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Profiles of African American College Students' Educational Utility and Performance: A Cluster Analysis

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African American students' beliefs about the value of getting a good education have long been debated. The present study demonstrates that African American students hold a variety of perspectives about the value of education, and that certain types of beliefs naturally occur in students with certain academic performance records. Cluster analysis was used to identify five clusters of 126 African American college students with differing profiles on Idealistic Educational Utility, Context-Specific Educational Utility (CSEU), and grades. These clusters were then related to Racial Ideology as measured by the Multidimensional Inventory of Black Identity. Results suggest that there are some high-achieving students with low levels of CSEU who tend to be somewhat nationalistic. The findings are discussed in terms of their implications for our understanding of the diversity of African Americans' beliefs about educational utility.

Researchers have addressed the question of how African Americans respond to perceptions of racial discrimination, especially as it relates to their academic performance, for decades. The unfolding of this debate is clearly reflective of the personal ideologies and political leanings of prominent researchers at various points in time. During the mid-1950s, as politicians and researchers alike were lobbying for desegregation, the belief was that perceiving the discrimination inherent in the separate and unequal segregated school systems was devastating to the self-esteem and achievement of African Americans (Cross, 1991). In the 1970s, African American scholars

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would suggest that perceiving discrimination was healthy and that such perceptions were the first step on the road to liberation. During the late 1970s and the 1980s, John Ogbu (1988), using his Status Mobility System, suggested that African Americans' main reaction to their perceptions of discrimination was hostility toward school and subsequent academic disengagement. More recent research has purported a mix of beliefs regarding the impact of perceptions of discrimination on the academic achievement of African American students.

An examination of recent research suggests that African American students exhibit a range of responses to their perceptions of discrimination. Although many researchers continue to conduct research that modestly supports Ogbu's contentions (Mickelson, 1990; Taylor, Casten, Flickinger, Roberts, & Fulmore, 1994), others have found that perceiving discrimination that may be very real in the lives of African American children may be healthy and adaptive (Oyserman, Gant, & Ager, 1995; Sanders, 1997). The current study is an attempt to demonstrate that there is an element of truth to both propositions. The real error in previous studies is not in their conceptualization of discrimination, but in the assumption that all African American students should respond to discrimination in the same manner. Moreover, these studies focus almost exclusively on the failure of African American students (O'Connor, 1997) or on the social dysfunction accompanied by academic success (e.g., Fordham & Ogbu, 1986).

The present study first identified relatively homogeneous profiles of African American college students' grades and perceptions of the utility of education (both in general and in reference to discrimination). This method of identification allows for consideration of students with relatively poor academic records as well as those who are doing well in school. Moreover, the study focuses on individual utility/performance clusters rather than attempting to fit the same model for all participants. The second portion of the study investigates some of the sources of individual differences in these utility/performance groups by relating cluster membership to racial ideologies, racial centrality, and to the extent of students' contact with other Blacks and with Whites.

EDUCATIONAL UTILITY AND SCHOOL PERFORMANCE

Educational utility is defined as the value a student places on doing well in school and on getting a good education. This study explores issues of educational utility as they relate to later occupational success. A student with a positive sense of educational utility believes that hard work and academic

achievement lead to job mobility and success. Mickelson (1990) and Rowley (1996, 1997) conceptualize educational utility as having two dimensions that are relevant to African American students. The first dimension, idealistic educational utility, is based on the Protestant work ethic—hard work in school is directly related to success. Idealistic educational utility makes no reference to barriers that may impede such success.

The second dimension of educational utility values, as defined in this study, is context-specific educational utility, and reflects the idea that education does not always result in occupational success—that because of discrimination, education is less useful for African Americans than it is for members of other racial or ethnic groups. The term *context-specific* was chosen to label this second dimension because of the implication that contextual factors such as race, gender, and socioeconomic status constrain the value of education.

The dichotomous model of educational utility is well supported by previous studies (e.g., Dillingham, 1980). Although Mickelson (1990) found no relationship between idealistic utility and grades, others have found a modest, positive relationship between similar constructs and school performance for African American samples (Farrell, 1994; Ford, 1993; Rowley, 1997, 1998; Taylor et al., 1994). In general, students who believe that education is important for their later success are more engaged in school and receive better grades.

A unique feature of this model is that it accounts for African Americans' positive attitudes toward education (Steinberg, Dornbusch, & Brown, 1992; Stevenson, Chen, & Uttal, 1990) and their awareness of discrimination and race-based inequity (Watts & Carter, 1991). Although it appears that the two ideas are in opposition to one another, ethnographic studies of African American students suggest that the two can coexist. Farrell (1994), for instance, found that all of the high-achieving inner-city high school students whom he interviewed believed, without reservation, that education is essential for occupational and financial mobility. They viewed education as their ticket out of the poor neighborhoods in which they lived. Still, most of the students believed that discrimination made it hard for students of color and poor students to get ahead.

O'Connor (1997) similarly investigated African American high school students' conceptions of the American opportunity structure and their own chances of making it in the future. All of the participants in her ethnography lived in neighborhoods characterized by poverty and crime. O'Connor specifically highlighted the values and beliefs of six high-achieving students. One of these resilient students was optimistic about her future and the

positive role that education would play in her life, but was also aware “of how social class and gender operated to constrain significantly the social opportunity and mobility of the social groups in which she found herself” (p. 597).

These examples demonstrate how students might be idealistic in the face of discrimination, but the model also allows for students whose idealistic and context-specific utility are more consonant. Many students may not use contextual information such as race and gender when thinking about the value of education. Others may hold only negative views about the value of education.

The relationship between idealistic and context-specific utility becomes more complex when academic performance is taken into account. When addressing the issue of students' beliefs about the relationship between educational utility and discrimination, empirical studies have rendered conflicting results. Research by Mickelson (1990) suggests that African American students perform less well when they believe that members of their family or racial group have not been financially or occupationally rewarded for academic achievement. Other studies found, however, that awareness of discrimination may also be a protective factor, leading to increased performance (Bowman & Howard, 1985; Oyserman et al., 1995; Rowley, 1997, 1998; Sanders, 1997). Some African American students use perceptions of discrimination as a source of motivation. They work to excel in school to prove to racists that African Americans are not intellectually inferior. Lee (1996) found similar responses to discrimination in her ethnographic study of Asian American students. Again, it should be stated that both of these positions can be true. For some African American students, perceiving discrimination may be associated with decreased motivation and performance in school, whereas others may use such perceptions as motivation. The key is to find a way to identify students with one profile so that the most effective interventions can be designed.

EDUCATIONAL UTILITY AND RACIAL IDENTITY

Educational utility, as conceptualized in this study, is necessarily related to the respondent's race-related beliefs. Racial identity provides a lens through which experiences, especially race-related, are filtered. It informs beliefs about relations between Blacks and Whites, as well as beliefs about how African Americans as a group should think and behave. Moreover, for Blacks in America, the question of the value of education has been tied to issues of race. Although the idealistic educational utility component does not refer specifically to barriers to success through education, it is still somewhat specific to the respondent's beliefs about the role of education in the lives of African Americans. This component is concerned, for example, with the

question of whether getting a good education is important for the success of African Americans. Indeed, few would argue that getting a good education is not a useful endeavor for African Americans. The context-specific educational utility component also refers specifically to race and education. Here, however, the role of certain barriers in the lives of African Americans and in the lives of the respondent's family members is examined. The central question for the context-specific component, then, is whether education is rewarded fairly for African Americans. The component also reflects the respondent's belief that education does not always result in success for people in general.

In the current study, racial identity is defined according to the Multidimensional Model for Racial Identity (MMRI) (Sellers, Rowley, Shelton, Smith, & Chavous, 1997). Although the MMRI consists of four components, only two will be examined in the current study: racial centrality and racial ideology. Whereas centrality reflects the level of importance of race to the individual's self-concept, ideology is the individual's belief about the behaviors and attitudes of the group. Although centrality and ideology have been shown to be correlated, they are conceptually independent constructs (Sellers et al.).

According to the MMRI, the centrality dimension of racial identity is a measure of the relative importance of race to the individual's self-concept. Individuals with high levels of centrality feel that race is important to who they are and is an important factor in choices that they make.

Racial ideology is defined as a "person's philosophy about the ways in which African Americans should live and interact with other people in society" (Sellers et al., 1997, p. 806). The four MMRI ideologies are as follows: (a) a nationalist ideology emphasizing the uniqueness of African Americans, (b) an oppressed minority ideology reflecting similarities between African Americans and members of other oppressed groups, (c) an assimilationist ideology emphasizing the importance of African Americans' full integration into mainstream American society, and (d) a humanist ideology minimizing group differences and emphasizing the commonalities among all humans. According to MMRI theory, although individuals may have beliefs that reflect one ideology more than others, most people hold philosophies that combine aspects of more than one ideology. For instance, an individual may be very assimilationist when it comes to the issue of race and schooling, but very nationalistic when it comes to politics.

Racial ideology should play an important role in shaping a student's perspectives about the value of an education for African Americans. Because of the history of African Americans being denied education, African Americans' beliefs about the value of education are tied to their social and political

ideologies. A common characteristic of the six resilient students identified by O'Connor (1997) was that they all viewed achievement in school as a mode of struggle. One student suggested that African Americans are doing less well in America now than before because of the lack of social and institutional organization, such as what was characteristic of the civil rights movement. Each of the students demonstrated nationalistic tendencies, a reluctance to assimilate into mainstream society, and a strong sense of closeness to the African American community (high centrality). Students with more conventional, idealistic values regarding education should be more assimilationist in their ideologies. It is logical that perceiving few structural barriers to mobility would be related to a belief that African Americans should try to work within the mainstream.

A previous study by the author relating the two educational utility dimensions to racial ideology showed that, in general, African American college students' endorsement of assimilationist ideology is positively related to idealistic educational utility (Rowley, 1999b). In addition, endorsement of the nationalist ideology was positively related to context-specific utility. In other words, students who had higher scores on nationalism were more likely to believe that education is useful, in spite of certain barriers. Although these results are in line with the theory of the current study, they are limited because of the implicit assumption that the relationships among variables are the same for the entire sample.

EDUCATIONAL UTILITY AND SCHOOL PERFORMANCE

Most studies to date have examined the relationship between educational utility and school performance in a linear fashion. The author conducted a recent study that highlighted the nonlinear relationship between the two educational utility components and grades in African American high school students (Rowley, 1999a). In this study, the two utility subscales and grades were relatively uncorrelated; all correlations were less than .30. These three variables (grades, idealistic educational utility [IEU], and context-specific educational utility [CSEU]) were clustered to identify profiles of students in terms of their general beliefs about education, their beliefs about education in spite of barriers to occupational success, and their performance. School performance was added to determine whether certain combinations of the two utility scales were more likely to occur for high-achieving versus low-achieving students. Participants were placed into five groups using a cluster analysis. These profiles were as follows: idealistic high achievers (i.e., high grades, high CSEU, and high IEU), idealistic low achievers (i.e., low grades, high CSEU, and high IEU), pessimistic low achievers (i.e., low grades, low

CSEU, and low IEU), low-utility low achievers (i.e., low grades, average CSEU, and low IEU), and aware high achievers (i.e., moderately high grades, low CSEU, and moderately high IEU).¹ The natural clustering of the three variables in these five profiles shows that combinations of the two utility variables do indeed cluster more prominently with certain types of students.

Analyses of variance were used to examine mean differences in the school engagement of these five groups. In general, it was found that the aware achievers (students who perceived some discrimination but also felt that education was very useful) had the highest levels of academic self-esteem, personal school importance (belief that education is important for them personally), and school engagement. Idealistic high and low achievers also scored relatively high on these variables, suggesting that perceiving discrimination is detrimental to school engagement when it is not accompanied by a more general belief in the utility of education. One of the important contributions of this study was in the finding that there are at least two profiles of high-achieving African American students with regard to context-specific beliefs—those who perceive unfair rewards for the academic accomplishments of African Americans but still believe that education is generally useful (aware achievers), and those who perceive few such barriers to success through education (idealistic achievers). Moreover, the study showed that there were also students (the idealistic low achievers) who had very positive views about the utility of education but who still did not do well in school.

This study was an important first step in understanding the diversity in African American students' perceptions about the utility of education and their subsequent school performance. What remains to be investigated, however, is whether these clusters or profiles of students are found in other populations of African American students, and whether the profiles are related to personality variables such as racial ideology.

EDUCATIONAL UTILITY AND INTERRACIAL CONTACT

One of the main premises of the current theory of African American educational utility is that perceptions of discrimination influence engagement in school (Mickelson, 1990; Ogbu, 1985; Rowley, 1999a). Such perceptions come from observing inequities in society—most often from seeing Whites rewarded for academic excellence in ways that African Americans are not. Thus, it seems that the more that students interact with Whites, the more that they would perceive discrimination. Studies have shown, in fact, that African American students in integrated schools tend to perceive more discrimination than those in more segregated schools (Ford, 1993). Of course, whereas contact with Whites may be associated with stronger perceptions of

discrimination, it should also be associated with endorsement of mainstream values. Indeed, African American students who attend schools with fewer African American students tend to more strongly endorse assimilationist values (Sellers et al., 1997). It seems likely, then, that contact with Whites would be positively associated with profiles higher in idealistic utility and negatively associated with context-specific utility.

THE PRESENT STUDY

This study is designed to address certain conceptual and methodological issues in the current literature on the relationships among educational utility, academic performance, and racial identity. The study emphasizes the diversity in African Americans' responses to life's challenges. Conceptually, the study moves beyond perspectives that suggest that African American students must have positive beliefs about education to achieve. It also calls into question theories that propose that awareness of certain societal constraints on mobility result only in academic disengagement.

The study also highlights the diversity of African American students through its methodological approach. Much of the research on African Americans has been criticized for using methods that imply that African Americans are a monolithic group (McLoyd, 1991). This criticism is usually in response to studies that rely on Black-White comparisons. The criticism, however, may also be leveled against studies that use variable-oriented methods, such as regression analysis, that attempt to fit a single model to an entire sample (Bergman, 1988). In the current person-focused method, however, participants are grouped according to the natural clustering among the variables of interests. Although it is possible through clustering procedures to produce an infinite number of extremely small clusters, it is assumed that for many phenomena there are a relatively small number of lawful, systematic relationships among the variables. Thus, a reasonable number of meaningful clusters can be identified.

The present study uses a person-oriented approach to understand the natural interaction of the two components of educational utility and students' grades. These three variables were chosen as the clustering variables for several reasons. First, previous literature suggests that idealism and context-specific beliefs about educational utility may be related in nonlinear ways (Ogbu, 1985; Rowley, 1999a). Indeed, the two variables are modestly correlated at best. This leaves the possibility that an individual may believe generally in the positive value of education, but may also perceive discrimination. Alternatively, someone could have low levels of general regard for education, but not necessarily because they perceive discrimination against African

Americans. Second, clustering educational utility with grades creates groups representing natural combinations of performance and value. This method also sheds light on combinations that tend not to occur naturally (Bergman, 1988). Cluster analysis provides a method of capturing such combinations as they occur naturally. Although performing several median splits on variables and combining individuals based on whether they are high or low on the variables can achieve somewhat similar combinations, cluster analysis allows for an infinite number of potential profiles and does not force arbitrary division of the data.

METHODS

PARTICIPANTS

There were 126 African American college students recruited from two universities. Of these participants, 96 attended a public, predominantly White university (PWU), and 30 attended a private, historically Black university (HBU). Both schools are located in the mid-Atlantic region of the United States. Overall, the sample was 74.6% women, with no differences in gender distributions at the two schools. Although the sample was disproportionately female, this percentage is representative of the African American populations at both schools (National Collegiate Athletic Association [NCAA], 1995). The median-reported family income was between \$55,000 and \$64,999. Most of the participants were in their first or second year of college (53.5% first year, 29.2% second year, 12.3% third year, 2.9% fourth year, and 2.0% fifth year or other). Besides differences in class standing—students at the PWU tended to hold higher class standing than those from the HBU—there were no significant differences in demographic background between the two schools. Because of the small number of participants at the HBU, data will be pooled across schools, but school type will be used as a covariate in all analyses.

MATERIALS

Multidimensional Inventory of Black Identity (MIBI). The MIBI was developed by Sellers and colleagues (1997) to measure the three stable dimensions of racial identity (centrality, ideology, and regard) proposed by the Multidimensional Model of Racial Identity for African Americans. Participants were asked to report the extent to which they endorsed each of 52

items on a 7-point Likert scale. Only the Ideology and Centrality subscale will be used for this study. The Centrality (8 items) scale measures the extent to which being African American is central to the respondents' definition of themselves. Participants reported their level of agreement or disagreement with such items as "Being Black is an important reflection of who I am." The Cronbach's alpha reliability coefficient ($\alpha = .84$) suggested that the scale was internally consistent. The Ideology scale (9 items for each subscale) measures four philosophies (assimilation, humanism, nationalism, and oppressed minority) associated with the way that African Americans view political/economic issues, cultural/social issues, intergroup relations, and attitudes toward the dominant group. With the exception of the Assimilation scale, each subscale yielded an acceptable level of internal consistency for the present sample. The Assimilation subscale ($\alpha = .58$) measures the extent to which the individual emphasizes a desired cohesiveness between African Americans and American society in general (e.g., "The destiny of Black people is tied to the destiny of all Americans"). The Humanist subscale ($\alpha = .70$) reflects an ideology where the similarities of all humans are emphasized (e.g., "Being an individual is more important than identifying oneself as Black"). The Oppressed Minority subscale ($\alpha = .77$) emphasizes the relationships between African Americans and members of other oppressed groups (e.g., "There are other people who experience racial injustice and indignities similar to Black Americans"). Finally, the Nationalism subscale ($\alpha = .77$) emphasizes the uniqueness of being African American (e.g., "Black people must organize themselves into a separate Black political force").

Idealistic and context-specific educational utility. This was measured with the Utility of Education for Blacks (UEB) scale created by the author (Rowley, 1996). The UEB has two subscales, both adapted from Mickelson's (1990) abstract and concrete attitudes scales. The Idealistic Educational Utility subscale consists of six items that reflect the belief that there is a direct connection between getting a good education and occupational success and mobility. "Education is the key to success" is an example of an idealistic utility item. Although items in this subscale sometimes mention race (e.g., "Education is the key to prestige for Blacks"), they do not mention how race could be a factor that limits the value of education. The Context-Specific Educational Utility subscale consists of eight items that reflect the notion that getting a good education is not always rewarded with a good job or job mobility (e.g., "Achievement in school does not always lead to job success"). This subscale also consists of items that reflect the limiting role of race (e.g., "Because of discrimination, education means less for Blacks"). Both scales

showed adequate internal validity with Cronbach's alphas of .82 and .77, respectively.

Exploratory and confirmatory factor analyses supported the two-factor model reflecting the idealistic and context-specific dimensions of educational utility. Scores on each subscale were created by reversing negatively worded items and computing a mean score for the relevant subscale. Higher scores on both subscales suggest perceptions of more utility. In other words, students with high scores on the Context-Specific subscale believe that in spite of barriers mentioned, education can lead to success.

Cumulative grade point average (GPA). All students were asked to report their cumulative GPA. In addition, students at the PWU were asked for permission to obtain an official transcript. Transcripts could not be obtained from students at the HBU. However, a strong positive correlation between transcript and self-reported GPA at the PWU ($r = .85$) suggests that self-reported GPA is an adequate proxy for the transcript GPA. Therefore, self-reported GPA will be used when transcript GPA is not available.

Interracial contact. This was measured with an instrument created by Wegner and Shelton (1995). Participants were asked to report the extent of contact with Whites and Blacks during high school. Responses were reported using a 4-point scale reflecting a range from *no contact* to *frequent contact*. There are four resultant subscales: involuntary contact with Whites, involuntary contact with Blacks, voluntary contact with Whites, and voluntary contact with Blacks. Voluntary contact is assessed by asking participants about interactions with friends and romantic interests. Involuntary contact primarily reflects contact with teachers and coaches at school. The four subscales are created by computing the mean of the relevant items.

PROCEDURE

Students at the HBU were administered the measures during an introductory psychology class period over a two-semester period. Students at the PWU were administered the measures in small groups for credit over three semesters.

GRADE/UTILITY CLUSTERS

Grade/utility profiles were identified through Ward's method. Ward's method is a hierarchical clustering method that begins by considering each case a single cluster (Lorr, 1986). In each step thereafter, the two most similar

clusters are joined. This process eventually ends with all cases in one big cluster. It is assumed that the ideal cluster solution is found somewhere between the two extremes.

The three variables (idealistic utility, context-specific utility, and GPA) were first standardized because they were assessed in different scales of measurement. Next, the agglomeration schedule and dendrogram were examined to determine the number of clusters that best characterized the data. The strategy in hierarchical cluster analysis is to find a solution with a relatively small number of clusters with members that are reasonably homogeneous in their values on the clustering variables. The agglomeration table contains distance coefficients that represent the distance between cluster centroids. A large decrease in the size of the coefficient occurs as similar clusters are merged. Thus, a solution just before such a large drop usually represents a solution where the most distinct clusters occur. In the present study, a large drop in coefficients occurred after six clusters.

By examining the agglomeration table and dendrogram, it was determined that a four- or five-cluster solution was statistically optimal. The conceptual value of cluster groups, however, is the ultimate test of the validity of a cluster solution. The cluster analysis procedure was then run using Ward's method of linkage and the squared Euclidean distance. Cluster memberships for four- and five-cluster solutions were saved. Upon inspection of the characteristics of these two cluster solutions, it was determined that the five-cluster solution fit best. Figure 1 is a bar graph representing the average *Z* scores on the three clustering variables for each cluster (see Tables 1, 2, and 3 for the *Z* scores, raw scores, and prose descriptions for the five-cluster solution). The two clusters that were joined between the five-cluster and four-cluster solutions were quite dissimilar. Although both clusters could be characterized as low achieving, their average scores on the utility variables were quite different. Thus, the five-cluster solution occurring before this union was accepted.

Three of the five profiles were similar to those found in a previous study employing the same methods with African American high school students (Rowley, 1999a). The first cluster, called the low-utility high achievers ($n = 32, 25.4\%$), was not present in the previous study. On average, members of this cluster had higher grades but relatively low levels of idealistic utility and context-specific utility. The second cluster not present in the previous study was the nondiscrimination average achievers ($n = 16, 12.7\%$). Members of this cluster had average grades and high levels of context-specific utility. Levels of idealism were relatively close to the mean of the full sample, but were negative. This cluster was given the term *nondiscrimination* because they viewed few barriers to success through education but were not particularly idealistic. Perhaps these students were more likely to emphasize

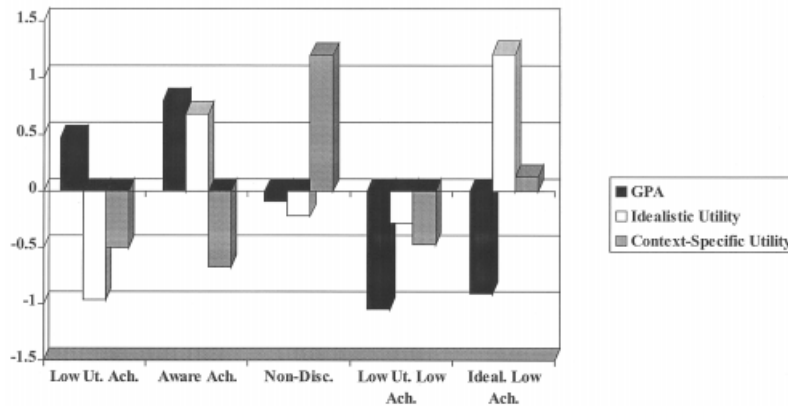


Figure 1: Z Scores for Cluster Groups
 NOTE: Ut. = Utility, Ach. = Achievers, Non-Disc. = Nondiscrimination, and Ideal. = Idealistic.

individual reasons for achievement or lack thereof. The third group was the aware achievers ($n = 35$, 27.8%). They had high grades but low context-specific utility, suggesting that they perceive some barriers. This group also had high levels of idealism. The fourth cluster was the low-utility low achievers ($n = 29$, 23%). These students tended to have low scores on both utility variables and very low grades. The final group was the idealistic low achievers ($n = 14$, 11%). These students had relatively low grades, but high levels of idealism. Their context-specific scores were near the mean.

RESULTS

PRELIMINARY ANALYSES

To test for socioeconomic status (SES) differences in grade/utility clusters, MANOVAs using cluster group as the between-subjects variable and father education, mother education, and family income as dependent variables were computed. The multivariate test was nonsignificant, suggesting that groups are similar in economic status.

Chi-square analysis was used to test for gender and school differences in cluster profiles. Neither of these demographic variables was related to cluster groups.

TABLE 1
Z Scores for Grade Point Average, Idealistic Utility,
and Context-Specific Utility by Grade/Utility Clusters

	<i>Low-Utility</i> <i>Achievers</i>	<i>Aware</i> <i>Achievers</i>	<i>Nondiscrimination</i> <i>Achievers</i>	<i>Low-Utility</i> <i>Low Achievers</i>	<i>Idealistic</i> <i>Low Achievers</i>
Grade point average	0.47	0.80	-0.09	-1.04	-0.91
Idealistic utility	-0.96	0.68	-0.22	-0.28	1.21
Context-specific utility	-0.50	-0.67	1.20	-0.47	0.13

TABLE 2
Means and Standard Deviations by Grade/Utility Clusters

	<i>Low-Utility</i> <i>Achievers</i>		<i>Aware</i> <i>Achievers</i>		<i>Nondiscrimination</i> <i>Achievers</i>		<i>Low-Utility</i> <i>Low Achievers</i>		<i>Idealistic</i> <i>Low Achievers</i>	
	M	SD	M	SD	M	SD	M	SD	M	SD
Grade point average	3.01	0.40	3.21	0.34	2.75	0.31	2.29	0.37	2.40	0.44
Idealistic utility	4.53	0.55	5.92	0.50	5.16	0.63	5.11	0.36	6.36	0.40
Context-specific utility	3.27	0.63	3.10	1.01	4.99	0.44	3.30	0.59	3.91	0.69

Grade/Utility Clusters and Racial Identity

The central question addressed in this study is whether we can explain grade utility profiles in relation to an individual's racial identity. To test this, a MANCOVA with grade/utility cluster as the between-subjects variable and the five MIBI subscales (four Ideology and one Centrality) as the dependent variables and school type as a covariate was employed. Post hoc tests were used to compare pairs of grade/utility clusters. Table 4 presents descriptive statistics for each dependent variable by grade/utility cluster.

TABLE 3
Prose Descriptions of Cluster Groups

<i>Cluster</i>	<i>Description</i>
Low-utility achievers	Students with good grades, but who are not idealistic about education and perceive some barriers to success through education.
Aware achievers	Students with good grades and positive idealistic beliefs about education, but who perceive some discrimination.
Nondiscrimination achievers	Average students who are not particularly idealistic, but do not perceive many barriers to success through education.
Low-utility low achievers	Traditional underachieving students with poor grades and low utility.
Idealistic low achievers	Students with poor grades who maintain high idealistic utility and perceive few barriers to success through education.

TABLE 4
Means and Standard Deviations of Ideology and Centrality by Grade/Utility Clusters

	<i>Low-Utility Achievers</i>		<i>Aware Achievers</i>		<i>Nondiscrimination Achievers</i>		<i>Low-Utility Low Achievers</i>		<i>Idealistic Low Achievers</i>	
	M	SD	M	SD	M	SD	M	SD	M	SD
Assimilation	4.78	0.71	5.27	0.63	5.16	0.80	5.05	0.77	5.64	0.67
Humanism	4.77	0.84	5.26	0.78	5.31	0.90	5.23	0.62	5.80	0.85
Minority	4.60	0.10	4.90	0.85	4.87	0.63	4.58	1.02	5.31	0.78
Nationalism	4.61	0.68	4.43	0.85	3.99	0.98	4.21	0.76	3.73	0.72
Centrality	5.78	0.84	5.69	1.17	4.91	1.12	5.29	0.96	5.15	1.09

The multivariate test for the effect of school type was significant, $F(5, 105) = 4.69$.² There were mean differences between schools on Assimilation ($b = -0.39$) and Nationalism ($b = 0.60$). Students at the PWU had higher scores on the Assimilation scale and students from the HBU had higher scores on Nationalism.

The multivariate test for the effect of cluster membership was significant, $F(20, 115) = 1.77$. Univariate tests were significant for Assimilation, Humanism, Minority, and Centrality, $F(4, 109) = 3.71, 2.04, 3.12,$ and 1.95 , respectively. Specifically, the low-utility high-achiever and low-utility low-achiever groups had lower Assimilation scores than the aware achievers, the idealistic low achievers, and the idealistic high achievers. The low-utility high-achiever and low-utility low-achiever groups did not differ on Assimilation. Also, the idealistic high achievers had lower Assimilation scores than the aware achievers. Thus, it appears that those students with relatively high levels of idealistic utility also tend to endorse Assimilation for African Americans. These students are not, however, necessarily doing better in school.

A somewhat similar pattern emerged with regard to differences among clusters on the Humanism scale. The low-utility high achievers and low-utility low achievers had lower Humanism scores than the idealistic low achievers. No other mean group differences in Humanism scores were significant.

Differences on the Minority subscale were also similar to those on the Assimilation and Humanism scales. The low-utility high achievers and low-utility low achievers tended to have lower Minority scores than the aware achievers and idealistic achievers. There were not, however, significant mean differences among cluster groups on the Nationalism scale after accounting for the influence of school type.

Mean differences among the five grade/utility clusters were significantly different, except when Centrality was the dependent variable. Race was less central to the self-concepts of the nondiscrimination achievers than the low-utility high achievers and the aware achievers.

Grade/Utility Clusters and Interracial Contact

A second question to be examined in this study is what impact interracial contact has on students' grade/utility profiles. To test this, a MANCOVA was conducted with cluster groups as the between-subjects variable and four dependent variables that measured interracial contact. School type was entered as a covariate. Although the multivariate test was only marginally significant, $F(16, 432) = 1.50, p < .10$, the four univariate tests were examined. Only the test predicting involuntary contact with Whites was significant, $F(4, 108) = 2.14$. Post hoc tests showed that the idealistic low achievers had more involuntary contact with Whites than the aware achievers, the nondiscrimination achievers, and the low-utility high achievers. Students who

show low utility but do well in school tend to come from more segregated backgrounds.

There were school type differences in interracial contact, $F(4, 105) = 9.55$. Specifically, students at the PWU had less involuntary contact with Blacks ($b = -0.37$) and more involuntary contact with Whites ($b = 0.83$).

DISCUSSION

Taken together, the results of this study are evidence of three important points. First, the cluster solution by itself suggests that there is more than one profile of high-achieving African American students with regard to their educational utility. Within the three clusters with GPAs above 2.75, several combinations of idealistic and context-specific utility were found. Interestingly, the only profile that was not solidly supported was the idealistic achiever profile, wherein the respondent had very high scores on both utility scales and high performance. College is often a place where African American students begin to think more deeply about issues of racism and discrimination. College provides many opportunities to discuss and ponder these issues in organizations (e.g., Black student organizations), classes, and social interactions.

Second, the study showed that there is also more than one profile of underachieving African American students. Many previous accounts portray African American underachievers as pessimistic about the future or as disengaged from the academic system (Ogbu, 1985; Osborne, 1997; Steele, 1992). The present study did show evidence of such low-utility low achievers, but there was also a group of low achievers with relatively high levels of idealistic utility coupled with average scores on context-specific utility. Ogbu (1988) stated, "Among the black responses to the job ceiling and to inferior education are disillusionment and lack of persevering academic effort because of low educational payoffs" (p. 176). Although this statement may be consistent with some of the low achievers in our sample, it is inconsistent with our cluster of students with poor grades and a strong belief in education.

Third, the present study represents a first step in relating these profiles to the individual's beliefs about race. O'Connor (1997) notes that all of the students who perceived discrimination but still remained hopeful about their own futures had a strong connection to the African American community. They possessed a belief in collective struggle with an emphasis on African Americans, bespeaking a nationalist ideology. The study also showed that belief in assimilation is not the only attitude conducive to achievement in

school. In fact, the group with the lowest Assimilation scores, the low-utility low achievers, were doing well in school, whereas the group with the highest Assimilation scores, the idealistic low achievers, were not doing well in school.

As stated, the specific clusters identified make an important statement about the range of perspectives found in African American students. The validity of these clusters is strengthened by their relation to those found in a previous study with high school students (Rowley, 1999a). As in the study with high school students, there was a cluster of students called aware achievers who perceived some barriers to success but managed to do well in school and maintain a strong value for education. This cluster is perhaps the most interesting and best supported by recent studies. Farrell (1994) described a similar group of students in his ethnography of high-achieving inner-city students. Farrell found that all of the students believed that education was useful, but they also realized that racism and classism are real and that they would have to work very hard to contend with these forces. In 1960, in his essay, "A Negro Student at Harvard at the End of the Nineteenth Century," W.E.B. DuBois shared his own identity as an aware achiever:

To make my own attitude toward the Harvard of that day clear, it must be remembered that I went to Harvard as a Negro, not simply by birth, but recognizing myself as a member of a segregated caste whose situation I accepted. But I was determined to work from within that caste to find my way out. (as cited in Lewis, 1995, p. 271)

But how do these students integrate their beliefs about the importance of school with their beliefs about race? It may be difficult to maintain such optimism if they are too focused on nationalism. But they are clearly aware of the impact of contextual factors, most notably race, in their efforts to become successful adults. Interestingly, the aware achievers have a moderate level of endorsement of each of the racial ideologies. They tended to fall in the middle of the sample on Assimilation, Humanism, and Nationalism. Perhaps this moderate stance on issues of race is what allowed them to hold strong idealistic values while also acknowledging the role of discrimination in the occupational mobility of African Americans. Moreover, this profile suggests a level of flexibility or code-switching ability that provides many behavioral options in many situations. Indeed, studies have demonstrated that many high-achieving African American students possess competencies that allow them to adapt socially and cognitively in a variety of contexts (Fordham & Ogbu, 1986).

A second cluster that was found in both studies is the idealistic low achievers. These students perceived few barriers to success through education and had strong positive idealistic values, but were still less successful in school. These students appear to be similar to the group that MacLeod called the Brothers in his ethnography *Ain't No Makin' It* (1995). The Brothers were the African American high school students who believed wholeheartedly in the value of a good education and in their potential to be successful. Unfortunately, this group lacked the cultural capital necessary to convert that ambition into advanced education and career opportunities. As would be expected, the idealistic low achievers strongly endorsed assimilationism and humanism.

The final replicated cluster was the low-utility low achievers. These students are the traditional underachievers, and have generally negative views of education. They seem to believe that education is not valuable for anyone, and certainly not for African Americans. This disbelief in the value of education is matched by their poor performance in school. One might ask how these students made it to college. It seems relatively unlikely that these could be the same low-utility low-achieving students found in high school. In such a cross-sectional study, it is impossible to tell, but it is certainly plausible that their attitudes changed once they got to college. It is also possible that these students were accustomed to doing better in school, but once entering college had less success and changed their beliefs about education. Other studies have demonstrated that across major transitions (such as going from elementary to middle school or from high school to college), when students who had been high achievers become average or below average students, their morale drops (Eccles, Lord, & Midgley, 1991; Lee, 1996). Although this group was not particularly high on Nationalism or Centrality, they did tend to have low scores on Assimilation and Humanism. They may not be specifically focused on the unique experiences of African Americans, but they seem not to endorse mainstream American values either.

The two clusters that were not present in the study with high school students were the nondiscrimination achievers and the low-utility high achievers. The nondiscrimination achievers were unique in that they did not perceive barriers to success through education—in fact, their scores on Context-Specific Utility were very high ($Z = 1.20$). They did not, however, have particularly high standard scores on Idealistic Utility ($Z = -0.22$). This suggests that nondiscrimination achievers do not have a particularly strong value for education, but they may be reluctant to view discrimination as the cause of low occupational mobility for African Americans. The absolute scores for this group, however, tell a different story. It appears that this group

is similar to the idealistic achievers found in the previous study (Rowley, 1999b). Scores on both the Idealistic and Context-Specific scales were well above the midpoint ($M = 5.16$ and 4.99 , respectively). The Idealistic Utility score simply was not extreme in relation to the other participants in this study. This group differed most from the other grade/utility clusters in their endorsement of Centrality. These students had low levels of Centrality as compared with other groups and had higher Humanist scores. There were not, however, significant differences between the nondiscrimination group and the other groups on Nationalism or Assimilation. Thus, the most striking uniqueness of this group was their low racial Centrality scores. Race is simply less important to this group than it is for members of other groups.

It was somewhat surprising to find that there was a high achieving group who has low levels of educational utility (i.e., low-utility high achievers). This group had the second highest GPA of the sample ($M = 3.01$), but the lowest level of idealism ($M = 4.53$). Their Idealistic Utility raw scores were just above the midpoint and their Context-Specific scores were well below the midpoint ($M = 3.23$), suggesting an apathy about the value of education. These students with low educational utility but good performance stand out as somewhat nationalistic with relatively low scores on Assimilation and Humanism. They seem to shun mainstream educational values, but remain motivated to do well in school. Something in these students is telling them that although following the mainstream method of gaining success does not generally result in occupational prestige for people like them, there is still a reason to do well in school. Perhaps their achievement reflects an act of rebellion. Sanders (1997) found that among the highest achieving African American high school students were those who believed that the best way to combat discrimination was to excel in school. With this group as well, it is possible that the transition from high school to college brought about a change in attitudes. Note that the low-utility high achievers tended to have the least involuntary contact with Whites before college. Perhaps moving from a segregated to an integrated setting caused their value for education to diminish and their resolve to be successful to increase. This possibility, of course, would need to be examined in a prospective longitudinal study.

In examining the relationships among the five cluster profiles and the racial identity variables, it is clear that using the cluster analysis, as opposed to some linear analysis, provided added insight into the relationships among educational utility, school performance, and racial identity. Relationships go beyond the simple linear relationships found in previous studies. Although it was generally found that students with high levels of idealistic utility highly endorse Assimilation, Humanism, and Minority ideologies, there was not a

strong correlation among these variables. For instance, the aware achievers fell midway between the low-utility high achievers and the high-utility low achievers on Assimilation, Humanism, and Minority ideologies. Most important, the study is an important step in understanding the complex relationships among educational utility, academic performance, and racial identity.

LIMITATIONS

This study brings to bear an important and perhaps neglected relationship—that of African American students' beliefs about race and race relations and their beliefs about the value of education. Although the results add significantly to our understanding of this association, there are some limitations in its execution. The first limitation is inherent in the cluster analytic procedure. By nature, cluster analysis is bound by the makeup of the study sample. Thus, generalizability of results may be limited. It is only through repeated support for a given solution that firm conclusions can be made about the relationships among a set of variables. A positive aspect of the study was the partial replication of clusters found in another study (Rowley, 1999a). However, the two samples differ in important ways—one was a high school sample and one was a college sample—that make further replication necessary.

A second limitation is in the relatively small sample size. Although statistical information and findings from previous research suggest that the five-cluster solution is optimal, it is possible that more participants would have yielded more clusters or more homogeneous clusters. These clusters, however, would most likely be small and extreme. Furthermore, each of the clusters identified represented an adequate number of participants.

Third, the study was cross-sectional, precluding any inferences about directionality. It is probable that the relationship between educational utility and school performance is bidirectional, with previous performance informing utility values and with utility values influencing performance. Moreover, it is clear that it is important to examine changes in profiles across the transition to college. Were students with certain profiles more likely to go on to college?

A fourth limitation is in the study's focus on a small set of variables that are related to academic achievement. The study was specifically designed to address the question of whether African American students' beliefs about education clustered naturally with certain levels of performance and how these grade/utility clusters were then related to racial identity. However, it is clear that many other variables play a critical role in the achievement of

African American college students. It would be impossible to control for each of these. Instead, we opted for a more focused approach. Future studies should, however, expand on this.

Finally, the study was limited by the inability to examine different effects according to school racial makeup. Although no differences in cluster membership were found between the two school types, and school type was used as a covariate in all analyses, it is still possible that relationships between clusters and outcome variables would differ according to this important variable.

FUTURE DIRECTIONS

The continuity between grade/educational utility clusters across time remains to be validated. Although similar clusters are found in high school and college, there needs to be an assessment of the developmental trajectories of individuals from high school to college through longitudinal studies. Are students with certain profiles more likely to go on to college and, once in college, more successful? Moreover, there needs to be an investigation of changes in profile membership during the college years from the first year, when one may be very idealistic, to graduation, when facing the work world is a reality that cannot be avoided. In any future investigations, however, the examination of the diversity of values and attitudes within African American students must remain a high priority.

NOTES

1. Both idealistic and context-specific educational utility were coded such that higher scores indicate a stronger belief in the utility of education; a low score on the Context-Specific subscale suggests the perception of more barriers to success through education.

2. The alpha level for all tests will be set at .05.

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