2005 AIR RESEARCH GRANT PROPOSAL

THE BLACK-BLACK EDUCATIONAL ATTAINMENT GAP: SOCIO-CULTURAL AND ACADEMIC IDENTITY AT A CROSSROADS

Grant amount requested: $26,243

Database of interest: National Education Longitudinal Study 1988/2000

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2. PROJECT SUMMARY

Cover stories of the 2004 back to school editions of *Ebony* and *Essence* magazines herald the gross disparity in college attendance rates between young black men and women. Differentials in 2001 enrollment rates were nearly two to one: of the 1,850,400 African American college students, 1,178,000 were women (U.S. Department of Education, 2002a). While overall enrollment rates of African Americans increased over the past 60 years, enrollments of black men relative to black women declined slightly, about one percent, between 1965 and 1984, then a more dramatic 7.6 percent from 1984 through the 1990s (Cross and Slater, 2000).

Using the NELS: 88/00 data set, this study explores differences in educational attainment between black students: why do young black men enroll in college at a lower rate than their female counterparts. It may be the case that perceived differences in economic returns to education accompanies the educational attainment gap. As returns to education should reflect one's educational investment, it stands to reason that differences in projected returns to education are observable through patterns of extracurricular activity participation, which by definition is a form of educational investment beyond required studies. It is therefore my hypothesis that investment in education for young black men and women outside of school hours is significantly different and is reflected in the educational attainment gap between black students. To test this hypothesis, binomial logistic regression analysis will be used to estimate a standard specification of educational attainment as a function of socioeconomic status (SES), gender; previous educational performance; in addition to neighborhood characteristics - urban, suburban, or rural; as well as measures of extracurricular participation and unstructured activity. Given the potential interaction between gender and the explanatory variables, I will re-estimate the attainment model, using OLS regression, with separate equations for men and women in order to employ an Oaxaca (1973) decomposition to account for the differential effects of extracurricular participation on black males.

To the extent that the perceived returns to education differ between young black men and women, it may be the case that the academic identities pursued by young black men are not reflected in either the materials or people seen associated with higher education. Towards that end, education policymakers for both higher and K-12 should consider direct advertising appeals and mentorship opportunities. If it is the case that differentials are based on choice, fiscal constraints have led states and localities to cut extracurricular activities, students most in need of these outlets may be disproportionately impacted, and may help explain why black boys are less apt to enroll in post-secondary education.

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4. **PROJECT DESCRIPTION**

a. STATEMENT OF THE PROBLEM

Cover stories of the 2004 back to school editions of *Ebony* and *Essence* magazines herald the gross disparity in college attendance rates between young black men and women. Differentials in 2001 enrollment rates were nearly two to one: of the 1,850,400 African American college students, 1,178,000 are women (U.S. Department of Education, 2002a). While overall enrollment rates of African Americans increased over the past 60 years, enrollments of black men relative to black women declined slightly, about one percent, between 1965 and 1984, then a more dramatic 7.6 percent from 1984 through the 1990s (Cross and Slater, 2000).

Using the NELS: 88/00 data set, this study explores the phenomenon of differentials in educational attainment between black students: why do young black men enroll in college at a lower rate than their female counterparts. By way of background, this proposal first outlines the contours and proffered explanations of achievement gaps between black and white students, and reminds readers why the closure of these gaps is important. It seems to be the case that with respect to the educational attainment gap between black students, achievement gap explanations illuminating the relationship between individuals, their peers, and the school environment will be most helpful. I then suggest the employment of identity capital as a theoretical framework for understanding the intersecting identities of black youth within the academic environment, most importantly the identities associated with race, gender, and academic peer groupings. In this proposed study, this latter factor, academic identity, is modeled in the form of extracurricular activity participation. In creating this model, most notable is the work of Constantine and Perna (n.d.) who estimate the effects of social and cultural capital on young black men and women, finding that receiving assistance in applying to college, parental involvement in education, and educational aspirations are important factors in the decision to enroll in college.

Building upon their work, the present study explores differential investments by young black men and women in the overall educational experience. Towards that end, I analyze the choice and time investments in extracurricular activities by young black men and women. It may be the case that perceived differences in social and economic returns to education accompanies the educational attainment gap. As returns to education should reflect one's educational investment, differences in projected returns to education may be observable through patterns of extracurricular activity participation.

A Cursory Look at Black Students, White Students, and Achievement Gaps

Achievement gaps between student groups can be bifurcated to consider gaps in educational attainment, how far students go in school, and educational achievement, generally measured by exam scores. As the focus of this paper is the educational attainment gap between black students, white students are used as a norm reference. Attainment and achievement gaps with other racial and ethnic groups are beyond the scope of this study, although future analysis should include Latinos and Native Americans. Gaps between black and white in both educational attainment and achievement have narrowed over the past 60 years. Current Population Survey (CPS) high school completion rates for blacks rose from 75 percent in 1970 to almost 84 percent in 2000, about eight percentage points behind whites (NCES, 2001). Likewise, studies of the College Board's SAT and National Assessment of Educational Progress (NAEP) reading and mathematics examination scores generally show the increased educational achievement of blacks from the mid-1970's to the mid 1990's, with an approximately 50 point average gain in SAT scores, 30 point average gain in NAEP reading scores and 20 point average gain in NAEP mathematics scores (Hanushek and Somers, 1999). In addition, among 2003 high school graduates, 66.1 percent of whites and 58.3 percent of blacks enrolled in some form of postsecondary education within one year of high school graduation, representing an enrollment gap closure of about 9 percent since 1982 (JBHE, 2004). Moreover, at any given level of academic preparation, blacks are more likely than whites to persist farther in their education (Jencks and Phillips, 1998; Mason, 1997; Rivkin, 1995). However, gains in educational attainment by blacks are lopsided and are largely attributable to the successes of black women (Cross and Slater, 2000; Hawkins, 1996; NCES, 2001).

Educational attainment differences between adolescent men and women do not appear to be related to innate characteristics. Differences in educational achievement, as measured by high school achievement examination scores, are small. Using NELS: 88/00, Constantine and Perna found that black women score slightly higher on achievement exams, a one and a half point differential (n.d.). But in using the National Longitudinal Survey of the class of 1972 (NLSY-72), Constantine found that black men perform slightly better than their female counterparts (1999). Similarly, Nettles and Perna (1997) found that black men outperform women on the SAT and ACT. Nor are high school completion rates between black students significantly different with 87.5 percent of young black men and 86.7 percent young black women between the ages of 25 and 29 having completed high school by 2001 (U.S. Department of Education, 2002b).

Differentials in educational attainment matter, as sociological and economics literature reveals that independent of achievement, labor market earnings is strongly linked to educational attainment. To the extent that longer periods of academic training signal the acquisition of skills, human capital, and character qualities such as perseverance, higher levels of educational attainment can increase one's earnings potential (Brewer, Eide & Ehrenberg, 1999; Rivkin, 1995). After controlling for educational attainment, black women earn at least as much as white women (NCES, 2001), and often earn more than black men (Cross and Slater, 2004). This latter proposition may have significant implications for relations within black marriages and family formation (Cross and Slater, 2004; Dickson, 1999; Raley & Bratter, 2004; Sassler & Goldscheider, 2004).

Contemporary academic literature is replete with explanations of different parts of the achievement gap between black and white students and can be examined at the level of the individual student and their peers (Akom, 2003; Ainsworth-Darnell & Downey, 2002; Downey & Ainsworth-Darnell, 2002; Conley, 1999; Farkas, Lleras, and Maczuga, 2002; Herenstein & Murray, 1994; Jencks and Phillips, 1998; NCES, 2001; Ogbu, 2003), the family and community (Entwisle & Alexander, 1992; Entwisle & Alexander, 1994; Guo & Harris, 2000; Hedges & Nowell, 1999; McNamara Horvat & Lewis, 2003; Orr, 2003; Roscigno, 1998), the teacher (Darling-Hammond, 2000; Ladson-Billings, 1995; Lubienski, 2002) and school and system-level factors (English, 2002; Farkas, 2003; Jencks & Phillips, 1998; Mickelson, 2001; Roscigno, 1998; Tyson, Darity, & Castellino, n.d.). Yet, with the exception of factors related to individual students and their peer groups, considerations explored in the black-white achievement gap are constants when considering differences in black educational attainment across gender lines. In other words, young black men and women come from the same set of families, neighborhoods, attend the same schools, and have the same teachers. The key issue is that theories positing socio-environmental factors as an explanation for the low achievement of blacks must also address why the impact of such factors differs by sex. Towards this end, models of identity capital, which until recently have largely eluded econometric modeling, may be insightful (Akerlof & Kranton, 2002).

b. PROPOSAL OF WORK

Research Design

The purpose of this study is to explore the post-secondary educational attainment gap and assess to what extent student investment in education matters, for college enrollment purposes, and is significantly different for

young black men and women outside of school hours. It is my hypothesis that investment in education for young black men and women outside of school hours is significantly different and is reflected in the educational attainment gap between black students. This difference in time allocation can be further divided into three components. First, black male and female adolescents make different choices with respect to the types of after school activities and that these choices are related to one's perceived returns to education. Whereas black women are more likely to participate in academic, social, religious and household activities, black men are more apt to spend time unsupervised with peers or in symbolic activities, largely athletics and entertainment. These choices, in turn, are related to student development of both human and identity capital. Next I posit that young black men and women make different choices with respect to the amount of time allocated to skill-building after school activities, with black women allocating more time to such activities. This factor is a function of human capital. Last, young black men and women engage in skill building activities at different intensities. Thus, even if quantitatively allocating the same amount of time to extracurricular activities, black women get a greater return in skills for the amount of time invested. This greater return in skills is then reflected in increased rates of post-secondary enrollment.

Data

This study will use unrestricted data from the fourth follow-up to the 1988 National Education Longitudinal Study (NELS 1988/2000), a national database sponsored by the National Center for Education Statistics (NCES). The NELS 1988/2000 survey includes data for a nationally representative sample of 26,432 individuals who were eighth-graders in 1988, the base year of the study (Ingels et al., 2002). Since 1988, four follow-up studies have been administered (1990, 1992, 1994, and 2000) in an effort to collect trend information about students' experiences as they leave middle school, progress through high school and enter into postsecondary institutions and the workforce. The data files from the fourth follow-up are ideal for this study because they provide information about the accomplishments of the 1988 eighth-grade cohort 12 years after the baseline study and eight years after most had completed high school or passed the General Educational Development test (GED) (Ingels et al., 2002). The 2000 data were collected at a time when most cohort members had entered and/or completed postsecondary education, which includes attendance at any college, university or vocational, technical or trade school (Ingels et al., 2002). The data is also ideal in that it can be easily broken down and analyzed on the basis of race/ethnicity, gender and socioeconomic status.

Conceptual Model

This study uses a conceptual model that incorporates identity and human capital development theories to examine the predicative power of academic identity and its interaction with cultural factors on educational attainment of Black students as measured by enrollment in a post-secondary institution. The concept of identity capital is an outgrowth of human capital development theory. Whereas human capital denotes economically derived value from skill-oriented knowledge, identity capital captures a specific skill, the skill of self-placement within a socio-cultural context – the ability to negotiate a given environment (Cote, 1996). The development of identity capital requires both knowledge of self, one's skills and capabilities, as well as a sense of one's socio-cultural environment. Tangible aspects of one's identity capital may include material possessions, one's "good" looks, speech patterns, and one's accomplishments. Intangible aspects are often reflective of personality characteristics such as self-esteem, sense of purpose, critical thinking and moral reasoning abilities, sense of humor, and so on (Cote, 1996; Cote and Schwartz, 2002). One's identity capital may vary from low to high status as the values ascribed to one's identity are contextual. Thus, many low socioeconomic, African-American students living in a state of hyper-segregation may have high currency in identity capital within their community, as the environment negotiated is predominated by others who have value constructs similar to their own. Yet, the same students attending schools with dominant cultural constructs may be disadvantaged unless they are able to adapt their identity to thrive within that setting.

Race is but one of many factors comprising an individual's socio-cultural identity. In addition to having one or more races, individuals have a sex, gender, sexual orientation, ethnicity(ies), socio-economic status and so on (Ferguson, 2000; O'Connor, 2001). While other indicators are of independent import, this study focuses specifically on the interaction of identities deriving from the racial and gender indicators of black youth. Within the scholastic environment, students carry additional identities: "jock", "nerd", "prep", "burnout", and so forth (Akerlof and Kranton, 2002; Barber, Eccles, & Stone, 2001; Eccles & Barber, 1999). It is the intersection, as opposed to the summation, of these identities that dictate the set of socially prescribed behavioral norms associated with these identities (O'Connor, 2001), and become a standard for negotiating the educational environment (Barber, Eccles, & Stone, 2001; McNamara Horvat & Lewis, 2003). Identity layers can be selected, deselected, and combined based

upon environmental circumstances, most notably the identity projected by peers (Cote and Schwartz, 2002; McNamara Horvat & Lewis, 2003; Stets & Harrod, 2004).

So what does it mean to be a young black high school student? In 1986, Fordham and Ogbu proffered the theory that to be socially accepted by other African American students, black students have the burden of maintaining an oppositional, anti-white posturing. While there are affirmative black identities to which black students can ascribe (Akom, 2003; Clay, 2003), this oppositional posture includes a disdain for academic achievement and proper Americanized English as both are perceived as attributes of whiteness. While there is some empirical substantiation of this thesis (Bergin & Cooks, 2002; Ford & Harris, 1996; McNamara Horvat & Lewis, 2003; Steinberg, 1997), several scholars fail to find evidence of this oppositional culture nationally (Ainsworth-Darnell, 1998; Cook and Ludwig, 1998) and in more regional and localized studies (Akom, 2003; Ferguson, 2001 in darity; Tyson, 2002; Tyson, Darity, & Castellino, n.d.). In the face of this conflicting literature, most telling is a mixed methods study by Tyson, Darity, & Castellino (n.d.) who explain that students regardless of racial or ethnic identity distance themselves from outward displays of academic achievement. Thus, rather than shunning an "acting white" labeling, African American students like their peers of other races/ ethnicities display risk aversion towards obtaining a negative academic identity, that of "nerd". This proposition is confirmed by works evaluating the intersectionality of identity and its resultant influence student negotiation of the school environment (Chavous, Harris, Rivas, Helaire, & Green, 2004; Frank, Kehler, Lovell, & Davison, 2003; McNamara Horvat & Lewis, 2003).

With respect to gender identities, literature on boys is of increasing popularity within education and the social sciences and largely is of a pejorative tone, exploring the "problems" of young masculinity. While a fluid concept, masculinity in its dominant conception represents, among other things, strength, power, bravery, rationality, and heterosexuality (Young, 2001). As young men develop their masculine identity, they test and exercise aspects of masculinity that fit their persona in demonstrative manners, both positive and negative. It is the negativities of bullying, homophobia, and violence as well as substandard academic performance that are of central concern in the literature (Frank, Kehler, Lovell, & Davidson, 2003; Ghaill, 1996; Weaver-Hightower, 2003). To the extent that African-American males are culturally disadvantaged in the classroom (Norman, Ault Jr., Bentz, & Meskimen, 2001), opportunities for positive displays of masculinity, in the form of classroom leadership for example, may be limited. Towards that end, young black men have tendencies to engage in socially destructive

behaviors, displays of strength, power, and "cool", in an attempt to maintain dignity and pride in the face of perceived oppression (Ferguson, 2000; Majors, 1992). In addition, as black males are penalized more than their white counterparts for misbehaviors, both in terms of disciplinary actions (Ferguson, 2000) and academic actions such as grade retention (Jimerson & Kaufman, 2003), greater disengagement from school, and hence lower educational attainment, is likely to result (Davis & Jordan, 1994; Roderick, 1995).

Across racial lines, relative declines in post-secondary enrollment by young men as compared to women are evident in national data sets (Anderson & NBER, 2000; Mortenson, 1999). Explanations for these relative declines in male post-secondary enrollment include increases in female-headed households and the dearth of male role models in K-12 education settings (Mortenson, 1999), higher rates of return to higher education for women (Jacob, 2002), higher rates of enrollment in higher education among older, and other non-tradition female students compared to their male counterparts (Anderson & NBER, 2000), the greater tendency of young women to spend leisure time in skill-enhancing activities (Mortenson, 1999), and greater female capacity with respect to non-cognitive skills (Jacob, 2002).

Note that the source of the relative decline in male enrollment is not associated with fewer men attending college, but that more women are enrolling. Thus in 1975, there were 6 million men and 5 million women enrolled in college, as opposed to 6.3 million men and 8 million women in 1997 (King, 2000). In addition, these relative declines are largely attributable to declining participation rates among men from African-American, Hispanic, and low socioeconomic status backgrounds (King, 2000). In fact King (2000) suggests that the difference in college enrollment rates between traditionally-aged white students is small. Even including non-traditional students, white women accounted for 56 percent of white college students in 2001 (U.S. Department of Education, 2002a). On the other hand, the attainment gap between black students is strikingly large, with the Journal of Blacks in Higher Education predicting that 100% of bachelors degrees awarded to black students would be attained by black women should attainment trends reflect degree completion patterns from 1977 to 1997 (1999). In 2001, black women accounted for 64 percent of black college students (U.S. Department of Education, 2002a). Using data from the National Post-Secondary Education Student Aid Survey, 1995-1996, King finds that at the lower end of the income distribution, the enrollment gap between black students is more than double and narrows to four percentage points among the middle class, and widens to 18 percent among students from families making $70,000 or more (2000).

Thus, just as explanations for declines in black male post-secondary enrollment cannot rest solely on factors associated with blackness, explanations grounded solely in masculinity or poverty also lack for under-inclusiveness.

This leads to a consideration of additional identity factors. Eccles & Barber (1999) propose that the identities of adolescents are shaped, in part, by their peer group. Choice of extracurricular activity reaffirms one's self-placement within a peer group, as well as the persona associated with that group. Giving the example of athletes, Barber, Eccles, & Stone (2001) suggest that persons engaged in athletic activities are more likely than non-athletic persons to self-identify as a jock. Thus, while not perfect proxies, activities voluntarily chosen by students during after school hours do give indication of the academic identities, student social persona associated with the schooling environment.

Beyond identity capital, the power of negotiating the school environment, extracurricular activity participation also represents an investment in education, providing transmission of social and cultural capital, attitudes, skills and the adoption of norms that are helpful in the cultivation of human capital more broadly (Barber, Eccles, & Stone, 2001; McNeal, 1998; Otto, 1976). Extracurricular activity is specifically linked to benefits such as enhanced attitude towards schooling, heightened academic aspirations with increases in educational achievement, and attainment, as well as decreases in the probability of high school dropout and substance abuse (Eccles, Barber, Stone, & Hunt, 2003; Marsh & Kleitman, 2002).

Note that the benefits of extracurricular activity participation extend to students across racial/ethnic, gender, socioeconomic, and intellectual capacity lines (Eccles, Barber, Stone, & Hunt, 2003), but are not evenly distributed (McNeal, 1998). Of note, in Lisella and Serwatka's study of 766 eighth-graders of various minority backgrounds in urban schools, they found that in almost half of the cases, male participation in extracurricular activities was associated with lower achievement (1996). With respect to female students, the results were more mixed wherein 23 of the 90 analysis of variance (ANOVA) procedures comparing grade point averages and standardized exam scores to extracurricular participation, women participating in extracurricular activities tended to achieve more. One of the implications of the Lisella and Serwatka study is that all extracurricular activities are not created equal: women participating in academically-based activities tend to achieve more (1996).

Looking specifically at the educational attainment gap between black students, Constantine and Perna (n.d.) using a sample of 895 students from NELS: 88/00 enrolled in a post-secondary institution in 1992, decomposed social and cultural capital factors by sex, finding that differences in enrollment between young black men and

women in four-year institutions are largely attributable to assistance in applying for college and financial aid, parental involvement and educational aspirations. Although they consider participation in athletics, which can be conceptualized as an identity of "jock" in their model and find this factor to be positively correlated with post-secondary enrollment, they do not inquire into the effect of other extracurricular activities on college enrollment.

The proposed study further considers the role of extracurricular participation in post-secondary enrollment. While the gross majority of high school students in the country participate in some form of extracurricular activity (Zill, Nord and Loomis, 1995), students of lower socioeconomic status (SES) participate at lower rates in extracurricular activities. Note that when controlling for socioeconomic status, blacks and other minority students are at least as likely as whites to participate in extracurricular activities. Yet, given that minority students are disproportionately of lower SES, the effects of extracurricular participation on minority students are difficult to assess (McNeal, 1998). Thus, patterns of academic achievement with respect to minority students and extracurricular activities may be better defined by increasing the number of cases sampled. The present analysis adds a sizable number of observations over the Lisella-Serwatka study. With respect to academic identity designations, several will be explored based on extracurricular activity choices, but of particular import to this study are the academic identities of "jock" and "entertainer" as these labels. Among young black men these identities may have more symbolic value, designating a short-term identity within the high school context, not translating into substantive socio-cultural capital (Kennedy, 1992) that can be leveraged for higher levels of educational attainment and wages.

Variables

Variables for this analysis are drawn from the NELS: 88/00 first, second, and fourth follow ups. Towards that end, panel weight F4F1PNWT will be used to account for non-response and missing data bias. The Svyset feature in STATA will be used to account for survey design effects.

The outcome variable modeled in this research is educational attainment, as measured in NELS: 88/00 by the self-reported response to the question of in what year did student enroll in their first post-secondary institution. The analysis in this research design, however, can be extended to include other academic and non-academic outcomes including college graduation and early labor market earnings. Control factors include socioeconomic status (SES), a specification of family endowments such as parental education, occupation, and income; neighborhood

characteristics – whether urban, suburban or rural; and, previous performance in the form of eighth grade standardized composite math and reading scores. These factors and gender are measured in the first follow up. Of primary explanatory focus in this study are measures of gender and extracurricular participation/ unstructured activity. While the former is self-explanatory, the latter requires further discussion.

NELS: 88/00 includes thirteen scholastic extracurricular activities and three community-based activities. Generally speaking, community-based activities have characteristics similar to extracurricular activities in that they are organized, structured programs in which participation is voluntary. For purposes of the present study, only the fact of participation in an extracurricular activity will be included in the analysis, excluding the level of participation in sports and whether the student is an officer in both sports and non-sports activities. The quantity of time allocated to each activity is not measured in NELS, although measures of the amount of time allocated to all activities is available and is included in the analysis. The variable measuring how often a student "hangs out" or drives around with friends is also included in the analysis in order to compare the effects of structured and unstructured after school activity. For purposes of modeling, extracurricular activity variables are measured as a combination of in grades 10 and 12. This set of variables was coded by a general inquiry into high school activity extracurricular activity participation, an amalgamation of years ten and twelve.

Analysis

Binomial logistic regression analysis will be used to assess a standard specification of educational attainment for African American students as a function of socioeconomic status, gender, previous academic achievement, neighborhood characteristics, choice of and amount of time spent in extracurricular and unstructured activities. A linear display of the model estimated is depicted as follows:

$$Y_i = \alpha + \beta_1 SES_i + \beta_2 \text{Prior Achievement}_i + \beta_3 \text{Neighborhood}_i + \beta_4 \text{Extracurriculars}_i + \beta_5 \text{Extracurricular Time}_i + \beta_6 \text{Unstructured Activity}_i + \beta_7 \text{Gender}_i + \varepsilon_i,$$

where Y_i represents post-secondary enrollment of all students between the years 1989 and 2000. Logit analysis is appropriate for this type of inquiry as the outcome variable used in this analysis is dichotomous. Logit estimations of the maximum likelihood of an event's probability correct for the non-linearity, non-normal distribution of errors,

and heteroscedasticity generated by general regression models using categorical outcome measures (Pedhazur, 1997). This study will first analyze the effects of being involved in any extracurricular activity. I then group the activities by activity types (academic, sports, music and arts, community-based, and unstructured) to analyze the effects of particular kinds of activities on achievement and whether these effects vary by gender.

A key question in this context is whether the differential outcomes for adolescent Black men and women are accounted for in the allocation of time across activities. If, for example, the cause of differential achievement is differences in time spent on skill-building activities, one would expect that the coefficient on the gender indicator (β_7) to move towards zero. A key empirical distinction in this analysis is whether men and women choose different activities or whether there are differential effects associated with gender by activity for a given outcome.

Given the potential interaction between gender and explanatory variables, one can estimate the attainment model separately for men and women. From these specifications it is natural to consider specific tests of equality of coefficients. Towards that end, an Oaxaca (1973) decomposition will be used to create an accounting of differential effects of extracurricular participation and socioeconomic status of black males and females. For purposes of calculating the decomposition, a linear OLS regression will be computed. From there it is straightforward to decompose the observed difference in attainment means as follows:

$$\bar{Y}^F - \bar{Y}^M = (\alpha^F + \beta_1^F \overline{SES}^F + \beta_2^F \overline{\text{Prior Achievement}}^F + \beta_3^F \overline{\text{Neighborhood}}^F + \beta_4^F \overline{\text{Extracurriculars}_i} + \beta_5^F \overline{\text{Extracurricular Time}_i} + \beta_6^F \overline{\text{Unstructured Activity}_i}) - (\alpha^M + \beta_1^M \overline{SES}^M + \beta_2^M \overline{\text{Prior Achievement}}^M + \beta_3^M \overline{\text{Neighborhood}}^M + \beta_4^M \overline{\text{Extracurriculars}_i} + \beta_5^M \overline{\text{Extracurricular Time}_i} + \beta_6^M \overline{\text{Unstructured Activity}_i}),$$

or for simplicity

$$\bar{Y}^F - \bar{Y}^M = (\alpha^F - \alpha^M) + \bar{X}^F(\beta^F - \beta^M) + \beta^M(\bar{X}^F - \bar{X}^M).$$

If it is the case that post-secondary enrollment differentials are related to differences in choices, it is relatively easy to go back and assess the degree to which extracurricular activities are available to students by socioeconomics, urbanicity, and gender.

c. DISSEMINATION PLAN

Findings will be presented at the 2006 national conferences of the Association for Institutional Research (AIR), the American Education Researchers Association, and the Association for the Study of Higher Education

(ASHE). Results also will be submitted to scholarly journals such as *Research in Higher Education, The Journal of Higher Education, The Review of Higher Education,* and *Urban Education*, with aims of publication by 2007.

d. DESCRIPTION OF POLICY RELEVANCE

As noted in both popular and trade literature, differentials in post-secondary enrollment rates between young black men and women are alarming. Eccles, Barber, Stone, and Hunt (2003) find overall that students participating in extracurricular activities have better educational outcomes, without regard to race, class, gender, or intellectual capacity. They argue that extracurricular activities provide mediating mechanisms that enable academic identity development and build peer groups supportive of academically engaged identities. To the extent that fiscal constraints have led states and localities to cut extracurricular activities, students most in need of these outlets may be disproportionately impacted, and may help explain why black boys are less apt to enroll in post-secondary education. It may be the case that extracurricular activities should not be considered as extras for some sets of students, but essentials for a productive academic career extending through college enrollment and graduation. Through decomposing cultural identity factors and academic identity factors we can gain a better sense of the attributes of the educational attainment gap between black students, and be better equipped to develop meaningful policy interventions.

e. DISCUSSION ON INNOVATIVE CONCEPTS OF PROJECT

This project's focus on a specific subpopulation, African American students, pushes higher education research beyond traditional methods of conceptualizing student populations as monoliths by race, class, or gender. Yet, the greater innovation of this project lies in its use of the analytic lens of identity capital to gain understanding about achievement gaps between groups. This type of analysis readily can be extended to other groups. With respect to the proposed study, educational attainment differences between black students seems to suggest that policies currently seeking to boost post-secondary enrollments among African Americans are not achieving their desired impact with respect to young black men. Through including the identity capital lens, we may better learn how students within similar cultural groupings may respond differently to education policies based on academic conceptions of themselves. We can also get a sense of the relative capacity of human and identity capital factors to

explain differences in educational attainment. Towards this end, Cote's (1996) theory that human capital models are passé with the modern era can be verified or disclaimed.

f. DISCUSSION OF AUDIENCE TO WHOM THE PROJECT WILL BE IMPORTANT

This research will be important to institutional researchers, higher education policy makers and analysts, and school administrators from both secondary and higher education institutions. If it is the case that these observed differences in post-secondary enrollment are a product of perceived differences returns to education, higher education administrators and policy makers may need to consider the messages sent regarding what identities "fit" the collegiate environment. To the extent that African American males, especially those from low income backgrounds, do not see intersecting layers of their racial, gender, and academic identities in post-secondary advertising materials, they may not perceive that they have a place in higher education. If, on the other hand, it is the case that observed differentials can be traced to activity choices, it may be a signal that human capital factors matter more, and that opportunities for young, black men to participate in extracurricular activities should be preserved, if not increased, as closure of music and other programs may have a disproportionate impact on this population.

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6. BIOGRAPHICAL SKETCH

Dr. Crystal Gafford Muhammad is young and rising scholar in the higher education field. An Assistant Professor at North Carolina State University College of Education in the Department of Adult and Community College Education, she teaches in the areas of law, politics, and race in higher education. Dr. Gafford Muhammad is a 2003 graduate of the University of Virginia, Curry School of Education, where she attained a Ph.D. in Education Policy. She holds a J.D., also from the University of Virginia, and is the 2003 first-place winner of the American Association for Higher Education's Black Caucus Doctoral Student Award. Current research projects include: Judicial Politics and Affirmative Action Higher Education, currently under consideration by the University of Akron's Law & Politics Series; Form or Substance: Does policy structure or rationale influence the constitutionality of race-conscious admissions policies?, a paper presented at the American Education Researcher Association and Association for Public Policy and Management conferences; and, Data Matters: Making A Compelling Case for Diversity in Education, presented at the Education Law Annual Conference and published by the University of Houston's Law and Higher Education monograph series. Each of these projects employs quantitative analysis and the datasets used were created by Dr. Gafford Muhammad. Dr. Gafford Muhammad has also conducted surveys for the University of Virginia's School of Nursing and Office of African American Affairs. With respect to national datasets, Dr. Gafford Muhammad has worked with NCES datasets since 1999, under the guidance of Dr. Sarah Turner, University of Virginia. Dr. Gafford Muhammad completed NCES training for NELS: 88/00 in 2000.

BRIEF CURRICULUM VITA: Crystal Gafford Muhammad

Education

University of Virginia, Curry School of Education, Charlottesville, VA
Ph.D. in Education Policy, May 2003
Dissertation topic – Competitive Admissions, Social Science, and the Law

- University of Houston's Institute for Higher Education Law & Governance, Higher Education Law Roundtable Fellow, May 2003
- First Place Doctoral Student Conference Award of the Black Caucus of the American Association of Higher Education, Spring 2003
- Walter Campbell Scholarship Recipient, Curry School of Education, 2000-2001
- NAACP Agnes Jones Jackson Scholarship Recipient, 2000-2001
- Research Assistant on multiple topics including organizational behavior, the digital divide, sexual education and school violence
- HUES Mentorship for Women of Color, Mentor

University of Virginia, School of Law, Charlottesville, VA
J.D., May 1998

- Journal of Law and Politics, Symposium Director, *Equal Education under the Law*
- Black Law Students' Association, Fundraising Chairperson
- Action for a Better Living Environment, Program Director
- Georgia Bar Admission, March 1999

Spelman College, Atlanta, GA
B.A. Political Science, *summa cum laude*, May 1995
Major: Political Science Minor: International Affairs

- Pi Sigma Alpha Honor Society, President
- Phi Beta Delta Honor Society
- Save Our Sisters Mentorship, Chairperson

Université de Syracuse, Strasbourg, France
Certificate in European Studies, April 1994

- Etas-Unis Alsatian Club, Treasurer

Higher Education Experience

North Carolina State University College of Education

- *Assistant Professor Adult & Community College Education*, (Fall 2003 -)
  - Teaching and research in the areas of law, politics, and race in higher education

University of Virginia Curry School of Education

- *Curry School Community Mentor*, (Fall 2001- Spring 2003)
  - Participated in fall orientation and serve as year round informal academic advisor

- *Teaching Assistant*, (Fall 2002 – Spring 2003)
  - Assisted in class maintenance, Economics of Education

- *Facilitator*, (Spring 2003)
  - Lead small group discussions of topics related to race, ethnicity, gender, and sexual orientation in Multicultural Education course

- *Guest Lecturer*, (Spring 2001)
  - Presented on the topic of Law and Child Ecology to a large lecture class of undergraduate, graduate, and continuing education students

- *Adjunct Professor of Education Policy*, (Spring 2001)
  - Taught graduate level course on the law and policy of students' rights in K-12 education

- *Governor's Research Fellow,* (Fall 1999-Spring 2000)
  - Redesigned and maintained policy studies web page and acted as webmaster

University of Virginia, Office of African-American Affairs

- *Consultant,* (Fall 2002 – Spring 2003)
  - Conducted benchmarking survey of Offices of African-American/ Multicultural Affairs at peer institutions

- *Higher Education Administration Intern,* (Summer 2002)
  - Executed duties of the Assistant Dean for African American Student Affairs
  - Conducted a study of student satisfaction with the programs and services at the Office of African American Affairs and the change in the racial climate at the University of Virginia since the 1980s

University of Virginia School of Nursing, Office of Alumni Affairs and Development

- *Consultant,* (Fall 2001)
  - Created and presented on database of development benchmarks of select schools of nursing

- *Higher Education Administration Intern,* (Summer 2000 – Spring 2001)
  - Designed and began implementation of a strategic plan for the School of Nursing's Public Relations Program

  - Actively participated in development projects; Devised and executed benchmarking development survey of select nursing schools

Professional Activities

Memberships

- American Education Researchers Association (AERA)
- Association for the Study of Higher Education (ASHE)
- Education Law Association (ELA formerly NOLPE)

Presentations & Publications

- Data Matters: Making a Compelling Case for Diversity, University of Houston's Institute for Higher Education Law & Governance Monograph Series, 05-01 (2005)
- Judicial Politics and Affirmative Action in Education, Education Law Conference (November 2004).
- The Devil in Details: Judicial Politics and Affirmative Action in Education, Frederick D. Patterson Research Conference (September 2004).
- The Future of Voluntary Desegregation: A Note from Law to Education, The William and Ida B. Friday Institute's First Friday Forum (April 2004)
- Data Matters: Making a Compelling Case for Diversity, Education Law Conference (November 2003)
- Form or Substance: Does the construct of a race-conscious admissions policy affect its constitutionality? APPAM Annual Conference (November 2003)
- Data Matters: Making a Compelling Case for Diversity, American Association of Law Schools Northeast People of Color Conference (April 2003)
- Form or Substance: Does the construct of a race-conscious admissions policy affect its constitutionality? AERA Annual Conference (April 2003)
- Data Matters: Making a Compelling Case for Diversity, AAHE Annual Conference (March 2003)
- Data Matters: Making a Compelling Case for Diversity, Whittier School of Law (January 2003)
- Data Matters: Making a Compelling Case for Diversity, George Mason University School of Law (January 2003)
- Panelist, "Strategies for Black Leaders", *NAACP Viewpoints*, Charlottesville, VA (Dec. 2002)
- Panelist, "Models of Black Leadership", *NAACP Viewpoints*, Charlottesville, VA (Oct. 2002)
- Data Matters: Making the Compelling Case for Diversity in Education, Curry Policy Brown Bag Series (Oct. 2002)
- The Black-Black Achievement Gap, AERA Annual Conference (Spring 2002)
- Competitive Admissions, Social Science and the Law, AERA Annual Conference (Spring 2002)

Skills

- SPSS, SAS and STATA statistical software, Endnote reference software, and Microsoft Office
- Received training in the proper use of NCES longitudinal surveys, including NELS: 88/00
- Received training in FTP and Web Design
- Proficient in French reading and conversation

7. BUDGET AND BUDGET JUSTIFICATION

Budget

Senior Personnel	
Principal Investigator Gafford Muhammad 2-FTE summer months	12,722
at $6361/mo	
Other Personnel	
Graduate Research Assistant	
$12/hr x 10 hrs/week x 28 weeks	6,720
Total Salaries and Wages	**19,442**
Fringe Benefits	
Principal Investigator (23%)	2,926
Graduate Research Assistant (8.55%)	575
Travel	
Mandatory AIR conference	1,500
Additional conference attendance for dissemination of results	
Association for the Study of Higher Education (ASHE)	1,500
Total Benefits and Travel	**6,501**
Other Direct Costs	
Materials and Supplies	150
Publication Costs/ Documentation/Dissemination	150
Total Other Direct Costs	**300**
TOTAL GRANT FUNDING REQUESTED	**$26,243**

Budget Justification

a. Salaries & Wages

Senior Personnel

Dr. Crystal Muhammad will serve as the Principal Investigator for the proposed study and will commit 2 months of full-time employment in the summer of 2005 (mid June to mid August) to this one-year project. The salary projections for the Principal Investigator shown in the proposed budget are in line with the salary schedule provided by the College of Education at North Carolina State University. Based on Dr. Muhammad's current salary, the rate of pay needed to compensate for 2 months of full time employment at a rate of $6361/ month equals $12,667.

Other Personnel

One graduate research assistant will be employed on an hourly basis to assist with this project. The hourly wage projections for the graduate student are based on current hourly graduate student wages at North Carolina State University. Based on the standard rate of pay and the number of weeks during one academic year, the amount required to employ one graduate student to assist with this project at a rate of $12 per hour for 10 hours per week over the course of 28 weeks equals $6,720.

b. Fringe Benefits

Fringe benefits and health insurance for two months of full time employment for the Principal Investigator, calculated at a rate of 23 percent, total $2,964. Fringe benefits and health insurance for one graduate student, calculated at a rate of 8.55 percent, total $575 for the one-year period.

c. Travel

The results of this study will be presented at three national conferences including the Association for Institutional Research and The Association for the Study of Higher Education. Based on prior experience, the cost for attending each of these conferences is estimated at $1,500. The total amount requested for conference participation is $3,000.

e. Other Direct Costs

Throughout the course of this study the Principal Investigator and the Graduate Research Assistant will need to obtain various materials and supplies to assist in the research process. In the proposed budget $150 has been set aside to cover the costs of photocopying relevant research materials and purchasing research reports, books, and monographs which are directly related to the research project. An additional $150 has been set aside to cover the costs related to publication, documentation and dissemination of the research results.

8. CURRENT AND PENDING SUPPORT

Startup support of $4,000 for this project was provided by the North Carolina State University, College of Education. This support lasts through March 2004. There is no further support pending.

9. FACILITIES, EQUIPMENT AND OTHER RESOURCES

In addition to Dr. Muhammad's office computer, North Carolina State University (NCSU) will provide an additional stand-alone personal computer for data analysis. NCSU will also provide an additional copy of the latest version of SAS statistical software for initial data analysis.

10. SPECIAL INFORMATION AND SUPPLEMENTARY DOCUMENTATION

Not applicable