Self-Efficacy’s Impact on African American Youth’s Academic Performance: 
A Gendered Experience

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THESIS
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This thesis is dedicated to the memory of my mother, Hazel Dell Lambouths, whose remarkable strength and perseverance continues to serve as my motivation.
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I. African American Males’ Mediation Analysis – Math

II. African American Males’ Mediation Analysis – English

III. African American Females’ Mediation Analysis – Math

IV. African American Females’ Mediation Analysis – English
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<table>
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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>ELS: 2002</td>
<td>Educational Longitudinal Study of 2002</td>
</tr>
<tr>
<td>GPA</td>
<td>Grade Point Average</td>
</tr>
<tr>
<td>NCES</td>
<td>National Center on Education Statistics</td>
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<tr>
<td>GED</td>
<td>General Equivalency Diploma</td>
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<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
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<td>HLM</td>
<td>Hierarchical Linear Modeling</td>
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SUMMARY

This study examined the mediating role of academic self-efficacy between parents’ and teachers’ academic expectations and students’ academic performance. Data were obtained from 424 African American 10th graders as part of the Educational Longitudinal Study of 2002 (ELS:2002). Students, parents, math teachers and English teachers were surveyed. Students completed measures of math and English academic self-efficacy. Parents and teachers completed a measure of their academic expectations for each student. High school GPAs obtained from student records were used to represent students’ academic performance. Preliminary analyses revealed that the effect of parents’ academic expectations disappeared when teachers’ academic expectations were included. Four mediation models were constructed separately, one for each gender (i.e. male, female) and academic subject (i.e. math, English) combination, controlling for parents’ academic expectations. Mediation results were significant in only one model. For African American males, math academic self-efficacy partially explained the relationship between math teachers’ academic expectations and students’ academic performance. Implications for teaching are discussed.
Introduction

African American males and females differ in educational outcomes (Cokley and Moore, 2007; Irving and Hudley, 2008). On average, African American males receive substantially lower grades (Mello and Swanson, 2007; Ross and Jackson, 1991), as well as graduate from high school and college at lower rates than their female counterparts (Ryu, 2008). In 2009, 66% of African American females received a high school diploma compared to only 34% of African American males (Rampey et al., 2009). College graduation rates, two years later, were similar (Snyder and Dillow, 2011). These differences constitute the largest ‘gender gap’ of any racial/ethnic group (Ryu, 2008), leading researches to recognize this phenomenon as a significant social issue (Garibaldi, 2007; Tucker and Mitchell-Kernan, 1995; Wilson, 1996). Secondary Education has many implications; from the quality of college one attends to the type of job and financial stability one obtains later in life (Day and Newburger, 2002). This study seeks to understand whether parents’ and teachers’ academic expectations contribute to these gendered differences in educational outcomes.

Often, educational researchers attribute gender differences in educational outcomes to motivational differences (Cokley, 2012; Graham et al., 1998; Osborne, 1997; Saunders et al., 2004; Wood et al., 2007). These findings suggest that, compared to African American females, African American males are more likely to report lower educational expectations (Wood et al., 2007) and achievement values (Saunders et al., 2004). Additionally, African American males are more likely than African American females to devalue academic achievement (Graham et al., 1998) and disengage from school (Osborne, 1997; Cokley, 2012).
“Socializers,” such as parents and teachers, may be contributing to the differences in academic performances between African American males and females. Parents’ and teachers’ behaviors are influenced by their expectations (Rubie-Davies, 2010). Parents stress education more with African American females (i.e. encouraged more to get good grades and attend college) while stressing athletics with African American males (Bateman and Hossler, 1996; Hearn et al., 1995). Also, teachers are more likely to place African American males into lower academic tracks (Joseph, 1996) and special education (Saunders et al., 2004) than their female classmates. Parents’ and teachers’ academic expectations could be influencing their behaviors toward African American males and females and contributing to the gender gap in these students’ educational outcomes.

This study will examine the relationship between parents’ and teachers’ academic expectations, students’ academic motivation, and academic performance. Specifically, this study will determine whether African American students’ academic self-efficacy mediates the relationship between their parents’ and teachers’ academic expectations of them and their academic performance.

The next section will summarize research related to academic self-efficacy, parents’ academic expectations, and teachers’ academic expectations. Upon completion of the literature review, the purpose of the current study and the study’s research questions and hypotheses will be presented.
Literature Review

Social Cognitive Theory and Academic Self-Efficacy

Social Cognitive Theory illustrates the bidirectional interactions of personal, behavioral, and environmental influences on individuals. These interactions, known collectively as *triadic reciprocal determinism* (Bandura, 1986), describe how (a) personal factors in the form of cognition, affect and biological events, (b) behaviors, and (c) environmental influences result in triadic reciprocity (i.e. the exchange of influences between (a), (b), and (c). Specifically, individuals pursue activities as a result of internal and external influences (e.g. cognition and environment), evaluate the outcomes, and then alter their subsequent performance as a means of establishing patterns of behavior. These patterns become standards that motivate future behavior (Bandura, 1989). *Triadic reciprocal determinism* helps us understand self-efficacy.

Self-efficacy, which also derives from social cognitive theory, is the degree to which students feel they can accomplish a given task. Students receive information to evaluate their self-efficacy from their actual performance, from the experiences of others, from social persuasions and judgments, and from their physiological reactions. Students’ attributions of their successes and failures informs and alters their environments and their self-efficacy beliefs, which in turn may inform and alter their subsequent performances (Pajares, 1996).

Academic self-efficacy describes students’ beliefs about their abilities regarding an academic task. Ultimately, students’ behaviors, motivations, and aspirations are all influenced by their academic self-efficacy (Bandura 1986; Bandura et al., 2001; Pajares, 1996).
Self-concept, self-esteem, and self-perception have often been used as proxies for academic self-efficacy. Although these variables may combine with academic self-efficacy to predict motivational outcomes, academic self-efficacy independently predicts future academic performance in ways the other variables do not (Jonson-Reid et al., 2005; Uwah et al., 2008; Zimmerman, 2002). Prior studies have examined the relationship between academic self-efficacy and academic performance as predictors of one another (Bandura, 1986; Witherspoon et al., 1997; Kerpelman et al., 2008; Schunk and Pajares, 2005; Zimmerman, 2002) and as mediators (Bandura 1982; Bandura and Schunk, 1981), evidencing the ways in which academic self-efficacy has operated in the lives of students.

Moreover, academic self-efficacy has helped to understand students’ persistence, engagement, learning, and achievement (Bandura, 1986; Pajares, 1996; Schunk and Miller, 2002). Students who feel more efficacious are more likely to exert additional effort and persist longer in the face of aversive experiences (Bandura, 1989). Additionally, the more confident students are in their academic abilities, the better their grades (Bandura, 1989). Put another way, when students feel efficacious towards a particular academic task, they become driven to successfully complete the task and are more resilient towards adverse events they may encounter.

The current study examines the interplay among students’ academic self-efficacy (i.e. personal factor), students’ academic performance (i.e. behavior), and parents’ and teachers’ academic expectations (i.e. environment), particularly for African American students. Research suggests that of the four sources that inform students’ academic self-efficacy, mastery experiences, observational learning, social persuasions (others’
expectations and judgments), and physiological states (Bandura, 1989); only mastery experiences and social persuasions significantly predict African American students’ academic self-efficacy (Usher and Pajares, 2008). This finding suggests that academic self-efficacy may operate differently for African American students.

**Race, Gender and Academic Self-Efficacy**

Race and gender, operating in concert, can uniquely inform African American students’ academic self-efficacy as well their parents’ and teachers’ academic expectations of them. “Race is gendered and gender is racialized” (Omi and Winant, 1986, p. 68), refers to the fact that both terms are socially constructed and therefore full of expectations, biases, and prejudices. The combination of African American adolescents’ race and gender could influence not only their academic self-beliefs, but also others’ academic beliefs about them. This reality is apparent in the low academic expectations of African American males.

African American males are more likely than their female counterparts to encounter negative social judgments about their academic performance (Usher and Pajares, 2008). In their “First Impressions” study of junior high students, Hudley and Graham (2001) observed that when students were presented with a description of a ‘low achiever’ and asked to attribute a photo from a collection of varying demographic photos, African American and Latino males were among the top choices. This finding speaks to a common (yet unjustified) belief that African American males are not as academically smart as their peers. This belief is consistent with wider societal stereotypes depicting African American males as having characteristics that undermine their academic success (Hall, 2001).
African American males report lower academic self-efficacy scores than African American females (Saunders et al., 2004; Buchanan and Selmon, 2008). African American males who believed that they were not as smart as African American females performed lower than the African American males who did not report this belief (Saunders et al., 2004). African American males also lacked self-efficacy, even when they possessed the academic skills needed for academic success (Roderick, 2003). The negative academic social meanings/judgments described above and experienced by African American males could directly influence the construction of these students’ academic self-efficacy and drive the gender differences observed between them and their female counterparts.

Parents’ and teachers’ academic expectations can either buffer or exacerbate the gendered social stigmas experienced by African American adolescents. Parents and teachers are important ‘socializers’ who influence youth’s own expectancies for success through their expectations of them (Wigfield and Eccles, 2000). It is suggested in Graham (1994) that examining the roles of parents and teachers can help educational researchers better understand the academic motivation of African American students. We therefore turn our attention next to the influence of parents’ and teachers’ academic expectations.

**Parents’ Academic Expectations**

Parents’ academic expectations play an essential role in the academic performance of students (McLoyd et al., 2005; Thompson et al., 1988). Parents’ academic expectations of their African American kindergarteners were positively related to academic performance at third grade (Bouffard and Hill, 2005). Other studies have
reported similar findings among African American adolescents (Halle et al., 1997; Taylor et al., 1995; Wood et al., 2007). Across these studies, students of parents who possessed high academic expectations reported higher grades than students whose parents had low academic expectations of them.

Parents’ academic expectations are also related to students’ academic self-efficacy (Parsons and Ruble 1977; Parsons et al., 1982; Eccles et al., 1990), which is postulated through Social Cognitive theory to be a strong predictor of academic performance (Bandura, 1986). Parents’ academic expectations of their African American children’s future attainment predicted children’s own expectations, even when controlling for students’ academic achievement (Trusty, 2002). For these students, their parents’ academic expectations may have uniquely influenced their self-expectations.

There is evidence that African American parents hold less favorable expectations for their sons than their daughters (Wood et al., 2007). African American parents’ perceptions of the opportunity structure their children will encounter affects their child-rearing (Lewis, 1975), leading them to expect more from their daughters than their sons. Racial socialization practices among African American adolescents also reveal gender differences. African American males are more likely to be cautioned against racial barriers, whereas African American females’ socialization consists of racial pride messages (Taylor, 1990). Through these messages, parents might unknowingly transfer academic beliefs to their children. Students could interpret their parents’ academic expectations as actual beliefs about their academic ability and use these expectations to inform their self-measure of their academic capabilities. These messages could
exacerbate the effects of the negative social stigmas attributed to African American males and bolster the self-conceptions of African American females.

**Teachers’ Academic Expectations**

Teachers’ academic expectations of their students appear to be positively correlated with students’ academic performance (Wood et al., 2007; Benner and Mistry, 2007). On average, students of teachers with higher academic expectations report higher grades than their peers. In contrast, students of teachers with lower academic expectations tend to report lower grades.

Rosenthal and Jacobson’s Pygmalion in the Classroom (1968) study examined the effect of teachers’ academic expectations on students’ academic performance. Researchers told teachers that a group of public elementary school students were “growth spurters” (i.e. possess above average intellectual capacity) based on a specific aptitude test. Actually, there was no such test and the students chosen as “growth spurters” were selected at random. Results showed that teachers had higher expectations for the arbitrarily categorized “growth spurters” than the other students. Additionally, the students labeled as ‘growth spurters’ reported higher academic achievement than their classmates.

Teachers’ differential academic expectations of particular students may act as a self-fulfilling prophecy event, which makes an originally false conception true (Brophy and Good, 1984). Based on self-fulfilling prophecy, teachers’ academic expectations could moderate their behavior towards students, which in turn, could influence students’ academic performance in ways that confirm the teachers’ initial expectations.
The relationship between teachers’ academic expectations and their behavior suggests how students’ academic performance may be influenced by their teachers. Teachers with low academic expectations of students are more likely to physically distance themselves from these students, less likely to praise these students’ successes, and more likely to criticize them for failure (Good, 1970; Good, 1981; Good, 1982). Additionally, teachers are less likely to call on these students to respond to questions (Kerman, 1979) and to provide these students with accurate feedback (Cooper, 1979). Teachers’ academic expectations could inform their behavior towards students, which then could influence these students’ own academic self-efficacy and academic performance (Good and Nichols, 2001).

Teachers hold lower academic expectations for African American males compared to African American females (Benner and Mistry, 2007; Jussim et al, 1996; Rosenthal and Jacobson, 1968; Ross and Jackson, 1991; Tenenbaum and Ruck, 2007; Wood et al., 2007) at every grade level (Benner and Mistry, 2007; Wood, Kaplan, and McLoyd, 2007). This is true even when students possessed equivalent academic and personal characteristics (Ross and Jackson, 1991).

Teachers’ lower academic expectations of African American males could be driving the disproportionate negative teacher behavior experienced by these students. This poses two important academic implications regarding African American males and education: 1) The potential de-motivation of teachers to offer assistance to African American males; and 2) the potential contribution to the devaluation of schooling by African American male students.
Additionally, teachers’ lower academic expectations of African American males in relation to African American females could evoke student behaviors that corroborate the teachers’ initial expectations. Attention could then focus on the resulting student behavior instead of on the teachers’ academic expectations that may provoke this behavior. African American males are therefore erroneously seen as the source of their own underachievement with no reference to the possible teachers’ role.

The academic motivation of African American males has been largely discussed in terms of student task utility, which describes the value that students place on a particular task towards their future success (i.e. achievement value). Graham, Taylor, and Hudley (1998) found that African American 8th grade males valued academic achievement less than their female counterparts. Included in African American males’ perceptions of education may be negative assessments of schooling. Given the academic social stigmas and negative events disproportionately experienced by African American males, their academic achievement may reflect their disengagement from a place that they feel doesn’t value them.

**Summary**

In general, parents and teachers hold lower academic expectations for African American males in comparison to African American females (Mello and Swanson, 2007; Ross and Jackson, 1991; Osborne, 1997; Saunders et al., 2004; Parsons and Ruble 1977; Parsons et al., 1982; Eccles et al., 1990). These expectations could affect African American youth’s academic self-expectations (Parsons and Ruble 1977; Parsons et al., 1982; Eccles et al., 1990; Benner and Mistry, 2007; Wood et al., 2007). Therefore, addressing the academic gender gap between African American male and female students...
involves an understanding of both individual characteristics (i.e. academic self-efficacy) as well as environmental influences (i.e. parents’ and teachers’ academic expectations) as well as the relationship between the two. This study extends prior work to examine whether academic self-efficacy mediates the relationship between parents’ and teachers’ academic expectations and African American adolescents’ academic performance.

This literature review presents research about how African American students, particularly African American males, may receive gendered academic expectations from parents and teachers. Within schools, African American males experience the classroom environment more negatively than their female counterparts. The consistency between teachers’ low academic expectations of African American males and these students’ low academic performance may represent the manifestation of a self-fulfilling prophecy, contributing to the gender differences in African American adolescents’ academic self-efficacy and academic performance.

**The Current Study**

As noted previously, African American student’s academic self-efficacy construction is influenced through social persuasions (i.e. expectations and judgments of others). Therefore, to better understand the gender gap in the academic performance of African American students, this study will examine parents’ and teachers’ academic expectations.

Although the literature has shown that parents’ and teachers’ academic expectations inform youth’s academic expectations, the process by which this occurs is unknown. Gill and Reynolds (2000) noted, “although much of the research on parents’ and teachers’ influences on children’s school achievement recognizes the role of
educational expectations, the process by which these expectations may affect children’s performance remain an open question, especially for African American children” (p. 407).

Academic self-efficacy, therefore, will be explored as a possible mediator, bridging parents’ and teachers’ academic expectations and African American adolescents’ academic performances. Social cognitive theory postulates a direct relationship between student academic self-efficacy and academic performance. By positioning academic self-efficacy as a mediator, this study hopes to show how academic expectations distinctly influence the academic performances of African American males and females in gender-specific ways.

In light of research showing that parents’ and teachers’ academic expectations for students are related to these students’ academic self-efficacy and academic performance (Gill and Reynolds, 2000; Benner and Mistry, 2007), and that academic self-efficacy and academic performance are directly related (Bandura, 1986), these expectations may influence students’ academic performance by way of their academic self-efficacy. Put another way, the academic performances of African American students may be related to the gender-specific messages these students perceive through their parents’ and teachers’ academic expectations. The lower academic expectations parents and teachers have of African American males could potentially operate as social persuasions and influence the gender differences we see in these students’ own academic self-efficacy and academic performance.

Numerous studies have examined the direct effects of parents’ and teachers’ academic expectations on students’ academic performance; however, this study is unique in two ways: 1) This study explores both direct and indirect influences on students’
academic performance; and 2) This study adds to literature on how African American students’ use their academic self-efficacy. Specifically, this study will test the mediating role of academic self-efficacy between parents’ and teachers’ academic expectations and the academic performances of African American male and female adolescents.

The research questions driving this study are as follows:

1. Do parents and teachers have different academic expectations for African American males and African American females?

2. Are parents’ and teachers’ academic expectations a predictor of academic self-efficacy for African American youth?

3. Is academic self-efficacy a predictor of academic achievement for African American youth?

4. Are parents’ and teachers’ academic expectations a predictor of academic achievement for African American youth?

5. Does academic self-efficacy serve as a mediator between parents’ and teachers’ academic expectations and African American youth’s academic achievement?

Hypotheses:

H1. It is hypothesized that both parents and teachers will report higher academic expectations for African American females than African American males.

H2. It is expected that parents’ and teachers’ academic expectations will predict academic self-efficacy for African American youth.

H3: It is expected that academic self-efficacy will be a predictor of academic achievement for African American youth.

H4. It is hypothesized that parents’ and teachers’ academic expectations will serve as a predictor of academic achievement for African American youth.

H5. The researcher expects academic self-efficacy to serve as a mediator between parents’ and teachers’ academic expectations and the gender differences in African American youth’s academic achievement.
Methods

Data

Data for the current study were taken from the Educational Longitudinal Study of 2002 (ELS: 2002) public-use files administered by the National Center on Education Statistics (NCES). The ELS: 2002 represents the most current and complete data set of school-based longitudinal studies sponsored by NCES. It was designed to assess various educational processes and outcomes of U.S. high school students beginning in their sophomore year (10th grade), with updates every two years. Base-year (high school sophomore) and two year follow-up (high school senior) data were used in the current study.

The ELS: 2002 employed a two-stage sampling process. The first stage involved selecting high schools for participation among public and private schools that contained 10th grade classrooms. Of the 1,221 eligible schools, 752 provided sophomore enrollment lists. In the second stage of the sample design process, 26 students were selected from each enrollment list.

In order to obtain information about students’ home background and school experiences, one parent as well as one English and one Math teacher completed study measures as part of the base-year data collection.

The African American sample included 2,020 students. Eighty-eight percent (N=1,779) were from public schools and the remaining twelve percent (N=241) were from private schools. The response rate for the African American sample was 90% for teachers and 83% for parents (Ingels et al., 2005). ELS investigators used mean imputation for missing values.
Sample

The study sample consisted of 166 male and 258 female African American students. This sample represents African American students with complete base year (2002) and two year follow-up (2004) ELS data. Students’ ages ranged from 14 to 18 years. Eighty-four percent of these students attended public schools, while the remaining 16% attended private schools. Of the students that attended public schools, 38% of them came from urban schools, 49% from suburban schools, and 13% from rural schools.

More than 75% of these students’ parents reported attending some college and nearly 25% had received a graduate degree. Additionally, 37% of parents reported total 2001 family incomes of $50,001 or greater, 32% reported incomes between $25,001 and 50,000, and the remaining 31% reported total incomes below $25,000. The average number of dependents per family was 3.

Measures

Parents’ Academic Expectations. Parents’ academic expectations were measured with the following item, “How far in school do you expect your 10th grader will go.” Response options included: 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”. This item was administered at base year to parents as part of the Parent Questionnaire (NCES, 2002). This particular item along with other comparable single-item measures have been widely used to assess parental academic expectations in similar studies (see Englund et
al., 2004; Gill and Reynolds, 2000; Halle et al., 1997; Trusty, 2002; and Wood et al., 2007).

**Teachers’ Academic Expectations.** Teachers’ academic expectations were measured with the following item, “How far in school do you expect this student to get.” Response options included: 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”. Teachers’ academic expectations were obtained at the base year from the Teacher Questionnaire (ELS:2002).

**Academic Self-efficacy.** The academic self-efficacy scale, which was adapted and adjusted from the Motivated Strategies for Learning Questionnaire (Pintrich et al., 1993), measured students’ perceptions of their ability to perform successfully in certain subject areas. Separate math and English academic self-efficacy scales (i.e. math self-efficacy and English self-efficacy) were designed by ELS investigators and kept separate for the current study. The measure consisted of the following five items: (1) I’m confident that I can do an excellent job on my Math/English tests, (2) I’m certain I can understand the most difficult material presented in Math/English texts, (3) I’m confident I can understand the most complex material presented in Math/English texts, (4) I’m certain I can master the skills being taught in my Math/English class, and (5) I’m confident I can do an excellent job presented by my Math/English teacher. These 5-items were scored on a four-point scale from 1 “almost never” to 4 “almost always.” This measure has also been used in other studies with adolescents (Fan and Williams, 2010;
Liu and Koirala, 2009). Standardized values (i.e., z-scores) were used for both scales. Z-scores were derived from the composite of the five items for math and English self-efficacy. For the current sample, the mathematics self-efficacy scale reported a Cronbach’s Alpha of 0.91 and the English self-efficacy scale reported a Cronbach’s alpha of 0.91.

**Academic Performance.** Academic performance was assessed from students’ cumulative grade point average (i.e. grades 9-12) at the first follow-up. Data for cumulative grade point average (GPA) was collected from student’s transcripts and was computed on a 4.0 scale, however, the ELS: 2002 study captured this variable categorically using the following scale: “0” = 0.00-1.00 GPA; “1” = 1.01-1.50 GPA; “2” = 1.51-2.00 GPA; “3” = 2.01-2.50 GPA; “4” =2.51-3.00 GPA; “5” = 3.01-3.50; 6 =3.51-4.00 GPA.
Results

This study tested a mediation model that examined the relationships among parents’ and teachers’ academic expectations, students’ academic self-efficacy, and students’ academic performance.

Descriptive Statistics

Table I provides descriptive statistics for all adolescents in the study. Tables II and III provide descriptive statistics by gender. In order to determine whether gender differences existed among the study variables, and to address the first research question, one-way analyses of variance (ANOVA) were performed. Significant gender differences emerged for students’ academic performance (F=5.17, p<0.05), parents’ academic expectations (F=4.47, p<0.05), English teachers’ academic expectations (F=4.00, p<0.05), and students’ math self-efficacy (F = 8.84, p<0.01).

In terms of students’ academic performance (i.e. GPAs), African American females had significantly higher grades than African American males. Specifically, 57% of African American females reported a cumulative grade point average greater than a 2.5 compared to 44% of African American males. Histograms displaying the distributions of students’ GPAs show a slightly positive skew for African American males and a slightly negative skew for African American females. Fewer African American males were represented at higher GPAs than at lower GPAs. For African American females, fewer of them were represented at lower GPAs than at higher GPAs.

Parents had higher academic expectations of students than teachers, however, both had higher academic expectations for African American females (Parents M=5.46, SD=1.43; English Teachers M=4.19, SD=1.45; Math Teachers M=3.98, SD=1.44) than
African American males (Parents M=5.16, SD=1.43; English Teachers M=3.89, SD=1.53; Math Teachers M=3.89, SD=1.43). While parents expected both African American males and African American females to obtain a 4-year college degree, teachers, on the other hand, only expected African American males and females to attend college, but not complete a 4-year college degree (See Tables II and III for results by teacher and gender).

There were also significant gender differences in students’ math self-efficacy. Specifically, African American males reported higher math academic self-efficacy (M=0.22, SD=0.98) than females (M = -0.07, SD=0.95). While African American males, on average, reported above average math self-efficacy scores, African American females, on the other hand, reported below average scores. African American males appeared to be more confident in their mathematic abilities than their female counterparts.

**Correlations**

Correlations were executed in order to assess the linear relationship among variables necessary for Ordinary Least Squares regression analyses. Due to the significant gender differences that emerged among many of the study variables, separate correlations were conducted for males and females (See Tables II and III). Both African American males and females displayed significant positive associations between academic performance and the academic self-efficacy and expectation variables. Students whose parents and teachers had higher academic expectations of them tended to have higher cumulative grade point averages. Specifically, parents’ academic expectations (Males r=0.32, p<0.01; Females r=0.32, p<0.01) and teachers’ academic expectations (math teachers: Males r=0.57, p<0.01; Females r=0.32, p<0.01; English
teachers: Males $r=0.61$, $p<0.01$; Females $r=0.59$, $p<0.01$) were positively associated with both male and female students’ academic performance. Additionally, students with higher academic self-efficacy scores (i.e. math or English academic) had higher cumulative grade point averages (math self-efficacy: Males $r=0.35$, $p<0.01$; Females $r=0.16$, $p<0.01$); English self-efficacy: Males $r=0.21$, $p<0.01$; Females $r=0.16$, $p<0.01$).

The largest correlation relationships for African American males were between English teachers’ academic expectations and academic performance. For these students, the higher the English teachers’ academic expectations were of them, the higher their academic performance ($r = 0.61$, $p<0.01$). The largest correlation relationship for African American females was between math teachers’ academic expectations and academic performance. For these students, the higher their math teachers’ academic expectations were of them, the higher their academic performance ($r = 0.61$, $p<0.01$).

**Regression Analysis**

Using Baron and Kenny’s (1986) mediation model, a series of regression analyses were conducted separately for African American males and females (See Figures 1 through 4). The first pathway examined the mediating role of students’ math self-efficacy between parents’ and math teachers’ academic expectations and African American adolescents’ academic performance (i.e. math model). The second pathway examined the mediating role of students’ English self-efficacy between parents’ and English teachers’ academic expectations and African American adolescents’ academic performance (i.e. English model). In both models, parents’ and teachers’ academic expectations (i.e. either math or English depending on the model) served as the independent variables, academic performance served as the dependent variable, and
teachers’ subject-based academic expectations (e.g. math or English) served as the covariate.

As a basis to justify testing mediation, the first step was to establish whether a significant relationship existed between the independent variables and the dependent variable of the study. Therefore, students’ academic performance was regressed onto parents’ academic expectations, math teachers’ academic expectations, and English teachers’ academic expectations. Both parents’ and teachers’ academic expectations were significant predictors of African American male (math teachers: b=0.291, p=0.00; English teachers b=0.376, p=0.00) and female (math teachers b=0.363, p=0.00; Female English teachers b=0.320, p=0.00) students’ academic performance. Parents’ academic expectations, however, did not emerge as a significant predictor of students’ academic performance for either gender (Males Parent b=0.032, p=0.63; Females Parent (b=0.081, p=0.09). Given prior research supporting a relationship between parents’ academic expectations and students’ academic performance (Davis-Kean, 2005; Froiland and Davidson, 2014; Hopson and Weldon, 2013; Wood, Kaplan, McLoyd, 2007), parents’ academic expectations remained as a covariate in each gender’s mediation analysis. Mediation results for African American males are displayed in Figures 1 and 2 and results for African American females are displayed in Figures 3 and 4.

**African American Males**

*Figure 1* displays mediation results using math teachers’ academic expectations, African American males math self-efficacy, and African American males academic performance. Path a examined the relationship between math teachers’ academic expectations and students’ math self-efficacy. To this end, students’ math self-efficacy
was regressed onto math teachers’ academic expectations, controlling for parents’ and English teachers’ academic expectations. Results showed that African American males’ math self-efficacy was significantly related to math teachers’ academic expectations (b=0.254, p=0.00), indicating an association between African American males’ perception about their math abilities and the academic expectations their math teachers have of them.

In paths b and c, academic performance was regressed onto students’ math self-efficacy and math teachers’ academic expectations respectively. Path b examined the relationship between the study’s possible mediator (i.e. students’ math self-efficacy) and the dependent variable (i.e. academic performance). In testing this path, our covariate, English teachers’ academic expectations, became significant. After controlling for parents’ and English teachers’ academic expectations, African American males’ math self-efficacy was significantly related to their academic performance (b=0.377, p=0.00). Path c examined the relationship between the independent variable (math teachers’ academic expectations and the dependent variable. Again, after controlling for parents’ and English teachers’ academic expectations, math teachers’ academic expectations were significantly related to African American males academic performance (b=0.291, p=0.00).

Path c’ is very similar to path c with the addition of controlling for our students’ math self-efficacy. Per Baron and Kenny (1986), for full mediation to exist, the observed significant relationship between the study’s independent variable (i.e. math teachers’ academic expectations) and dependent variable (i.e. students’ academic performance) should not be significant once students’ math self-efficacy is entered into the model. Results showed that for African American males, math teachers’ academic expectations
remained significantly related to academic performance \((b=0.212, p=0.01)\), indicating that full mediation did not exist in this model. Math teachers’ academic expectations, however, did become less predictive of academic performance once students’ math self-efficacy was added \((i.e. c > c')\), suggesting a partial mediation relationship.

When the mediator reduces the predictive power of the independent variable on the dependent variable, but yet full mediation is not supported, a Sobel significance test \((Sobel, 1982)\) can be used in order to test the indirect effects \((i.e. \text{partial mediation})\) a possible mediator may have between the independent and dependent variables \((Baron and Kenny, 1986)\). Results of the Sobel test indicated that students’ math self-efficacy partially mediated the relationship between math teachers’ academic expectations and students’ academic performance for African American males \((t = 2.55, p=0.01)\).

Additionally, Path \(c'\), which included all of our study variables, had a positive effect on predicting African American males’ academic performance over our initial model \((\Delta R^2=0.039, F=35.32, p<0.01)\), evidencing the added value of including math self-efficacy.

Results of the study’s mediation analyses using English teachers’ academic expectations, students’ English self-efficacy, and African American males’ academic performance are displayed in Figure 2. We followed the same process outlined in Baron and Kenny \((1986)\) used in our math model above. Path \(a\) examined the relationship between English teachers’ academic expectations and students’ English self-efficacy. Students’ English self-efficacy was regressed onto English teachers’ academic expectations, controlling for parents’ and math teachers’ academic expectations. Results showed that for African American males, their English self-efficacy was not significantly related to their English teachers’ academic expectations \((b=-0.082, p>0.05)\) of them, after
controlling for math teachers’ academic expectations and parents’ academic expectations. Consequently, mediation could not be established using English academic self-efficacy for this model. The complete mediation analyses, including results of paths $b$ and $c$ can be seen in Figure 2.

**African American Females**

*Figure 3* displays mediation results using math teachers’ academic expectations, African American females math self-efficacy, and African American females academic performance. Path $a$ examined the relationship between math teachers’ academic expectations and students’ math self-efficacy. Students’ math self-efficacy was regressed onto math teachers’ academic expectations, controlling for parents’ and English teachers’ academic expectations. Results showed that African American females’ math self-efficacy was significantly related to math teachers’ academic expectations ($b=0.363$, $p=0.00$), indicating a relationship between African American females’ thoughts about their math abilities and the academic expectations their math teachers have of them.

In paths $b$ and $c$, academic performance was regressed onto students’ math self-efficacy and math teachers’ academic expectations respectively. Path $b$ examined the relationship between the study’s possible mediator (i.e. students’ math self-efficacy) and the dependent variable (i.e. academic performance). After controlling for parents’ and English teachers’ academic expectations, African American females math self-efficacy was unrelated to their academic performance ($b=0.12$, $p>0.05$). This result suggested that for these African American females, their personal beliefs about their math abilities had no direct influence on their academic performance and therefore math self-efficacy could not serve as a possible mediator. *Figure 3* supports these findings. From the figure you
can observe that adding math self-efficacy to our model produced no additional value. This can also be seen in path $c'$, where adding math self-efficacy added no additional value to the relationship between math teachers’ academic expectations and African American females academic performance (i.e. $c = c'$). Interestingly, however, both covariates, parents’ academic expectations ($b=0.143, p<0.05$) and English teachers’ academic expectations ($b=0.52, p<0.05$) became significant in path $b$. This suggests that, controlling for math self-efficacy, English teachers’ academic expectations and parents’ academic expectations predicted African American females’ academic performance. Due to the insignificance of our mediator variable, math self-efficacy, no further mediation analyses were performed for African American females for the math model.

Figure 4 displays mediation results using English teachers’ academic expectations, African American females English self-efficacy, and African American females academic performance. Path $a$ examined the relationship between English teachers’ academic expectations and students’ English self-efficacy. Students’ English self-efficacy was regressed onto math teachers’ academic expectations, controlling for parents’ and math teachers’ academic expectations. Results showed that African American females’ English self-efficacy was significantly related to English teachers’ academic expectations ($b=0.21, p<0.05$), indicating a relationship between African American females’ thoughts about their English abilities and the academic expectations their English teachers had of them.

In paths $b$ and $c$, academic performance was regressed onto students’ English self-efficacy and English teachers’ academic expectations respectively. Path $b$ examined the relationship between the study’s possible mediator (i.e. students’ English self-efficacy)
and the dependent variable (i.e. academic performance). After controlling for parents’ and math teachers’ academic expectations, African American females English self-efficacy was unrelated to their academic performance ($b=0.05, p>0.05$). This result suggested that for these African American females, their personal beliefs about their English abilities had no direct influence on their academic performance and therefore English academic self-efficacy could not be established as a mediator.
Discussion

This study examined the potential mediating role of academic self-efficacy in the relationship between parents’ and teachers’ academic expectations and the academic performances of African American adolescents. Partial mediation was found in one of the four models tested. These findings, along with their implications and relationships to existing research, will be discussed.

The study’s first hypothesis examined whether parents and teachers held lower academic expectations for African American males compared to females. Confirming this hypothesis, the parents and teachers in this study held higher academic expectations for African American females than African American males. Although the mean for parents’ academic expectations was statistically higher, categorically, these parents expected both their sons and daughters to obtain at least a 4-year college degree. Teachers had lower academic expectations of students than parents. On average, they expected African American females to attend a 4-year university (but not graduate), while only expecting American males to complete a 2-year college degree.

Given that the gender differences in parents’ academic expectations were small and that our full mediation results were only significant for teachers, the following discussion will focus only on the differences found in teachers’ academic expectations.

The lower academic expectations teachers had of African American males compared to African American females could be part of a larger macro-system in which African American males are inferring messages that they are not as smart as their peers. Jussim et al. (2005) describes this as a ‘concurrent accumulation effect.’ A concurrent accumulation effect occurs as the result of “the accumulation of effects on targets of
multiple perceivers’ expectations within a single time frame (Jussim et al., 2005, p. 147). The result of such an effect strengthens the impact than if the effect only came from one source. Teachers, through their lower academic expectations, could be perpetuating the negative academic stigmas (Major et al., 1998) already surrounding African American male students and exacerbating the harmful effect these stigmas may have on these students’ academic performance.

The gender differences in teachers academic expectations observed in the present study corroborate the findings of Ross and Jackson (1991). Ross and Jackson found gender differences, favoring African American females, in both teachers’ academic expectations and students’ academic performance. Given the similar directional relationship observed in teachers’ expectations and students’ academic performance, Ross and Jackson (1991) suggested that the gender differences in teachers’ academic expectations might be contributing to the gender differences in students’ academic performance.

Results of the study’s second hypothesis were mixed. As noted previously, the data used in this study contained two subject-specific (similar to academic self-efficacy measures) teachers’ expectation measures (e.g. math teachers’ academic expectations and English teachers’ academic expectations). Therefore, for this hypothesis, separate regression models were conducted for each gender (4 models total). Two models included math teachers’ academic expectations along with parents’ academic expectations and the other model included only English teachers’ academic expectations along with parents’ academic expectations. Results showed that for the African American males in this study, only math teachers’ and parents’ academic expectations
predicted both their math efficacy and English self-efficacy. What these students thought about their math and English capabilities was influenced by what their parents and math teachers expected from them. When parents’ and math teachers’ academic expectations were high, so too were students’ academic self-efficacy.

For the African American females in this study, results were different. Unlike African American males, parents’ academic expectations did not predict neither African American females math self-efficacy nor their English self-efficacy. In terms of teachers’ academic expectations of these students, there were significant findings albeit still different from those observed in our African American male population. Specifically, math teachers’ academic expectations predicted only math self-efficacy and English teachers’ academic expectations only predicted English self-efficacy. Math and English teachers’ academic expectations only influenced African American female students’ beliefs about their academic capabilities for the subject in which the teacher taught.

It is apparent that the teachers’ and parents’ academic expectations in this study influenced African American male and female students’ academic self-efficacy differently. For African American males, what their parents’ and math teachers’ expected of them had a general impact, influencing both their math and English self-efficacy. For the African American females, however, only what their teachers’ expected of them seemed to impact their academic self-efficacy. Additionally for the females in this study, the extent of the impact of their math and English teachers’ academic expectations of them were more specific, only influencing these students’ self-efficacy in the domain in which the teachers taught. Surprisingly, parents’ academic expectations influenced the English and math academic self-efficacies of African American males
only. We will discuss this particular finding in our analyses of the complete mediation model later in this section.

Undermining these results for African American males is a uniquely strong correlation between their math teachers’ expectations of them and both their math and English efficacies. Correlations between math teachers’ academic expectations and both self-efficacy measures were twice as strong as the correlations between English teachers’ academic expectations and both self-efficacy measures. For these students, what their math teachers expected from them extended beyond the domain of mathematics, informing their thoughts of both their English and math capabilities.

The results found here for African American females were more expected than the results we found for African American males. For the African American females in this study, both their English and math teachers’ academic expectations were significantly related to their relative self-efficacy measures, as oppose to only math teachers’ academic expectations, as in the case for African American males. In the literature review, I presented research stating that African American males usually report lower academic self-efficacy scores than their female counterparts. In the present study, however, African American males reported higher math and English self-efficacy scores.

In their longitudinal study of children in late childhood/early adolescence, Cole and colleagues (1999) found no significant gender differences amongst children at 3rd grade, however, as time progressed, they began to see differences in academic self-efficacy between males and females. Males are more likely to report higher competency beliefs about their mathematics abilities than females (Casey et al., 2001; Cole et al., 1999; Frey and Ruble, 1987; Hyde et al., 1990; Kurtz-Costes, 2008; Pressley et al., 1987;
These differences are found as early as 1st grade (Wigfield and Eccles, 2000) and tend to become most drastic in adolescence (Casey et al., 2001; Hyde, 1990; Kurtz-Costes, 2008). Also, parents and teachers are known to transmit gender stereotypic beliefs to their children around mathematics (Eccles, 1984; Jacobs et al., 1993), despite students’ actual math performance (Tiedemann, 2000).

African American males’ reports of their math academic abilities, along with parents’ and teachers’ transmittal of gender stereotypic beliefs may be the result of an actual endorsement of gender stereotypes in math. Academic gender stereotypes promote a belief that boys are better in mathematics than girls and girls are better in verbal domains than boys (Bornholt et al., 1994; Eccles et al., 1993; Hyde et al., 1990, Jacobs et al., 2002; Marsh et al., 2005; Marsh and Yeung, 1998; Stetsenko et al., 2000; Wigfield et al., 1997). Social status theory states that boys are more likely than girls to endorse traditional gender stereotypes (Kurtz-Costes et al., 2008).

For the African American females in this study, all of their teachers seem to play a role in the construction of their academic efficacies whereas for African American males, their math teacher appears to be more influential to their academic efficacies than others. This difference may be driven by African American males overall tendency to report higher self-efficacy scores, which could be influenced by academic gender stereotypes favoring them in math.

Results for the study’s third hypothesis were mixed. It was hypothesized that academic self-efficacy would predict students’ academic achievement. In order to test this hypothesis, four separate regression models were conducted. For each gender, one model included only math self-efficacy along with academic performance and the other
model included only English self-efficacy with academic performance. Using social cognitive theory, we expected all academic self-efficacy measures to be significantly related to students’ academic performance. Guided by this understanding, our results presented here are somewhat surprising and definitely unexpected. Of the four models, only the math self-efficacy model for African American males was significant. African American males in this study who were more confident in their math abilities received higher grades than those whom were less confident. For these students, their English academic self-efficacy was unrelated to their overall academic performance. For the African American females in this study, their beliefs in both their math and English abilities were unrelated to their overall academic performance.

As discussed in the previous hypothesis, math seemed to be a differentiating factor in the results observed between African American male and female students. Here, there was a distinctly strong relationship between students’ math self-efficacy and academic performance for the African American males in this study. This correlation was double the strength than that of the African American females counterparts.

The results here represent an extension of what we discussed in the prior hypothesis; therefore, the following discussion will be similar in tenor. Through their interactions with parents, teachers, peers, and media, the African American adolescents in this study could be developing gender-based beliefs about their capabilities, especially around math. Kurtz-Costes et al. (2008) found that social beliefs that boys are better than girls in mathematics and science were related to self-perceptions of mathematics and science competence among boys but not among girls. The ubiquitous gender stereotypic
beliefs that males are better in math than females could have influenced the students in this study.

The study’s fourth hypothesis examined the relationship between parents’ and teachers’ academic expectations and student’s academic performance. Here our hypothesis was partially confirmed. Only teachers’ academic expectations were significant for both genders. In fact, teachers’ academic expectations alone accounted for over 40% of the variance in academic performance, evidencing the strong influence teachers’ academic expectations had on the students in this study. The fact that parents’ academic expectations did not emerge as a significant predictor of African American adolescents’ was an unexpected finding. We will discuss this finding in our overall analysis of the complete model.

Teachers’ academic expectations have a long history of influencing the academic performances of students, regardless of race and gender. Teachers’ academic expectations of students have been associated with teachers’ behaviors, which typically promote the initial expectation, creating a self-fulfilling prophecy effect (Brophy 1983, Jussim, 1989). Research regarding teacher-student relationships informs us that teachers respond differently to students of whom they have lower academic expectations (Good, 1970; Good, 1981; Good, 1982; Good and Nichols, 2001). These teachers are less likely to praise students for their good work or call on them to answer questions (Kerman, 1979). Additionally, these teachers are more likely to distance themselves from these particular students, criticize their work, and provide these students with less accurate feedback (Cooper, 1979; Good, 1982, 1981, 1970). Teachers’ expectations therefore have the tendency to influence the academic performances of African American males
and females directly, via inferences, or indirectly, through teacher behavior. Most research on expectancy effects has examined the unique contribution of teachers’ academic expectations to students’ future achievement, and, while these effects are sometimes small (Jussim et al., 1996), they are significantly larger for African American students (as compared to European Americans), students from low-SES backgrounds, and students with a history of poor academic performance.

For this particular study, teachers’ academic expectations were similarly associated with the academic performances of both African American males and females, however, teachers had lower academic expectations of African American males than African American females. Given our discussion of how teachers’ academic expectations influence students’ academic performance, we expected the African American males in our sample to have lower grades compared to African American females. Indeed, African American males received significantly lower grades than the African American females in this study. Although we do not know the exact cause of this difference, research supports the idea that teachers’ academic expectations and resulting behavior could potentially be a contributing factor.

The study’s last hypothesis is a culmination of the prior hypotheses discussed in this section. Here the hypothesis is that academic self-efficacy will mediate the relationship between parents’ and teachers’ academic expectations and African American youth’s academic performance. Results showed that only math self-efficacy partially mediated the relationship between math teachers’ academic expectations and the academic performances of African American males. No mediation relationship emerged for African American females. This overall result points to a common theme discussed in
this section regarding the unique relationship between the African American males in this study and the impact of math-related influences (i.e. math teachers academic expectations and math academic self-efficacy) on their academic performance.

This study adds to existing educational literature by suggesting that African American males’ academic performance is indirectly influenced by their math teachers’ academic expectations. Knowing that for some students, teachers may indirectly influence their academic performance is an area for future inquiry. Here, indirect influences were operationalized in the form of teachers’ academic expectations, however, other operational influences could include teachers behavior, body language, tone of speech, attention given to students, and feedback approach to name a few. This is definitely an area for future inquiry.

The non-significant relationship between the academic self-efficacy measures (e.g. math and English academic self-efficacy) and academic performance for the African American females in the current study warrants further review. These results suggest that for these particular students, what they think about their math and English capabilities is unrelated to their academic performance. Having low math and English self-efficacy is not indicative of having low academic self-efficacy overall; these results should not be interpreted as their being no relationship between academic self-efficacy and academic performance for African American females. Using a general measure of academic self-efficacy, studies have reported significant relationships between African American females and their academic performance (Saunders et al., 2004, Buchanan and Selmon, 2008). For the African American females in this study, their academic performance may
be more closely related to a more general sense of academic self-efficacy rather than subject specific academic self-efficacy beliefs.

The takeaway here, however, is that teachers should be cognizant not only of what they say and do, but how they say and do things, as these behaviors have the tendency to convey messages to students about their academic capabilities. Teachers’ academic expectations were predictive of both African American male and female students’ math and English self-efficacy. Stigmatized groups, African American students in general, and African American males specifically, may present higher vulnerabilities to these indirect teacher influences. Gender stigmatized academic domains, such as mathematics, may also present an added vulnerability for some students. For these reasons, teachers should also be open to exploring these outside influences, including their own biases and academic expectations of students, which may be negatively influencing some students’ academic motivation and/or performance. For the students in this study, some teachers could be entering classrooms with gendered academic expectations for African American adolescents, possibly resulting in behaviors contributing to African American males underachievement compared to their African American female counterparts. An increased consciousness on behalf of teachers of their academic expectations of these students would hopefully help to control some of the academically deleterious implicit messages African American males may be receiving from them.

**Limitations**

One limitation of the current study is that the design may have created an inherent bias towards teachers’ academic expectations. In the present study, the correlation
between teachers’ academic expectations and students’ academic performance was almost twice than that of parents’ academic expectations and students’ academic performance for both genders. Given that teachers are typically the individuals who assign grades, does that present an inherent bias in models that juxtapose inside-the-school versus outside-the-school influences? This raises the question of how to best study students’ attitudes, motivations, behavior, and outcomes in school using ‘within-school’ influences alongside influences that occur outside of the school. Using statistical techniques that account for clustering, such as Hierarchical Linear Modeling (HLM), allows for the examination of group-related relationships. Using HLM, cluster analyses could be examined at the family, classroom, school and neighborhood level. This is a direction for future research.

The high correlation and shared variance of the study’s independent variables (i.e. parents’ and teachers’ academic expectations) also posed a limitation. Testing two highly correlated items in the same model runs the risk of each independent variable’s individual effects on the dependent variable not being fully realized due to its relationship with the other independent variable. This shared variance does not reduce the predictive power or reliability of the model as a whole; it only affects calculations regarding individual predictors. The insignificance of parents’ academic expectations and English teachers’ academic expectations may have been influenced by this shared variance. Study variables were tested in order to rule out multicollinearity, which is an extreme occurrence of two independent variables being too highly correlated (which would bias results). Multicollinearity results were insignificant, suggesting that the shared variance
between the two variables were not too high as to pose a threat to the study’s overall findings.

Another limitation of this study was using cumulative GPA with subject-specific academic self-efficacy measures. Results may have looked different if a general measure of academic self-efficacy was used. The association found between African American males and their math self-efficacy, however, would have been precluded.

**Future Research**

Future research should continue to examine how students’ academic performance is influenced by simultaneous factors. Students are rarely confronted with one influence in isolation. Many times there are multiple influences that students must navigate and negotiate. The closer research designs can mirror the actual lived experiences of students, the more beneficial and practical their findings will become. In the present study, we looked at the simultaneous influences of parents’ and teachers’ academic expectations. By examining both of these variables, we were able to draw unique conclusions about their collective influence on African American adolescents.

Social Cognitive Theory’s Triadic Reciprocal Determinism Model posits that there is a bi-directional relationship between an individual’s thoughts and their actions, thus future behavioral research should consider research designs that explore different paths for related variables. For example, a great compliment to this study would be one that examined whether parents’ and teachers’ academic expectations mediated the relationship between academic self-efficacy and African American adolescents academic performance. The present study took a “thought precedes action” approach, however, we also know that action informs thoughts. This study was predicated on the fact that
academic self-efficacy precedes behavior when it is also possible and noted in the literature that behavior can and does influence academic self-efficacy (Bandura, 1986). It is possible that the students’ academic performance in this sample could have served as an informant to their academic self-efficacy. Individuals are not only consumers of their environment, but also producers. Our research designs must be complex enough to capture this reality, yet simplistic enough for others to interpret and make practical meaning from it.

In light of research suggesting that African American males disproportionately encounter negative school experiences in relation to their peers, future research could benefit from examining the relationship between these negative schooling experiences and their academic achievement. There is a dearth of research exploring the effects that schools (as a structure and system) have on African American students, particularly African American males. An implication of this could be that the relationship between structural or systematic influences (i.e. schools or the art of schooling) in shaping these students’ self-thoughts, motivation, and achievement could be getting ignored.

In regards to African American females, researchers may find it useful to continue exploring possible indirect predictors (i.e. mediators) to these students’ academic performance. In the currently study, academic self-efficacy (operationalized by English and Math measures), did not emerge as a successful mediator in the models tested. This should not deter researchers from examining indirect influences. Both direct and indirect influences are important in understanding what informs and influences African American females’ academic performance.
Conclusion

In terms of academic achievement, it appears that math academic self-efficacy serves different purposes for African American males and females. Due to these differences, the lower academic expectations of math teachers could be leading African American males to perform below their African American females counterparts. Efforts should be made to accentuate the areas where all students feel confident in hopes to increase their overall sense of academic self-efficacy. This becomes especially important for students, such as African American males, who may be receiving social messages that they are not as intelligent as their peers. This study suggests that math education may be an area for teachers to explore.

Parents must also realize their role in student motivation. In this study we postulated that parents may be contributing to the significance that African American males place on their math teachers. Parents carry the power to attenuate or exacerbate social messages their children receive from the social environment. This creates an ability and conscious awareness that should not be taken lightly or ignored.

This study suggests that what predicts African American males’ and females’ academic performance may differ by gender. This is important to note as we attempt to plan and implement interventions to increase the academic performance of African American youth. General approaches that group or treat all African American youth as a homogeneous group could be problematic given the observed differences found in this study. This knowledge should be carried forward and leveraged as practitioners and teachers attempt to motivate African American adolescents towards academic success.
CITED LITERATURE


Table 1  
Means, Standard Deviations, and Correlations of Study Variables for all African American Adolescents

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>M(SD)</th>
<th>English Teacher Academic Expectations</th>
<th>Math Teacher Academic Expectations</th>
<th>English Academic Self-Efficacy</th>
<th>Math Academic Self-Efficacy</th>
<th>Cumulative Grade Point Average</th>
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<td>Parent Expectations</td>
<td>424</td>
<td>5.34(1.44)*</td>
<td>-</td>
<td>.36**</td>
<td>.37**</td>
<td>.16**</td>
<td>.13*</td>
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*p < .05. **p < .01.

Note. Expectations (parent & teacher) were measured as follows: 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.” Academic self-efficacy (Math & English) are reported in z-scores. Cumulative GPA was captured categorically using following scale: 0 = 0.00-1.00; 1 = 1.01-1.50; 2 = 1.51-2.00; 3 = 2.01-2.50; 4 = 2.51-3.0; 5 = 3.01-3.50; 6 = 3.51-4.0.
Table II
Means, Standard Deviations, and Correlations of Study Variables for African American Males

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<th>Math Teacher Academic Expectations</th>
<th>English Academic Self-Efficacy</th>
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<td>.34**</td>
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<tr>
<td>Efficacy</td>
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*p < .05. **p < .01.

Note. Expectations (parent & teacher) were measured as follows: 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.” Academic self-efficacy (Math & English) are reported in z-scores. Cumulative GPA was captured categorically using following scale: 0 = 0.00-1.00; 1 = 1.01-1.50; 2 = 1.51-2.00; 3 = 2.01-2.50; 4 =2.51-3.0; 5 = 3.01-3.50; 6 =3.51-4.0
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<th>English Teacher Academic Expectations</th>
<th>Math Teacher Academic Expectations</th>
<th>English Academic Self-Efficacy</th>
<th>Math Academic Self-Efficacy</th>
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<td>.59**</td>
<td>.27**</td>
<td>.14*</td>
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<td>Cumulative Grade Point Average</td>
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</table>

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Note. Expectations (parent & teacher) were measured as follows: 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.” Academic self-efficacy (Math & English) are reported in z-scores. Cumulative GPA was captured categorically using following scale: 0 = 0.00-1.00; 1 = 1.01-1.50; 2 = 1.51-2.00; 3 = 2.01-2.50; 4 = 2.51-3.0; 5 = 3.01-3.50; 6 = 3.51-4.0.
Figure 1. African American males’ mediation analysis – math
Figure 2. African American males’ mediation analysis – English
Figure 3. African American females’ mediation analysis – math
Figure 4. African American females’ mediation analysis – English
Appendix A

University of Illinois at Chicago

Office for the Protection of Research Subjects (OPRS)
Office of the Vice Chancellor for Research (MC 672)
203 Administrative Office Building
1737 West Polk Street
Chicago, Illinois 60612-7227

Notice of Determination of Human Subject Research

January 25, 2013

*20130080-72540-1*
20130080-72540-1

Danny Lambouths, BBA
Department of Youth Development
College of Education
140 W Harrison, M/C 147
Chicago, IL 60612
Phone: (312) 413-2640 / Fax: (312) 996-6400

RE: Protocol # 2013-0080
Self-Efficacy’s Impact on African American Youth’s Academic Performance: A Gendered Experience

Sponsor: None

Dear Danny Lambouths:

The UIC Office for the Protection of Research Subjects received your “Determination of Whether an Activity Represents Human Subjects Research” application, and has determined that this activity DOES NOT meet the definition of human subject research as defined by 45 CFR 46.102(f).

You may conduct your activity without further submission to the IRB.

If this activity is used in conjunction with any other research involving human subjects or if it is modified in any way, it must be re-reviewed by OPRS staff.
VITA

DANNY L. LAMBOUTHS III
4143 S. Wabash, Unit GN
Chicago, IL  60653
email: dlambo2@uic.edu    mobile: 773.984.0204

Education

Doctorate of Philosophy (Ph.D.) in Educational Psychology
University of Illinois at Chicago, Chicago, IL
Concentration: Human Development & Learning

Research interests: Racial disparities, parent racial socialization, racial disparities, contemporary racism

Master of Education (M.Ed) in Youth Development, May 2015
University of Illinois at Chicago, Chicago, IL
Concentration: Research & Methodologies

Master’s Thesis: Impact of Self-Efficacy on African American Youth’s Academic Performance: A Gendered Experience
Chair: Marisha L. Humphries, Ph.D.
Defense Date: December 17, 2014

Bachelor of Business Administration (BBA), April 2003
University of Michigan, Ann Arbor, MI
Concentrations: Finance/Accounting/Organizational Behavior

Research Experience

June 2013 - Present
Research Assistant
Cutoffs Project, University of Illinois at Chicago
Faculty Investigator, Rachel A. Gordon, Ph.D.

IES-funded meta-analysis study using 12 large-scale studies exploring the relationship between child-care quality and child outcomes. The overall goal of this project is to test whether there is evidence that providing policy incentives for higher quality child-care would be expected to lead to children’s better school readiness

- Cleaned raw data on 3 of the 12 datasets
- Examined dataset properties (i.e. user guides, raw data, code books) and prepared summary “Factsheets” that communicated vital features of each dataset to study investigators
- Ran multiple regression analyses on 3 of the 12 datasets to support research question
• Statistically compared multiple imputation strategies and wrote up results in a formalized memo to study investigators

**Jun 2012 – Present**  
**Research Assistant**  
Ann Arbor, MI  
Family and Schools Study (FAS), University of Michigan  
Faculty Investigator: Stephanie J. Rowley, Ph.D.

Qualitative research study examining 42 semi-structured interviews conducted with African American mothers; examining their perception of the role that race will play in their child’s future education

• Analyzed 42 interviews of African American mothers and highlighted key themes  
• Co-developed coding scheme based on key themes  
• Coded 42 interviews based on responses to “role of race” question

**Jan 2012 - May 2013**  
**Research Assistant**  
Chicago, IL  
2012 Chicago Area Study, University of Illinois at Chicago  
Faculty Investigator: Rachel A. Gordon, Ph.D.  
[http://igpa.uillinois.edu/cas/2012-chicago-area-study](http://igpa.uillinois.edu/cas/2012-chicago-area-study)

Research study which looked at how early childhood centers were coping with the current recession and how that economic crisis may have widened disparities in access to early childhood programs.

• Assisted with survey creation which was used as primary data collection source  
• Conducted over 15 survey interviews with subjects  
• Assisted research team with comparative analysis of findings based on race and SES  
• Co-wrote 2 research briefs and 1 policy brief with study investigators based on findings

**Jan 2012 - Aug 2013**  
**Research Assistant**  
Chicago, IL  
Safe Spaces, University of Illinois at Chicago  
Faculty Investigator: Stacey S. Horn, Ph.D.

Safe Spaces is Ford-funded collaboration between UIC and the Illinois Safe Schools Alliance to investigate why young people harass each other due to race, gender, religion, or sexuality, and uses findings to inform policies and programs to ensure schools are safe and supportive for all students.

• Served as note-taker for 2 focus groups with youth organizations  
• Administered surveys in order to collect data from high school adolescents  
• Entered data from surveys to be used in data analysis

**Professional Work Experience**
Aug 2011–May 2014  **Recruiter**  
African American Academic Network  
University of Illinois at Chicago  
• Built and nurtured relationships with high school counselors and principals in the chicagoland area to build a pipeline of African American students from these prospective schools to UIC  
• Consulted with high school students and parents addressing admissions-related concerns.  
• Presented at Chicago-area college fairs and career nights to recruit high school seniors to UIC  
• Assist with the implementation of campus programs to bridge African Americans students on campus with prospective African American high school students.

1999 - 2001  
See optional page at the end of CV for non-academic related work experience

**Academic Presentations**

**Posters**


**Paper**


**Translational Activities**

**Book Chapter**

(Eds.), *Promoting healthy development for America’s youth: Lessons learned from the 4-H Study of Positive Youth Development*.

**Research Briefs**


**Policy Brief**


**Service**

**Fall 2013 - Present**  
American Psychological Association – Educational Psychology Division (Div 15)  
*Committee on Graduate Student Activities*

**Fall 2013 – Fall 2014**  
Graduate Student Council (UIC)  
*Educational Psychology Representative*

**Dec 2013**  
American Psychological Association 2014 Convention  
*Educational Psychology Division (Div 15) Proposal Reviewer*

**Fall 2013**  
Institute for the Study of the African American Child (ISAAC) Conference Proceedings:  
*Assistant Editor*

**Fall 2012 – Fall 2013**  
Black Graduate Student Association (UIC)  
*Co-Founder and President*

**Organizational Memberships**

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<th>2012 - Present</th>
<th>Golden Key International Honour Society</th>
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<tr>
<td>2011 – 2014</td>
<td>Brothers Reaching Out (Black Male Initiative)</td>
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<tr>
<td>2011 – 2012</td>
<td>Black Star Project Volunteer</td>
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<tr>
<td>2010 – 2011</td>
<td>University of Chicago Charter School Mentor</td>
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**Honors and Awards**

**Fall 2011**  
University of Illinois Board of Trustees Tuition Waiver (Declined due to other funding)
Fall 2012  Martin Luther King Jr. Fellowship (Tuition Waiver + $5000)
Spring 2013  President’s Research in Diversity Award ($600)
Summer 2013  UIC Graduate College Travel Award ($200)
Fall 2014  UIC Graduate College Travel Award ($200)

Non - Academic Related Professional Work Experience

Aug 2007 – Jul 2011  Senior Compliance Specialist - Treasury  
United Air Lines, Inc.  
Chicago, IL

• Managed company-wide compliance process for mortgage and other debt-related deals totaling $3B in aggregate
• Accessed, updated, and evaluated SOX processes and controls for Treasury Department and coordinated remediation initiatives when necessary
• Proactively accessed control environment and collaborate with Internal Audit and IT to create ‘best practices’ approach to streamlining/automating processes
• Led back office function for fuel hedging activity and work with Financial Reporting to ensure proper accounting (including margin calls)
• Administered the distribution of financial statements, compliance certificates, and appraisals to external stakeholders.

Senior Staff Specialist - Treasury
• Maintained aircraft database detailing characteristics for total fleet. Computed monthly aircraft interest expense and cash forecasts
• Performed back office function for fuel hedging activity
• Coordinated logistics to execute aircraft sales and equity transfers for both United and its aircraft lessors
• Promoted to Senior Compliance Specialist, Oct 2009

Jun 2006 – Jul 2007  Regional Accountant  
Arthur J. Gallagher & Company  
Itasca, IL

• Prepared month-end financial reports and account reconciliations
• Analyzed, compiled, and maintained regional budget and general ledger (reporting approximately $20M in revenues and $16M in expenses

Sep 2003 – Jun 2006  Assurance Associate  
PricewaterhouseCoopers LLP  
Chicago, IL

• Performed assurance and review services for multi-million dollar manufacturing, construction, and non-for profit companies/organizations
• Assisted with the development of client's strategy for compliance with U.S. Sarbanes-Oxley Act of 2002.
• Managed portion of client ergonomics (e.g. budget, staff allocation) to increase productivity.