EMPIRICAL RESEARCH

African American Adolescents' Future Education Orientation: Associations with Self-efficacy, Ethnic Identity, and Perceived Parental Support

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Abstract The current study, using data from 374 African American students (59.4% female) in grades 7–12 attending a rural, southern county public school, addressed associations of self-efficacy, ethnic identity and parental support with "future education orientation." Both gender and current level of achievement distinguished adolescents with differing levels of future education orientation. The strongest predictors of future education orientation were self-efficacy, ethnic identity and maternal support. Gender did not moderate these associations. Implications for future research include the need to conduct longitudinal studies and research that integrates quantitative and qualitative methods to elucidate further the nature and importance of future education orientation for African American youth. Also needed are policies and programs that facilitate school bonding and academic performance, as are efforts that focus specifically on enhancing the future education orientation and academic success of African American male adolescents.

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Introduction

Education is fundamental for financial, personal, and social success in American culture. Compared to white students, African American youth experience a greater proportion of achievement barriers, such as relatively low academic achievement, a tendency to disengage from the academic environment, a disproportionately high level of suspensions and expulsions, and under representation in college enrollment and completion (Davis and Jordan 1994; Graham 2004; Sirin and Rogers-Sirin 2005).

Past theorizing by Ogbu (1978) attempted to explain why African American adolescents, as a group, were not excelling academically and did not appear to be viewing the furthering of their educations as a viable goal. Ogbu's oppositional culture explanation holds that involuntary minorities, such as African American adolescents, perceive fewer academic rewards, fewer occupational opportunities, and greater social stigma related to academic success than do adolescents who belong to the majority culture (Ainsworth-Darnell and Downey 1998).

Work by Cokley (2002), Osbourne (1997), and Steele (1992, 1997) has discussed the phenomenon of academic disidentification among African American students. Steele (1992) proposed that it is in the academic environment more than anywhere else, that African American children and adolescents learn how little they are valued in society. He further posited that academic achievement links strongly with an individual's self-concept in the academic domain. When African American students do not see the academic domain as supporting their self-conceptions, they seek outlets other than academic achievement to feel positive about themselves (Steele 1997).

Osbourne (1997) used the National Educational Longitudinal Study dataset to examine African American

adolescents' academic disidentification over time. He found that African American boys showed a strong pattern of academic disidentification from grades 8 to 12, whereas the disidentification pattern for African American girls was relatively weak. Likewise, Cokley (2002) found in a sample of African American college students that males, but not females, showed a sharp decrease in the strength of the association between GPA and academic self-concept from freshman/sophomore year to junior/senior year. Thus, the academic environment, especially for African American males, may not facilitate attainment of academic goals by not adequately supporting these youth to work toward their academic aspirations.

Additional studies have documented that gender differences among African American students become more pronounced during adolescence. A recent study conducted by Greene and Mickelson (2006) found that African American eighth grade female adolescents received higher test scores than did their male counterparts; gender differences in academic achievement were not detected in a younger sample of African American second graders. The authors suggested that socialization of male and female students differs. Academic achievement of male students was affected most by peers, the school environment, and attitudes about education. In contrast, female students' academic achievement was most influenced by their families' socioeconomic status and cultural capital. They further noted that the lower academic performance of African American males in middle school set the stage for continued poor academic performance in later years.

In a transition to high school study of African American students in Chicago, Roderick (2003) found that between the eighth and ninth grades, African American male students experienced more dramatic declines in academic performance than did African American female students. In addition, ninth grade teachers viewed their male students more negatively than they did their female students. The gender difference in graduation rates was striking; 40% of the males and 80% of the females graduated. Roderick noted that even when African American male adolescents have the academic skills, they may lack the self-efficacy and sense of the future that facilitates coping with the stresses of school and peer environments. In addition, African American males may not perceive clear benefits to school persistence nor a clear vision of what the pathways to a successful future entail.

Compared to African American male students, African American female students appear to have brighter futures regarding their educational outcomes. Such statistics have implication for adolescents' expectations for their futures. One study of African American high school students showed that thinking about the future was associated with perceptions of education usefulness and education usefulness was associated with placing value on academic work, which in turn showed associations with adolescent grade point average (Brown and Jones 2004). Divergence in African American adolescents' academic achievement along gender lines may in part be due to differences in how African American male and female adolescents view themselves academically and how efficacious they feel in pursuing future educational goals (Saunders et al. 2004). In addition, the support adolescents receive from others for their academic investments also matters for current and future educational outcomes (Gutman and Midgley 2000; McGrath and Repetti 2000; Smith et al. 2005).

Adolescents' Future Education Orientation

According to Nurmi (1991, 2005), future orientation includes the thoughts, dreams, and expectations one has for future events; education is one of the major domains encompassing adolescents' beliefs about the future. Nurmi further states that orientation toward the future provides motivation that guides attainment of goals. Thinking about the future in a positive way, therefore, is important for adolescent development. A positive future orientation especially is important for individuals struggling with negative life circumstances, such as lack of financial resources. In fact, McCabe and Barnett (2000) suggested that future orientation can be a "protective factor" for adolescents, especially for those who are low-income and members of minority groups. In other words, future orientation allows an adolescent to dream and hope for better possibilities in the future, setting the stage for actions that increase goal attainment.

Theoretically, Nurmi (1991) posited that parents are important influences on their adolescents' future orientation by setting the normative standards affecting their children's values, interests and goals. In addition, parents serve as role models for their adolescents and they foster their adolescents' attributions regarding the ability to influence domains of life (such as the educational domain). In addition to the context that parents provide for adolescents' future orientation, Nurmi also theorized that how adolescents feel about themselves has implications for their future orientation. In fact, he stated that a major influence on adolescents' future orientation was "internal beliefs in their own influence over the future" (p. 52).

Research addressing "future education orientation" among African American youth is sparse. Honora (2002) noted that traditional research fails to explain how African American youth envision themselves in the future, and few research studies have attempted to explore the concept of future orientation as it relates to the academic achievement of African American adolescents. Carter (1991) emphasized the value of applying within-group comparisons to

identify the differences in educational aspirations among African American youth. Although studies comparing ethnic groups have made important contributions to the literature, the findings of comparative studies often miss the considerable heterogeneity that exists within a single ethnic group. Furthermore, with comparative studies, there is a risk of perpetuating the deficit hypothesis that the academic performance of some minority groups is inferior to that of the majority group (Steele 1992). Thus, Smetana et al. (2002) suggested the need to look within one ethnic group rather than conducting comparative studies in order to gain a better understanding of a specific group. The current study helped to address gaps in the literature by focusing exclusively on a sample of African American youth in order to examine factors theorized to be associated with future education orientation. More specifically, examined in this study was how self-efficacy, ethnic identity, and perceived maternal and paternal support for achievement influenced the future education orientation of African American youth. Also addressed was how these factors varied by gender.

Self-efficacy

Much of the research focusing on adolescent academic achievement has included the concept of self-efficacy. Self-efficacy fits with Nurmi's theorizing about future orientation and an adolescent's internal beliefs about his or her level of competence and ability to perform well in the future. According to self-efficacy theory, behaviors, motivation, and aspirations are influenced by whether an individual believes in his or her ability to attain a specific outcome (Bandura 1986; Bandura et al. 2001). The more efficacious students feel, the more they persist in their current academics (Bandura et al. 1996), and this has implications for their future opportunities.

Skinner et al. (1998) proposed that adolescents high in self-efficacy are more likely than their peers low in self-efficacy to set high and concrete goals, form logical plans, and challenge their abilities. In addition, Bandura et al. (1996) asserted that the greater the level of perceived self-efficacy, the higher one's aspirations will be and the firmer one's commitment to these aspirations. Some research has shown a positive link between self-efficacy and future educational expectations among African American adolescents (e.g., Kerpelman and Mosher 2004; Lent et al. 1984; Saunders et al. 2004). Other research has indicated, however, that African American adolescents, on average, report only half the confidence as that of White adolescents of similar ability that they will graduate from a 4-year college or university (Rhea and Otto 2001).

Furthermore, beliefs about self-efficacy have been shown to vary by gender. African American females have been found to maintain stronger intentions to remain in school, had higher grade point averages, and had significantly higher levels of academic self-efficacy than African American males did (Saunders et al. 2004). Thus, self-efficacy has a strong, positive association with academic achievement and, based on the work of Nurmi (1991, 2005), is expected to be associated similarly with future education orientation. The strength of the association between self-efficacy and future education orientation is anticipated to be stronger for female than for male adolescents.

Ethnic Identity

Although not linked directly to future education orientation, ethnic identity is a type of internal belief and has been shown to play an important role when focusing specifically on African American adolescents' academic outcomes. Ethnic identity refers to an individual's involvement in an ethnic group, and the cognitions and behaviors directly related to a sense of belonging to a particular ethnic group (Rotheram and Phinney 1987). Bergin and Cooks (2002) found for a sample of high achieving minority high school students that these students did not feel compelled to sacrifice their ethnic identity in order to do well academically, nor did they feel it was necessary to alter their achievement even when accused by peers of "acting white." Similarly, Wong et al. (2003) showed a positive relationship between ethnic identity and academic achievement, which suggests that ethnic identity may serve as a protective factor against the negative effects of racial discrimination in the academic environment.

Other studies have shown that a stronger sense of ethnic identity was associated with positive psychosocial outcomes among ethnic minority college students (i.e., less depression, greater self-esteem and job competence; St. Louis and Liem 2005), as well as among African American early adolescents (i.e., greater social adaptation and emotional adjustment; Yasui et al. 2004). Furthermore, Brook and Phal (2005), in a longitudinal study focusing on a sample of low income, urban African American youth, found that stronger ethnic identity during the high school years served as a protective factor in early adulthood, predicting less depression and drug use. Finally, a body of work by Oyserman and colleagues (Oyserman, Brickman, and Rhodes, 2007; Oyserman et al. 2001, 2003a, b) has demonstrated the positive influence that ethnic identity has on African American adolescents academic engagement and outcomes. This work demonstrates that ethnic identity can serve as a buffer against factors that may decrease school engagement and academic efficacy. When youth feel connected to their ethnic group and believe that their ethnic group values academic achievement, they have better academic outcomes.

Collectively, studies suggest that ethnic identity may play a positive, rather than negative, role in African American adolescents' academic achievements and future education orientation, and may prevent failure to complete academic goals. The nature of the ethnic identification may be what makes the difference. A positive ethnic identity that includes affirmations of the ethnic group and feelings of empowerment contributes to academic success, whereas a lack of such feelings in one's ethnic identification may dissuade youth from academic identification. A positive ethnic identity appears to buffer adolescents against factors that hinder their academic achievement, and we hypothesize that ethnic identity also will be associated positively with future education orientation.

Perceived Parental Support

In addition to internal influences on variation in future education orientation, social support, especially from parents, for achieving academic goals matters. Family, and particularly the parent–adolescent relationship, provides one of the most important social contexts for adolescent development. Although peers become increasingly influential during adolescence, parents continue to be important sources for adolescents' decisions about major life choices. For example, Nurmi (1991) asserted that parents play an integral role in communicating values, interests, and goals that affect how adolescents view their futures. Research findings indicate significant, positive relationships between adolescents' future academic expectations and parental educational level, perceived parental expectations for their adolescents, and the messages that parents relay to their adolescents regarding the importance of education for future success (Annunziata et al. 2006; Gutman and Midgley 2000; Kerpelman et al. 2002; Smith et al. 2005; Smith 1991; Wilson and Wilson 1992).

In a sample of urban, African American preadolescents, Ford (1993) found that children who strongly agreed with their perceptions of their parents' values toward education appeared more optimistic about their futures. They also were more supportive of the mainstream achievement ideology (i.e., emphasized upward mobility and the importance of hard work and strong academics to achieve success in life) than those children who did not agree with perceived parental education values. Overall, Ford noted an important finding: the messages that African American parents conveyed to their children regarding the importance of education for future success, as well as their children's perceptions of these messages, influenced adolescents' achievement orientation.

Recent work continues to document the importance of parental influence on adolescents' academic achievement. In a sample of 200 African American adolescents (ages 12–18) and their mothers, Taylor and Lopez (2005) found that mothers conveying their expectations to their children, as indicated by adolescents' perceptions of parental expectations, were associated positively with adolescents' school achievement. Davis-Kean (2005) found similar associations and noted that parents' own educational attainments were related to their children's achievement indirectly through the association with parental expectations and beliefs that were directly related to African American children's academic outcomes.

Three studies provide noteworthy findings for parental support and African American adolescent outcomes. A family intervention study with a sample of low income, rural African American early adolescents noted the importance of effective parenting for promoting positive youth outcomes, including goal oriented future orientation (Brody et al. 2004). When parents communicated effectively and were involved with their adolescents, this predicted better future orientation and other positive youth outcomes. In another study addressing parental involvement and adolescent achievement and aspirations among seventh through 11th grade students, it was found that parental academic involvement showed a positive association with African American, but not European American, adolescent academic achievement (Hill et al. 2004). The authors suggested that parental involvement is particularly important for African American adolescents as a buffer against other contextual factors that hinder African American adolescent academic achievement. Finally, a study conducted by Bean et al. (2003) that examined the influence of parental support on academic achievement of African American and European American adolescents found that mothers' supportive behaviors predicted adolescent academic achievement.

In summary, studies of parental support of academic achievement among African American students indicate that parents play an important role in encouraging adolescents to perform well in school. Through their support for academic achievement, parents communicate to their adolescents the importance of education. Based on these findings and the theoretical importance of the parent–adolescent relationship context for adolescents' future orientation, we expect that parental support, especially maternal support, for academic achievement will matter for adolescents' future education orientation.

Purpose

The purpose of the current study was to examine associations among African American adolescents' future education orientation (FEO), self-efficacy, ethnic identity, and perceptions of parental support for achievement. In addition, how adolescent gender factored into these

associations was considered. The specific research questions and hypotheses were:

1. Are there differences in FEO according to current level of achievement or adolescent gender? It was predicted that female adolescents would have higher FEO than male adolescents would, and that higher achieving adolescents would be higher than lower achieving adolescents in their FEO. Also explored was whether the interaction of gender and academic achievement showed differences in FEO.
2. Controlling for age, gender, adolescent current achievement level, and parental education levels, how important are ethnic identity, self-efficacy, and perceived parental support for explaining African American adolescents' FEO? Is the prediction of FEO moderated by gender?

Methods

Participants

The sample for the current study (N = 374; 152 male, 222 female) was drawn from data collected for a larger project of adolescents (N = 675) participating in an investigation of African American adolescents' risk and resilience. The participants were enrolled in a rural, county school (grades 7–12) in the southeast. The school population was 99% African American and 88% of the students were on free or reduced lunches. Participants ranged in age from 12 to 20 (M = 15.3, SD = 1.71). Adolescents for this study had complete data for all of the study variables. Excluded cases were those where adolescents had not completed both parts of the two-part survey or were missing data for one or more of the key study variables. Comparisons between participants included in the current study (n = 374) and those excluded (n = 301) indicated few significant differences between the groups. The analysis sample contained more females and was younger (analysis sample mean = 14.75/SD = 1.66; nonanalysis sample mean = 15.53/SD = 1.76) than the nonanalysis sample.

For most of the adolescents, the family income range was $20,000 or less (33%), $20,000 and $35,000 (21%), or $35,000 and $60,000 (21%). Fifteen percent reported a family income greater than $60,000, and the remainder did not report their family income. In terms of family structure, most of the adolescents lived in single mother-headed households (38%) or with both biological parents (31%). Twenty-one percent lived in stepfamilies (mostly with a biological mother and a stepfather) and the remaining 10% lived in other family structures. Of the parents who were reported as employed, 56% of the mothers and 59% of the fathers held full-time employment, 14% of the mothers and 13% of the fathers held part-time employment, and another 3% of the mothers and 6% of the fathers worked multiple jobs. Twenty-nine percent of the fathers and 16% of the mothers had less than a high school education, 52% of the fathers and 50% of the mothers had completed 12 years of school, and 19% of the fathers and 34% of the mothers had at least some college.

Measures

Future Education Orientation

Future education orientation (FEO) was measured using eight items from the Future Education subscale of the Future Orientation Questionnaire (Nurmi et al. 1990). Responses were coded on a 5-point Likert-type scale that ranged from (1) "not much thought or planning for the future" to (5) "having serious thoughts and plans for the future." An example question is "How often do you think about or plan your studies and plan for your future education?" For the current study, α = 88.

Ethnic Identity

The revised (12-item) Multigroup Ethnic Identity Measure (MEIM-R; Roberts et al. 1999) was used to assess ethnic identity. Responses were on a 4-point scale ranging from (1) "strongly disagree" to (4) "strongly agree." An example item is: "I have a strong sense of belonging to my ethnic group." Reliabilities were found to range from .81 to .89 across ethnic groups; the reliability for the African American ethnic group was .82 (Roberts et al. 1999); for the current study, α = .88.

Self-efficacy

The general self-efficacy subscale of the Self-Efficacy Scale (Sherer et al. 1982) was used to assess self-efficacy. The subscale contains 8 items that assess general self-efficacy perceptions. A 5-point Likert-type scale ranging from (1) "strongly disagree" to (5) "strongly agree" was used. An example question is "If I can't do a job the first time, I keep trying until I can." Cronbach alpha reliability was reported to be .86 (Sherer et al. 1982). For the current study, α = .83.

Perceived Parental Support

Items were drawn from the Adolescent Family Process measure (Vazsonyi et al. 2003) in order to assess parental supportiveness of adolescent achievement. Five items were used to assess mother and father supportiveness separately.

An example item is: "My mother (father) often asks about what I am doing in school." Items were responded to on a 5-point Likert-type scale, ranging from (1) never to (5) very often. For the current study, $\alpha = .78$ and $.85$ for the mother and father support for achievement subscales, respectively.

Current Level of Achievement

Grades were used to indicate current level of achievement. Respondents were asked to report their grades according to the following question: "What are the average grades you usually get in your classes at school?" Response choices were: (1) Mostly A's, (2) Mostly A's and B's, (3) Mostly B's, (4) Mostly B's and C's, (5) Mostly C's, (6) Mostly C's and D's, (7) Mostly D's and lower. Scores were reverse coded so higher values indicate higher grades.

Demographic Variables

The adolescents' age, gender, family structure, and each parent's educational attainment were included as demographic variables.

Procedure

A university research team recruited participants through both parental letters and classroom visits. All students with parental consent forms were given the survey to complete. Students had the option of declining participation when researchers administered the questionnaires during the homeroom period on two separate days. When all questionnaires were completed, the researchers collected the surveys and responded to students' questions.

Results

Prior to addressing the research questions, means and standard deviations on all of the study variables were computed and examined (see Table 1). Participants in the current sample reported moderate to high scores in ethnic identity and self-efficacy. Perceived support from parents was moderate. Participants, on average, also reported a relatively strong FEO. Examination of the zero-order correlations indicated that there were moderate, positive associations among FEO and most of the study variables; paternal support was modestly correlated with FEO (see Table 2).

Difference in FEO According to Gender and Current Achievement

The first research question addressed whether gender or perceptions of current achievement were associated with

Table 1 Means and standard deviations for self-efficacy, ethnic identity, perceived support and demographic variables

Variables	M	SD
Current grades[a]	4.14	1.54
Age	15.28	1.71
Mother's education[a]	2.40	1.01
Father's education[a]	2.00	.93
FEO[b]	3.58	.81
Self-efficacy[b]	3.61	.70
Ethnic identity[b]	3.21	.65
Maternal support[b]	3.40	.80
Paternal support[b]	2.86	.93

[a] Current grades average for the group is "mostly B's and C's; Mother's education is slightly more than high school; Father's education is completion of 12th grade

[b] Values range from 1 to 5

differences in adolescents' levels of FEO. In order to test this question, current achievement was divided into three levels (high achievers received mostly As and Bs ($n = 136$), average achievers received mainly Cs ($n = 121$), and low achievers received mostly Ds ($n = 117$)). Differences in FEO were examined using a 2 (gender) × 3 (current achievement) analysis of variance (ANOVA). Results indicated that there were significant differences according to gender (F (1, 368) = 40.760, $p < .001$), current achievement (F (2, 268) = 3.339, $p = .037$), and their interaction F (2, 368) = 3.576, $p = .029$).

As can be seen in Table 3, females were higher than males, and high achieving adolescents were higher than low achieving adolescents for FEO. The significant interaction of gender × current grades qualified the main effects, showing that increased self-reported academic achievement for the female adolescents was related to higher FEO, but for the male adolescents, self-reported academic achievement and FEO were not related. In addition, all of the males were at the lowest level of FEO (i.e., lower than all of the females with the exception of those in the low achiever group).

Associations among FEO and Self-efficacy, Ethnic Identity, and Parental Support

Hierarchical multiple regression was employed to examine the second research question, which addressed the relative importance of ethnic identity, self-efficacy, and perceived parental support for explaining African American adolescents' FEO. In step one, age, gender, mother's and father's educational attainment, and the adolescent's current grades were entered as control variables. Ethnic identity, self-efficacy, maternal support and paternal support were added in the second step of the analysis (see Table 4).

Table 2 Bivariate correlations for FEO, self-belief, perceived support, and demographic variables

	1	2	3	4	5	6	7	8	9	10	11	12
1. FEO		.35**	.53**	.40**	.17**	−.08	.32**	.17**	.09	.09	.06	.05
2. Ethnic identity			.27**	.36**	.26**	.05	.14**	.20**	.17**	.12*	.02	.07
3. Self-efficacy				.27**	.06	−.06	.21**	.22**	.04	.04	.10	−.02
4. Mother support					.40	−.02	.16**	.20**	.20**	.20**	.09	.06
5. Father support						−.19**	−.11*	.07	.10*	.17**	.16**	.09
6. Age							−.03	.02	−.01	−.09	−.05	−.09
7. Gender								.03	−.04	−.02	−.12*	−.07
8. Grades									.06	.16**	−.08	−.10
9. Mother education										.41**	−.09	.20**
10. Father education											−.07	.15**
11. Family structure[a]												.12*
12. Family income												

[a] 1 = 2-parent biological families, 0 = other family structures; * $p < .05$; ** $p < .01$

Results for step one of the analysis (Model 1) indicated that gender (being female) and current grades were positively associated with FEO. When self-efficacy, ethnic identity, and perceived maternal and paternal support were entered in step two (Model 2), self-efficacy, ethnic identity and perceived maternal support predicted FEO as did gender, however, the current grades variable was no longer significant. Thus, being female and having higher levels of self-efficacy, ethnic identity and perceived maternal support were associated uniquely and additively with greater FEO.

The final set of analyses examined whether gender moderated self-efficacy, ethnic identity, or perceived parental support in the prediction of FEO. Product terms were created by multiplying gender (effect coded: −1 = male, 1 = female) by the centered self-efficacy, ethnic identity and the perceived parental support variables. Two step hierarchical multiple regression analyses were used to test each of the interaction terms separately (as suggested by Jaccard et al. 1990). The first step included the demographic and main effect variables. The second step was the addition of the interaction term. None of the interaction terms were significant (β range = −.02 to .03), indicating that gender did not moderate any of the associations of the predictor variables with FEO. Thus, self-efficacy, ethnic identity and perceived parental support operated similarly in the prediction of FEO for males and females in this sample of African American adolescents.

Discussion

In the current study, FEO of African American adolescents was examined. Self-efficacy, ethnic identity, and perceived maternal support for achievement were found to influence

Table 3 Mean differences in FEO according to gender and level of achievement

	High achievers ($n = 136$) M (SD)	Average achievers ($n = 121$) M (SD)	Low achievers ($n = 117$) M (SD)	Total ($N = 374$) M (SD)
Males ($n = 222$)	3.30[d,e] (.81)	3.29[d,e] (.69)	3.21[d,e] (.75)	3.27 (.75)
Females ($n = 152$)	3.98[f,g,h,i] (.81)	3.87[g,h,i] (.80)	3.49[d] (.65)	3.79*** (.79)
Total ($N = 374$)	3.72[c] (.87)	3.59 (.82)	3.41[a] (.70)	

$R^2 = .14$; *** $p < .001$

[a] Different from high achievers

[b] Different from average achievers

[c] Different from low achievers

[d] Different from female high achievers

[e] Different from female average achievers

[f] Different from female low achievers

[g] Different from male high achievers

[h] Different from male average achievers

[i] Different from male low achievers

Table 4 Hierarchical regression analysis predicting FEO

Variable	Model 1			Model 2		
	B	SE B	β	B	SE B	β
Gender	.52	.08	.32***	.32	.07	.19***
Age	−.04	.02	−.07	−.02	.02	−.05
Average grades	.08	.03	.15**	.00	.02	.00
Mother's education	.06	.04	.08	.01	.04	.01
Father's education	.03	.05	.03	.00	.04	.00
Ethnic identity				.17	06	.13**
Self-efficacy				.47	05	.40***
Maternal support				.19	.05	.19***
Paternal support				.04	.04	.04
R^2	.13***			.41***		
F for change in R^2	12.080***			28.176***		

** $p < .01$, *** $p < .001$

FEO additively. Males and females did not differ in the prediction of FEO based on their self-efficacy, ethnic identity or perceived maternal support, although the majority of female adolescents had higher FEO scores than the male adolescents did.

Differences in FEO According to Gender and Current Grades

When examining gender differences, the current study supports previous literature showing that African American females typically value academic effort, achievement, and future education to a greater degree than males do. For example, Graham et al. (1998) found less valuing of academic achievement among African American males compared to African American females, as evidenced by females (but not males) consistently nominating same-sex, high achieving peers as those they most respected and wanted to be like. Similar to our results, Honora (2002) found that high achieving African American females considered more long-term goals and expectations related to education than high achieving African American males did.

Findings of the current study showed that although males were lower in FEO than were females, the factors that predicted FEO were virtually the same for males and females. That is, stronger self-efficacy, ethnic identity, and perceived maternal support for achievement predicted higher FEO for both males and females. However, a finding of concern was that male adolescents, regardless of

current achievement, were similar to each other and low achieving females in their level of FEO, and were lower than average and high achieving females in their FEO. Regardless of the grades they earned, the males, on average, did not appear to incorporate this information into their beliefs related to education beyond high school. Bandura's theory of self-efficacy (1986) would suggest that the power of an individual's self-efficacy beliefs, as compared to his or her actual ability, is a stronger predictor in explaining FEO. Thus, regardless of the grades they earn, if African American males do not believe they will be able to attain entry into higher education due to social and economic barriers, they may not even entertain such possibilities. Our findings suggest that while it is important to foster positive beliefs about reaching future academic goals among African American adolescents, regardless of gender, male adolescents need more strengthening in this area.

Noguera (2003) suggested that part of the reason for lowered academic performance and expectations among African American males is their greater exposure, than other groups, to negative treatment in school. He notes that "Black males may engage in behaviors that contribute to their underachievement and marginality, but they also are more likely to be channeled into marginal roles and to be discouraged from challenging themselves by adults who are supposed to help them" (pp. 445–446). Educating the important adults in adolescents' lives, such as their parents and teachers, to support adolescent FEO is needed. Furthermore, Garabaldi (1992) asserted that significant adults play critical roles in "reversing the negative academic and social behaviors of African American males" (p. 8). He suggested that teachers and parents can raise their achievement expectations for African American male youth, and can engage in behaviors that help to reinforce and support these expectations. These behaviors can include helping male adolescents resist negative peer pressure, facilitating their participation in extracurricular activities, acknowledging their academic achievements, and encouraging them to engage in community service.

Self-efficacy and Ethnic Identity

Findings for the current study are consistent with recent work showing positive associations between self-efficacy and educational aspirations (Johnson-Reid et al. 2005; Kerpelman and Mosher 2004; Saunders et al. 2004). Ethnic identity also positively predicted FEO. This association does not support Ogbu's (1978) oppositional culture explanation, and is consistent with recent research showing that African American students do value academic achievement and that ethnic identity predicts positive

views about educational attainment (Bergin and Cooks 2002; Wong et al. 2003). It is not surprising, however, that ethnic identity was less strong in its association with FEO than was self-efficacy, given that self-efficacy is more closely tied to academic goals and performance. In addition, the current sample was drawn from an all African American county school with primarily African American teachers. Ethnic identity may be less important in school settings where within-school racial discrimination may be less of a problem.

Parental Support for Achievement

Support for achievement, especially from mothers, also was important for adolescent FEO. Nurmi (1987) suggested that adolescents tend to mirror their mothers' internal beliefs concerning future orientation toward education. Furthermore, Wilson and Wilson (1992) asserted that the degree of educational support within the home strongly influences the likelihood of an adolescent attending college, and that maternal educational expectations are particularly important for adolescents' educational attainments.

The finding that paternal support showed only a modest association with FEO at the bivariate level and was not significant when the self-efficacy, ethnic identity, and parental support variables were considered together, is consistent with past research that suggests a significantly stronger relationship between adolescents' own educational expectations and perceived maternal goals as opposed to perceived paternal goals (Smith 1991). Another factor that may have accounted for the modest association between paternal support and FEO is the large percentage of the participants who lived with only their mothers (family structure, however, was not associated with FEO). Although some of those living in mother-headed households had contact with their fathers, many of the adolescents may not have had regular opportunities to receive support for achievement from their fathers due to inconsistent contact or no contact. In addition, it may be that the ways in which fathers were offering support for achievement were not fully captured in the current measure. The current measure focused on "talking" with the adolescent; possibly fathers showed support for achievement in other ways, such as financial support and engaging in tasks that support achievement, and/or working indirectly through the mother to support the adolescent's achievement.

Limitations and Future Directions

The current study was limited due to reliance on self-report and secondary data, as well as the nature of some of the measures used, especially those assessing current academic achievement (i.e., self-reported grades), and parental support for achievement. Future research should include objective measures of academic achievement (i.e., school reported grades, standardized test scores, other indicators of cognitive capacity), and expand the parental support for achievement measures to assess, more accurately, what parents (and others) are providing. Furthermore, assessment of adolescents' perceptions of environments that are *unsupportive* and undermine their academic efforts and aspirations may shed additional light on what explains and supports adolescent FEO. Better measures of socioeconomic status with more diverse samples of African American youth also will enhance future research. It also will be important to determine the factors that matter most in circumstances where adolescents, especially males, experience discouragement from others for their educational aspirations. In addition, it will be important for future work to investigate why African American males, regardless of their current grades, appear to have lower FEO than African American females do. Finally, longitudinal studies are needed to examine, more thoroughly, associations between support for achievement, self-efficacy, ethnic identity, and FEO among African American adolescents, and to link these associations to actual attainments. Integrating quantitative and qualitative methods may serve to elucidate adolescents' thinking about their futures and the support they need in order to feel capable of pursuing viable academic and career goals.

In addition to extending the research, implications for policies and programs that facilitate FEO should be explored. Studies conducted by Oyserman and colleagues (i.e., Oyserman et al. 2002, 2006) have demonstrated the value of youth-focused interventions that promote African American adolescents' development of strategies for attaining their possible selves in the academic domain. Similar to FEO, possible selves are images of who one might become. These studies indicate that both in-school and after-school intervention programs designed to encourage students to visualize themselves as successful adults through attaining academic goals for next year, as well as for the future, are effective. The programs focus on creating timelines, and developing strategies to make possible selves in the academic domain more salient. These programs also help students to engage in solving everyday problems, including academic problems. Another aim of these programs is to help students to articulate possible plans, obstacles and ways of overcoming obstacles, through discussions with parents or identifying role models. Evaluation results indicated that African American adolescents who received these programs showed greater bonding to school, and improved their academic interest. They also improved their current academic performance and had

more strategies for doing well in school, and for attaining possible selves.

Finally, Garabaldi (1992) offers recommendations from his New Orleans Public Schools study for intervention efforts designed to meet the educational needs and future aspirations of African American male adolescents. Some of the recommendations that are most important for promoting a FEO include: recognition of African American males who perform well academically, engagement of African American male college students in community service activities at elementary and secondary schools where they can serve as role models for younger students, teachers taking an active and early role in encouraging African American male students to pursue college or other types of post-secondary education, and businesses offering rewards and incentives for employees' children who have good school attendance and earn above average grades.

Taken together, the key findings of the current study indicate that African American adolescents' internal beliefs (i.e., self-efficacy and ethnic identity) matter for their FEO, as does parental support for achievement, especially support from mothers. Gender differences clearly emerged where females had stronger FEO than males did, and males appeared not to rely on current grades as informative for their FEO. This is the first study to examine the influence of internal beliefs and parental support on FEO in a sample of low income, rural African American youth; the findings are consistent with studies examining academic achievement and aspirations of urban African American youth (e.g., Brook and Phal 2005; Brown and Jones 2004; Ford 1993; Garabaldi 1992; Roderick 2003). Both future research and practice need to examine specific strategies for increasing FEO among African American adolescents, and for identifying the personal- and system-level supports needed for successful realization of academic goals. Adolescents' beliefs about barriers to school and work achievement need to be assessed and then addressed with policies and programs as changes in these beliefs have the potential to improve their capacity to engage in success promoting behaviors (e.g., increasing productive work habits, increasing positive performance expectations, and engaging in effective problem solving; Jackson et al. 2006). There also appears to be compelling and converging evidence that special attention must be paid to strengthening the FEO of male African American adolescents. The findings of the current study in conjunction with related work offer possibilities for addressing this important area of adolescent development.

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