this study, need to continue.

REFERENCES

Baker, D. P., & Entwisle, D. R. (1987). The influence of mothers on the academic expectations of young children: A longitudinal study of how gender differences arise. *Social Forces*, *65*(3), 670-694.

Barack Obama Male Leadership Academy (BOMLA) (n.d.). Barack Obama male leadership academy is the first school in Texas to get 3D systems 3D Printer. Retrieved from http://www.dallasisd.org/site

Barro, R. J., & Lee, J. W. (2001). International data on educational attainment: Updates and implications. *Oxford Economic Papers*, *53*(3), 541-563.

Bivens, R. (2017). The gender binary will not be deprogrammed: Ten years of coding gender on Facebook. *New Media & Society*, *19*(6), 880-898.

Blackdemographics.com (2017). Black male statistics. Retrieved from http://blackdemographics.com/population/black-male-statistics/

Carpenter, D. M., & Ramirez, A. (2007). More than one gap: Dropout rate gaps between and among Black, Hispanic, and White students. *Journal of Advanced Academics*, *19*(1), 32-64.

Carpenter, D. M., Ramirez, A., & Severn, L. (2006). Gap or gaps: Challenging the singular definition of the achievement gap. *Education and Urban Society*, *39*(1), 113-127

Carson, E. A., & Anderson, E. (2015). Prisoners in 2015. Retrieved from http://www.bjs.gov/index.cfm?ty=pbdetail&iid=5869

Collins, P. H. (1990). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment.* New York: Routledge.

Collins, P. H. (2015). Intersectionality's definitional dilemmas. *Annual Review of Sociology*, *41*, 1-20.

Dee, T. S. (2005). A teacher like me: Does race, ethnicity, or gender matter? *The American*

  Economic Review, *95*(2), 158-165.

Dittmann, A. G., & Stephens, N. M. (2017). Interventions aimed at closing the social class

  achievement gap: Changing individuals, structures, and construals. *Current Opinion in*

  Psychology, *18*, 111-116.

Do, D. P., Frank, R., & Finch, B. K. (2012). Does SES explain more of the black/white health
gap than

  we thought? Revisiting our approach toward understanding racial disparities in

  health. *Social Science & Medicine*, *74*(9), 1385-1393.

For men of color, high academic motivation does not bring academic success. (2014, March). *UT*

  News. Retrieved from https://news.utexas.edu/2014/03/17/cccse-report-aspirations-to-

  achievement

Garibaldi, A. M. (2014). The expanding gender and racial gap in American higher education.

  The Journal of Negro Education, *83*(3), 371-384.

Gershenson, S. (2015, August 18). The alarming effect of racial mismatch on teacher

  expectations. Retrieved from http://www.brookings.edu/blogs/brown-center-

  chalkboard/posts/2015/08/18-teacher-expectations-gershenson

Gershenson, S., Holt, S. B., & Papageorge, N. W. (2016). Who believes in me? The effect of

  student–teacher demographic match on teacher expectations. *Economics of Education*

  Review, (*52*)209-224. doi:10.1016/j.econedurev

Geruso, M. (2012). Black-white disparities in life expectancy: How much can the standard SES

  variables explain? *Demography*, *49*(2), 553-574.

Gibbs, J. T. (Ed.) (1988). *Young, Black, and male in America: An endangered species*. Auburn

House Publishing Company: Dover, MA.

Ginder, S.A., and Kelly-Reid, J.E. (2013). Enrollment in postsecondary institutions, Fall 2012;
financial statistics, fiscal year 2012; graduation rates, selected cohorts, 2004-09; and
employees in postsecondary institutions, Fall 2012: First look (provisional data) (NCES
2013-183). U.S. Department of Education. Washington, DC: National Center for
Education Statistics. Retrieved from http://nces.ed.gov/pubsearch

Goldin, C., Katz, L. F., & Kuziemko, I. (2006). The homecoming of American college women:
The reversal of the college gender gap. *The Journal of Economic Perspectives*, *20*(4),
133-133.

Golombok, S. (2015). *Modern families: Parents and children in new family forms*. Cambridge
University Press.

Guy, T. C. (2014). The (end)angered black male swimming against the current. *New
Directions For Adult & Continuing Education, 2014*(144), 15-26. doi:10.1002/ace.20110

Hale, J. E. (1982). *Black children: Their roots, culture, and learning styles*. JHU Press.

Hamilton, D., Darity Jr, W., Price, A. E., Sridharan, V., & Tippett, R. (2015). Umbrellas don't
make it rain: Why studying and working hard isn't enough for Black Americans. *New
York: The New School*.

Harper, S. R. (2005). Leading the way: Inside the experiences of high-achieving African
American male students. *About Campus*, *10*(1), 8-15.

Harper, S. R. (2006). Black male students at public flagship universities in the U.S.: Status,
trends, and implications for policy and practice. Washington, DC: Joint Center for
Political and Economic Studies.

Harper, S. R. (2012). *Black male student success in higher education: A report from the national*

Black male college achievement study. Philadelphia: University of Pennsylvania, Center

for the Study of Race and Equity in Education. Retrieved from http://works.bepress.com

/sharper/43/

Haskins, R. (2014). Marriage, parenthood, and public policy. *National Affairs, 19*(1), 1955-72.

Hendricks, J. T. (2014). *"STEMulating" success factors: An investigation of the academic talents*

of successful black male college graduates from STEM programs. (Doctoral dissertation).

Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3614470).

Hill, N. E., Castellino, D. R., Lansford, J. E., Nowlin, P., Dodge, K. A., Bates, J. E., & Pettit, G.

S. (2004). Parent academic involvement as related to school behavior, achievement, and

aspirations: Demographic variations across adolescence. *Child Development*, *75*(5),

1491-1509.

Holmes, C. J., & Zajacova, A. (2014). Education as 'the Great Equalizer': Health benefits for

Black and White adults. *Social Science Quarterly, 95*(4), 1064-1085.

Hummer, R. A. (1996). Black-white differences in health and mortality: A review and

conceptual model. *The Sociological Quarterly*, *37*(1), 105-125.

Hunter, M. G. (2017). Four essays on a student's expectation that they will complete college.

Theses and Dissertations--Economics. 33. https://doi.org/10.13023/ETD.2017.399

IBM Support (2016). *Pairwise vs. listwise deletion: What are they and when should I use them?*

Retrieved from http://www-01.ibm.com/support/docview.wss?uid=swg21475199

Intellectus Statistics. (2017). Intellectus Statistics [Online computer software]. Retrieved from

http://analyze.intellectusstatistics.com/

Jackson, D. (2015, May 04). Obama promotes 'My Brother's Keeper Program'. *USA Today*.

Retrieved from http://www.usatoday.com/story/news/nation/2015/05/04/

obama-baltimore-new-york-city-my-brothers-keeper-alliance/26869779/

Jacobson, L. (2015, June 15). Bernie Sanders says a Black male baby born today has 1-in-3

chance of prison [website]. Retrieved from http://www.politifact.com/truth-o-

meter/statements/2015/jun/15/bernie-s/bernie-sanders-says-black-male-baby-born-today-

has/

Jansson, B. S. (2009). *The reluctant welfare state: engaging history to advance social work*

practice in contemporary society (6th ed.). Belmont, CA: Brooks/Cole Cengage

Learning.

Kafele, B. K. (2009). *Motivating Black males to achieve in school & in life*. ASCD.

Kearney, M. S., Harris, B. H., Jácome, E., & Parker, L. (2014). *Ten economic facts about crime*

and incarceration in the United States. Hamilton Project, Brookings. Retrieved from

https://www.brookings.edu/wp-content/uploads/2016/06/v8_THP_10CrimeFacts.pdf

King, T. (2011). Swords, shields, and the fight for our children: Lessons from Urban Prep.

Journal of Negro Education, *80*(3), 191-192.

Kirp, D. L. (2010). The widest achievement gap. *National Affairs*, *5*, 54-74.

Kuhn, M., & Rios-Rull, J. (2016). 2013 Update on the U.S. earnings, income, and wealth

distributional facts: A view from macroeconomics. *Federal Reserve Bank of Minneapolis*

Quarterly Review, 37(1), 2-73.

Lederman, D. (2012, February 6). When Black men succeed. Inside higher education [website].

Retrieved from https://www.insidehighered.com/news/2012/02/06/study-aims-learn-

why-some-black-men-succeed-college

Louviere, J. J., Hensher, D. A., & Swait, J. D. (2000). Stated choice methods: analysis and

applications. Cambridge, United Kingdom: Cambridge University Press.

Matthews, L. E., & Williams, B. A. (2007). Beyond 'commentaries of despair': Reengineering

    pathways to design in the schooling of Black men. *Negro Educational Review*, *58*(3/4),

    187.

Menard, S. (2009). *Logistic regression: From introductory to advanced concepts and*

    applications. Thousand Oaks, CA: SAGE

Noguera, P. A. (2003). The trouble with Black boys: The role and influence of environmental

    and cultural factors on the academic performance of African American males. *Urban*

    Education, *38*(4), 431-459.

Norusis, M. J. (2004). SPSS 13.0 Advanced statistical procedures companion. Upper Saddle

    River, NJ: Prentice Hall.

Peng, C. Y. J., Lee, K. L., & Ingersoll, G. M. (2002). An introduction to logistic regression

    analysis and reporting. *The Journal of Educational Research*, *96*(1), 3-14.

Perrakis, A. I. (2008). Factors promoting academic success among African American and

    White male community college students. *New Directions for Community Colleges, 142,*

    15-23.

Phoenix, A. (2006, August). Editorial: Intersectionality. *European Journal of Women's Studies*,

    13(3), 187-192. doi:10.1177/1350506806065751.

Piciullo, T. J. (2009). *School membership, parent academic expectations, peer relationships,*

    student-teacher relationships, academic self-concept, and academic achievement among

    ninth grade students from low, average, and high need schools. (Doctoral dissertation).

    Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3368241).

Poynton, T. A., & Lapan, R. T. (2017). Aspirations, achievement, and school counselors'

    impact on the college transition. *Journal Of Counseling & Development*, *95*(4), 369-377.

doi:10.1002/jcad.12152

Qualls, W. J. (1982). Changing sex roles: Its impact upon family decision making. *ACR North American Advances*.

Rainey, P. C. (2010). *School identification and student perceptions of parent and teacher expectations: A closer look at the achievement gap between black males and females* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3411945).

Rastogi, S. (2011). *The black population: 2010*. US Department of Commerce, Economics and Statistics Administration, US Census Bureau. Retrieved from https://www.census.gov/prod/cen2010/briefs/c2010br-06.pdf

Robbins, S. P., Chatterjee, P., & Canda, E. R. (2011). *Contemporary human behavior theory: A critical perspective for social work*. Pearson Higher Ed.

Rohde, D., Cooke, K., & Ojha, H. (2012). The decline of the 'Great Equalizer'. *The Atlantic*.

Rose, P. M., & Dyer, C. (2008). Chronic poverty and education: A review of literature. Retrieved from http://dx.doi.org/10.2139/ssrn.1537105

St. Jean, Y. S., & Feagin, J. R. (1998). *Double burden: Black women and everyday racism*. ME Sharpe.

Sakala, L. (2014). Breaking down mass incarceration in the 2010 census: State-by-state incarceration rates by race/ethnicity. *Prison Policy Initiative*.

Schiller, B. R. (2008). *The economics of poverty and discrimination* (10th ed.). Pearson/Prentice Hall.

Sciarra, D. T., & Ambrosino, K. E. (2011). Post-secondary expectations and educational attainment. *Professional School Counseling, 14*(3), 231-241.

Smith, M. J., & Fleming, M. K. (2006). African American parents in the search stage of college

    choice: Unintentional contributions to the female to male college enrollment gap. *Urban*

    Education, *41*(1), 71-100.

Snyder, T. D., & Dillow, S. A. (2013). Digest of education statistics 2012 (NCES 2014-015).

    Washington, DC: National Center for Education Statistics, Institute of Education Sciences,

    U.S. Department of Education.

Stark, T. H., Leszczensky, L., & Pink, S. (2017). Are there differences in ethnic majority and

    minority adolescents' friendships preferences and social influence with regard to their

    academic achievement? *Zeitschrift für Erziehungswissenschaft*, *20*(3), 475-498.

The Achievement Gap Initiative (AGI) (2015). The Achievement Gap Initiative at Harvard

    University. [Website]. Retrieved from http://www.agi.harvard.edu/about.php

Urban Prep Academies (2017). Commencement 2017. [Website]. Retrieved from

    http://www.urbanprep.org/commencement

U.S. Department of Education (2016). The state of racial diversity in the educator workforce.

    Retrieved from: http://www2.ed.gov/rschstat/eval/highered/racial-diversity/state

    -racial-diversityworkforce.pdf

U.S. Department of Education, National Center for Education Statistics. (2012). Digest of

    education statistics 2012. Washington DC: U.S. Government Printing Office. Retrieved

    from https://nces.ed.gov/fastfacts/display.asp?id=72

UT Austin launches Texas consortium to improve outcomes for male minority students.

    (2013, August, 14). Retrieved from http://news.utexas.edu/2013/08/14/ut-austin-launches

    -texas-consortium-to-improve-outcomes-for-male-minority-students

Veenstra, G. (2013). The gendered nature of discriminatory experiences by race, class, and

sexuality: A comparison of intersectionality theory and the subordinate male target

hypothesis. *Sex Roles*, *68*(11-12), 646-659.

Wax, A. L. (2017). Educating the disadvantaged-two models. *Harvard Journal of Law &*

Public Policy, 40, 687.

White House Initiative on Educational Excellence for African Americans (WHIEEAA) (n.d.).

Retrieved from https://sites.ed.gov/whieeaa/

Wilder, S. (2014). Effects of parental involvement on academic achievement: A meta-synthesis.

Educational Review, 66(3), 377-397.

Wilson, V. (2015). Black unemployment is significantly higher than white unemployment

regardless of educational attainment. *Economic Policy Institute*, *17*, 2000-2008.