

Wealth, Traditional Socioeconomic Indicators, and The Achievement Debt

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This study examined whether socioeconomic indicators including wealth, parents' education, parents' occupation, and parents' income predicted the academic outcomes of African Americans and European Americans differently. Using a sample of 1,302 African American and 6,362 European American public high school students drawn from the first- and second-year follow-up of the National Educational Longitudinal Study of 1988, the study found that socioeconomic status (SES) accounted for significant variance in the academic achievement of African American students, and that wealth explained variance for students of both ethnicities beyond what was explained by SES alone. Wealth accounts for greater variance in outcomes of African American students than of European American students.

In her presidential address before the American Educational Research Association (AERA) in April 2006, Gloria Ladson-Billings called attention to the relationship between wealth and what she called an "achievement debt" accruing to African Americans over centuries in the United States. Her thesis, supported by a growing body of research (Conley, 1999; Orr, 2003; Shapiro, 2004) and testimony among African American scholars and elders, was that differences in educational outcomes between African American and European American students related to the historical denial of resources—social, intellectual, and financial capital—as a legacy of slavery, Jim Crow policies, and more subtle institutional racism.

In the 1960s, researchers began making use of SES as a proxy measure of the accrued historical differences in resources and status that Ladson-Billings described. Starting with the Equality of Educational Opportunity Study (Coleman et al., 1966), hundreds of studies use SES to account for variance in educational outcomes and to explain differences in outcomes across ethnic and racial groups. For example, the Early Childhood Longitudinal Study of 16,157 children in kindergarten (Lee & Burkam, 2002) found that SES accounted for about 40% of the difference in reading readiness between children of African American and European American ethnicity. In a meta-analysis research project, Sirin (2005) analyzed correlational studies conducted between 1990 and 2000 involving 74 independent data samples. The studies showed a mean correlation between SES and educational achievement of 0.29 for student-level data, and 0.60 for aggregated data.

Studies showed different patterns of relationship between SES and academic outcomes for students of African American and European American ethnicity. Sirin's (2005) meta-analysis found that the mean correlation between SES and educational outcomes was higher for European Americans ($r = 0.27$) across studies than for minority students ($r = 0.17$). Several studies have found strong relationships between SES and the academic achievement of African American students (Adams & Singh, 1998; Lee, 1993; Smith-Maddox, 1998), but others have revealed no significant relationship between SES and the academic achievement of African American students (Battle, 1997; Ford, 1993). Craig, Conner, and Washington (2003) found that African American students from a lower SES community achieved higher test scores than African American students from a higher SES community.

The dissimilarities in the relationship between SES and the academic performance of African Americans and European Americans may be partly a reflection of the socioeconomic indicators



used to measure SES. While SES may reflect the socioeconomic experiences of the general population, Conley (1999), Oliver and Shapiro (1997), and Shapiro (2004) proposed that debt and wealth are variables that are more relevant in understanding the economic experience of African Americans. Conley (1999) argued that wealth impacts academic attainment more than SES. Orr (2003) found that wealth had a significant relationship to the academic achievement of African American students.

BACKGROUND LITERATURE

The socioeconomic experiences of African Americans reflect a history of poverty imposed by racism (Alexis, 1998). Before 1865, slavery and laws prohibited nearly all African Americans in the United States to own wealth. Following the Civil War, efforts by European Americans to maintain power in the South resulted in practices such as sharecropping, legal challenges against Black homesteaders, and Ku Klux Klan terrorism, making it extremely difficult for African Americans to hold title to land or achieve freedom from debt (Du Bois, 1953). Consequently, the African American population has historically been one of the most impoverished ethnic groups in the United States (Alexis, 1998; Dalaker & Proctor, 2000; Myers, Kim, & Mandala, 2004). In 1865, African Americans owned 0.5% of the total wealth of the United States; and rose to only 1% by 1990 (Conley, 1999).

The difference in the socioeconomic experiences of African Americans and European Americans reflects the difference in the two groups' wealth, defined as net financial worth. Rothstein (2004) explained that given the same household income, the wealth of African Americans is on average only 12% of the wealth of European Americans. Often, the wealth held by African Americans includes a higher proportion of debt than the wealth held by European Americans. Between 1998 and 2001, 30% of African Americans' assets were in debt, while 11% of European Americans' assets were in debt (Shapiro, 2004). Assets in debt refer to assets in which loans with a financial institution are still outstanding (e.g., for a home, boat, car, etc.).

The difference in the assets of the two populations reflects the nature of wealth associated with the two groups. European American families pass wealth down from one generation to the next, while the wealth of African Americans comes mainly from current income, loans, and credit. Additionally, European Americans are more likely to receive financial support from other family members (e.g., parents or grandparents) in purchasing a first home or in paying for college. However, African Americans, who are also often the first generation to buy a home and become middle class; pay for their own college, and they frequently have no capital support (Rothstein, 2004).

While African Americans are more likely to pay for their own college, they borrow more student loans than their European American counterparts (Choy, 2000). African Americans' mean annual salary was nearly \$3,000 lower than European Americans' mean annual salary after graduating with an undergraduate degree (Choy, 2000). Consequently, African American students left school with more debt and with an average income less than that of European American students. This difference in debt owed, and income earned reduces African Americans' ability to establish wealth at a similar rate as European Americans.

Shapiro (2004) demonstrated the difference in the wealth of African Americans and European Americans through asset poverty levels. He defined the asset poverty level as the money required to sustain a family of four just above the poverty level for three months. In 2000, this amounted to \$4,176 dollars (U.S. Census Bureau, 2002). Shapiro found that 52% of African American families lived below the asset poverty level, compared to 26% of European Americans.

Wealth is clearly important to families' status, security, and range of choice, yet researchers generally do not consider wealth in sociological indices of socioeconomic status. The indicators most commonly used to measure SES come from Duncan's (1961) Socioeconomic Index (SEI), a composite of occupational prestige, income, and education. Duncan used data from North and Hatt's (1949) pioneer study of occupational prestige and census data from 1949 to conduct the

first correlational study of the statistical relationship between education, income, and occupation. The North-Hatt study made use of the public's rankings of the prestige of various occupations. Using the North-Hatt's study and census data, Duncan focused on White males with at least a high school education and income of \$3,500 dollars or more in 1949, and found an average correlation among income, occupational prestige, and educational level of 0.75. The study did not report whether the index included a sample of African Americans or other ethnic minorities who were or have been disadvantaged.

The SEI model continues to influence the way researchers measure SES. The National Educational Longitudinal Study (NELS:88, NCES, 1988) initially employed a measure of SES developed by Stevens and Featherman (1981) based on father's income, mother's income, father's education, mother's education, and father's and mother's occupation as rated by the SEI model. In the first-year follow-up study, the National Center for Education Statistics (1990) used the Nakao and Treas (1994) revised SEI model.

It is reasonable to ask whether indices of SES would be more predictive of African American educational outcomes if SES represented the historical economic experience of the African American community. Three studies have examined the relationship of wealth, as distinct from SES, on academic outcomes.

Philips, Brooks-Gunn, Duncan, Klebanov, and Crane (1998) used the children of the National Longitudinal Survey of Youth (CHLSY, Bureau of Labor Statistics, 1986) to account for the gap in scores on the Peabody Picture Vocabulary Test-Revised (Dunn, Dunn, Robertson, & Eisenberg, 1981) between students of African American and European American ethnicity. Predictor variables included family background, parenting practice, and parental wealth. They found that wealth had a small and non-statistically significance on the gap between the scores of African American and European American students. Philips and colleagues concluded that although the study did not produce significant effects, examining the relationship between wealth and education on families with older children might produce different results. They explained that parents of older children could have more forms of wealth (e.g., savings) later in life than when their children were younger.

Conley (1999) used the Panel Study of Income Dynamics (PSID, Hill, 1991) data collected by the Institute for Social Research at the University of Michigan to examine the relationship between wealth and African Americans' educational attainment, focusing on high school graduation. Conley performed a three-stage regression analysis. The first stage examined the effects of race alone on high school graduation. The second analysis added SES as a predictor, and the third added parental wealth. Conley found that the strongest predictor of high school completion was parental wealth and liquid assets. He concluded that parents are better able to fund their children's education through assets than through income.

Finally, Orr (2003) used the National Longitudinal Survey of Youth (NYLSY:79, Bureau of Labor Statistics, 1979) dataset to assess the relationship between SES, wealth, and the academic gap between African Americans and European Americans ages 5 to 14. In examining this relationship, Orr used the mathematics portion of the Peabody Individual Achievement Test (PIAT, Dunn & Markwardt, 1970) as the measure of academic achievement. Orr found that when she analyzed PIAT mathematics scores by race and controlled for SES, students from families with little or no wealth scored lower on the PIAT mathematics test than those students in families with wealth. Orr further explained that wealth had a larger relationship to PIAT mathematics scores than parental education or occupation. Orr found similar results between wealth and achievement for the PIAT reading comprehension and reading recognition scores.

The contrast in findings between the studies by Philips and colleagues (1998) and the studies by Conley (1999) and Orr (2003) suggest that the relationship between wealth and academic outcomes may become greater for older students.

PURPOSE

This study examined the relationship of wealth to the academic performance of African American high school students. The authors disaggregated SES into its component variables of income, education, and occupational prestige, and studied their relationship to several proxy measures of wealth, using factor analysis to determine which combinations of indicators were internally consistent. Then, the combinations of socioeconomic indicators supported by factor analysis as independent variables to account for variance in educational outcomes for African American and European American students were used.

Two hypotheses were tested: (a) wealth accounts for more variance in the achievement of African American high school students than European American students, after controlling for income, parents' educational level, and occupational status; and (b) a proportion of the achievement gap between African American and European American students is explained by wealth beyond what is explained by SES and engagement.

PROCEDURES

Sample and Dataset

The public-use data file of the NELS:88 provided a sample needed to address the hypotheses. NELS:88 is a nationally representative sample of public and private school students surveyed in 1990, 1992, 1994, 2000, and 2004 by the NCES and the U.S. Department of Education. The initial sample came from 24,599 eighth graders enrolled in 1,052 public and private schools across the United States. During 1988, the base year, a parent survey, a teacher survey, a school administrator survey, and a student survey collected data on students' eighth grade experience. The participants provided information related to student background, family background, community, school experiences, self-reported test scores, and test-based test scores. NCES collected data on follow-up surveys in 1990, 1992, 1994, and 2000.

The sample for this study represents students who were in 10th grade in 1990 and who attended public school from 10th grade to 12th grade. This sampled selection follows the suggestion of Orr (2003) and Philips, and colleagues (1998) that when assessing the relationship between wealth and academic outcomes, using an older student population may produce different results than using younger sample groups. The researchers' rationale was that families might have more-established wealth during their students' high school years than during their students' elementary and middle school years. This study also chose to assess students in public school settings because the 2002 U.S. Census data showed that 97% of African Americans attended public schools.

After removing those participants who attended private school, the NELS:88 first-year follow-up in 1990, produced a sample of 1,302 African American and 6,362 European American participants. This sample provided information needed to analyze data on achievement and engagement of 10th graders. The same sampled group from the first-year follow-up study appeared in the second-year follow-up study in 1992. The second-year follow-up data provided information needed to analyze data on 12th graders' high school attainment.

Dependent Variable

Achievement, measured by NELS:88's standardized test composite variable, was the dependent variable for this study. This variable represents a combination of students' standardized mathematics and standardized reading scores. To obtain these scores, administrators and teachers administered multiple-choice tests of reading and mathematics tests developed by the Educational Testing Services. The reading test consisted of 21 questions on five passages, measuring comprehension of words, identification of figures of speech, interpretation of author's perspective,

and evaluation of the passage. The mathematic test consisted of word problems, graphs and geometric figures, equations, and quantitative comparisons.

Researchers who have used the NELS:88 consider the tests unbiased, reliable, and valid (Battle, 1997; Roscigno & Ainsworth-Darnell, 1999). Rock and Pollack (1995) found the internal consistency reliability of the reading test to be 0.80 for the base-year study, 0.86 for the first-year follow-up study, and 0.85 for the second-year follow-up study. They found the reliability of the mathematics test to be 0.89 for the base-year study, 0.93 for the first-year follow-up study, and 0.94 for the second-year follow-up study.

Independent Variables

The independent variables were five traditional components of SES plus several proxy indicators of wealth. Parents' answers on the parental questionnaire provided data for the traditionally used components of socioeconomic status. The components included household income, father's occupational prestige, mother's occupational prestige, father's education, and mother's education. Wealth, defined as the net worth of the household, was inferred through several proxy variables indicating the existence of liquid and illiquid assets.

The authors rated occupational prestige by assigning prestige scores from the SEI model (Nakao & Treas, 1994) to occupations identified by parents from the following questionnaire choices: "Clerical Worker," "Craftsperson," "Farmer," "Homemaker," "Laborer," "Manager," "Military," "Machine Operator," "Professional I," "Professional II," "Small Business Owner," "Protect Service," "Sales," "School Teacher," "Service Worker," "Technical Worker," "Never worked," and "Other." The mean occupational prestige score for African American fathers was 32.4 ($SD = 21.7$) and the mean occupational prestige score for European American fathers was 40.9 ($SD = 21.9$). Mothers' occupational prestige scores were higher on average than were fathers' occupational prestige scores. African American mothers' mean occupational prestige score was 37.5 ($SD = 22.9$), and European American mothers' mean occupational prestige score was 44.3 ($SD = 22.0$). These mean scores resemble Conley and Yeung's (2005) findings, which showed the occupational prestige scores for their sampled African Americans at 26.9 and a mean occupational prestige score for their sampled European Americans at 42.9.

NELS:88 provided data both on mother's and father's education level. Each parent answered the question, "What is your highest level of education?" The scale ranged from "never completed high school" to Ph.D. or M.D. The mean level of education for African American fathers was 2.9 ($SD = 1.7$) and the mean education level for European American fathers was college graduation, 3.4 ($SD = 1.8$). The mean level of education for African American mothers was 2.9 ($SD = 1.6$), and the mean level of education for European American mothers was 3.1 ($SD = 1.6$).

The NELS:88 collected wealth data using the parent questionnaire. Parents responded to the questions, "Which of the following sources of money did you or will you use to cover current educational expenses for the 1991-1992 school year?" and "Which of the following sources of money will you use to cover your teenagers' future educational expenses?" Parents answered either yes or no to either of the following items, "Used savings/assets for teen's education," "Used 2nd mortgage for teen's education," "Used alimony/child support for teen's education," and "Used trust fund for teen's education." One thousand (78%) African Americans and 5,552 (80%) European Americans reported some form of assets.

Both liquid and illiquid assets represent resources for students' education (Conley, 1999; Orr, 2003). The availability of liquid assets was inferred from answers to the following survey questions: "Used savings/assets for teen's education," "Will you use trust fund for teen's education?" "Will you borrow from your U.S. bonds?" "Used other forms of savings," "Will you set aside money for your teen's future education?" and "Will you use savings/assets for teen's future education" as liquid assets? In addition, four survey questions referred to illiquid assets: "Will you use a 2nd mortgage for teen's education?" "Will you use insurance policy for teen's education?" "Will you use investments in stocks/real estate for teen's education?" and "Will you re-mortgage property for teen's education?"

The authors conducted two separate factor analyses for African Americans and European Americans on the socioeconomic indicators, including liquid and illiquid assets, to determine whether different correlational patterns were associated with race. They also used an orthogonal rotation to identify independent factors. Orthogonal rotation was employed because the method “yields completely independent (uncorrelated) factors, which are more easily interpreted than factors with shared variance” (Kieffer, 1998, p. 8). Table 1 shows the combined results, with factor loadings below 0.40 suppressed. As seen in Table 1, the five variables ordinarily associated with socioeconomic status loaded onto a single factor for both racial groups. However, variables associated with wealth revealed racially distinctive patterns. For African Americans, wealth-related variables formed two factors: (a) one (Factor 3) associated with home ownership, and (b) all the others forming a single factor (Factor 2). For European Americans, the wealth-related variables also grouped into two factors: (a) one (Factor 2) related to liquid savings, and (b) the other (Factor 3) representing illiquid investments, including the home.

Table 1

Rotated Component Matrix

Indicator	African Americans			European Americans		
	1	2	3	1	2	3
Father's Education	.791			.829		
Mother's Education	.816			.759		
Annual Household Income	.687			.660		
Father's Occupational Prestige	.734			.727		
Mother's Occupational Prestige	.632			.510		
U.S. Savings Bonds		.587				.542
Investments in Stocks/Real Estate		.625			.691	
Trust Funds		.413			.713	
Savings Account		.688			.516	
2nd Mortgage			.833			.601
Insurance Policy		.515				.652

Note. 1, 2, 3 = Factor 1, Factor 2, and Factor 3.

The factor analysis generated two sets of socioeconomic indicators: (a) one reflecting the correlational pattern for African Americans, and (b) the other reflecting the correlational pattern for European Americans. The authors converted the component variables into *z* scores, centered over the entire dataset, to equalize the contributions of the individual variables to the composite scores. They estimated the internal reliability of each composite variable using Cronbach's coefficient alpha (α). The first composite variable, consisting of the five variables traditionally used to measure SES, was the same for both African Americans and European Americans, as shown in Table 1, and yielded a Cronbach's α of 0.75.

The second composite variable, income-generated assets, derived from Factor 2 for African American participants, and yielded α of 0.44. The third factor, non-income generated assets consisted of one variable, second mortgage, so a Cronbach analysis was unnecessary.

The third composite variable, named liquid assets consisted of the three variables loading on Factor 2 for European American participants: (a) investments, (b) trust funds, and (c) savings accounts, which yielded an α of 0.47. The final composite variable, illiquid assets, consisted of three variables loading on Factor 3 for European American participants: (a) U.S. savings bonds, (b) second mortgage, and (c) insurance policy. The variable yielded a reliability estimate of only 0.27.

MEDIATING VARIABLE: ENGAGEMENT

Student engagement, defined as active participation in school, was examined as a mediating variable because a large body of research has demonstrated that it is highly predictive of important educational outcomes, including academic grades, test scores, and high school graduation (Finn & Voelkl, 1993; Johnson, Crosnoe, & Elder, 2001; Jordan, 1999; NCES, 1995). The NELS:88 dataset did not directly measure engagement as a single variable, but the dataset did provide several component variables, including teacher-reports of paying attention in class, participating in extracurricular activities, taking advanced placement or honors courses, completing homework, and having regular attendance.

The authors conducted a principal component factor analysis of 18 variables associated with academic engagement as a preliminary step in creating a composite engagement scale. Only data for African American students ($n = 955$) were included in the factor analysis to ensure that the results would be internally consistent for African American students. The eight variables that loaded above 0.30 on the principal component were combined to create an engagement score, resulting in internal consistency reliability (coefficient α) of 0.73. These variables included having regular attendance (reported by teachers), doing homework, being attentive in class, participating in the National Honor Society, participating in other academic clubs, and taking the SAT, ACT, or an advanced placement test.

Analysis

To test both hypotheses, this study used ordinary least squares (OLS) regression. To test the hypothesis that wealth was a stronger predictor of achievement for African American students than for European American students, two separate regression analyses were conducted within racial groups: one using the wealth variables identified by the factor analysis on African American participants, and the second using the wealth variables identified by the factor analysis on European American participants.

To test the second hypothesis, the authors employed a sequence of regression models. In the first model, achievement was regressed on race alone. The analysis included SES and the interaction of SES and race in the second model. They included the interaction term because previous research has shown that SES is not distributed similarly across races, and often correlated higher with educational outcomes for students of European descent than for students of African American descent (Sirin, 2005). The third model included proxy variables for income-generated wealth and for home ownership, based on the factor analytic structure of wealth variables within the African American dataset. Interactions between these variables and race were also tested. Changes in the sizes of the regression coefficients and the statistical significance of the coefficients were considered at each stage of the analysis.

FINDINGS

The results of the regression of achievement on SES and income-related proxy variables are presented in Table 2. Two regression models were tested, employing different proxy variables representing wealth. Model 1 made use of income-generated assets and non-income generated assets as predictors, with composite variables from the factor analysis of African American respondents. Model 2 made use of liquid assets and illiquid assets, with composite variables from the factor analysis of European American respondents.

Table 2

The Regression of NELS:88 Achievement on SES and Proxy Wealth Variables

Model 1	African American Respondents: Unstandardized Coefficients		European American Respondents: Unstandardized Coefficients	
	β	SE	β	SE
(Constant)	46.96***	.521	52.285***	.202
SES	1.166***	.144	1.009***	.059
Income Generated	.676**	.250	.023	.095
Assets	-.374	.543	.292	.191
Non-Income Generated Assets				
Model 2				
(Constant)	46.941***	.526	52.276***	.202
SES	1.174***	.146	1.007***	.059
Liquid Assets	.609*	.280	.083	.097
Illiquid Assets	-.603	.303	.076	.107

Note. * $p < .05$; ** $p < .01$; *** $p < .001$. SES = socioeconomic status.

As shown in Table 2, the variable of income-generated assets (e.g., savings bonds, stock and real estate investments, trust funds, savings accounts, and insurance policies) was a significant predictor of achievement for African American students ($b = 0.676, p < .01$), but not for European American students ($b = 0.023, p > .05$). However, the confidence intervals for the beta coefficients overlapped at $\alpha = .05$, preventing the rejection of the null hypothesis that differences between the coefficients in the general population were due to chance. Similarly, in Model 2 the variable of liquid assets (e.g., stocks, trust funds, and savings accounts) was a significant predictor of achievement for African American students ($b = 0.609, p < .05$), but not for European American students ($b = .083, p > .05$). Again, the confidence intervals for the beta coefficients overlapped at $\alpha = .05$. The results of the regression of NELS:88 achievement on race, SES variables, wealth variables, and the mediating variable of engagement are shown in Table 3.

Table 3

The Regression of NELS:88 Achievement on Race, Socioeconomic Status, Wealth, and Engagement (Standardized Coefficients) (N = 2,047)

Variables	Model 1	Model 2	Model 3	Model 4
<i>Independent Variables</i>				
Race (White = 2, Black = 1)	.215***	.193***	.192***	.053
SES		.528***	.485***	.436***
SES * Race		-.149	-.109	-.065
Income generated assets			.298**	.267**
Home mortgage			-.115	-.108
Income generated assets * Race			-.278**	-.252**
Home mortgage * Race			.141	.133
Engagement				.177***
R ²	.046	.192	.196	.208
Change in R ²	.046***	.146***	.004*	.012***

Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

In Table 3, the variance associated with race declines as SES and wealth variables are added in a series of regression models. The initial model presents a difference in achievement associated with race as six points, an effect size of 0.53, and explained 4.6% of the variance in achievement. When introducing SES and the interaction of SES with race as predictors in Model 2, these predictors explained 19.2% of the variance in achievement, and the effect size associated with race reduced to 0.48. The addition of wealth variables in Model 3 explained an additional 0.4%, and the effect size associated with race reduced to 0.47. Through the introduction of engagement as a moderating variable, an additional 1.2% of variance is explained, and the effect size for race alone drops to 0.12.

DISCUSSION

Johnson (1992) explained that "African American critics have often criticized the mindless transfer of methodology and measures from works in White populations to studies of African American populations, and they have noted the invalidating effects of such practices" (p. 101). This study showed that the use of the traditional SES variable to measure the academic outcomes of African American students does not fully explain the socioeconomic experience of the African Americans in the same manner SES explains the socioeconomic experience of European Americans. This study and others (Conley, 1999; Orr, 2003) also showed that by using variables that are more relevant to the African American socioeconomic experience, researchers are better able to understand the pertinent relationship between socioeconomic indicators and the academic outcomes of African American students.

CONCLUSION

The authors draw two main implications from these findings. Firstly, the problem of low educational performance of African American students is rooted in economic and political history, and cannot be left solely to schools to repair. Wealth bestows advantages beyond those of income, occupation, and parents' education. Wealth brings security, choices of where to live, protection from the stresses of short-term unemployment and other emergencies, ability to fund a college education, and a psychological, as well as, financial investment in a community. Today, a significant proportion of African American youth are concentrated in areas where wealth in the form of home ownership and savings are virtually unheard of (Epperson, 2004; Oliver & Shapiro, 1997). Just as national policies and economic structures prevented African Americans from acquiring wealth historically, concerted political action and community organizing are required to bring wealth into African American communities. Political and economic change must accompany educational reform in order to retire the achievement debt that drains the resources and dims the futures of African American youth.

Secondly, these findings imply that wealth needs to be explicitly taken into account in future research. A limitation of the current study was that the authors were not able to measure wealth directly, because questions about savings and home ownership were not included in the NELS:88 survey of parents. Nonetheless, the proxy indicators of wealth that were available significantly improved the ability to account for the gap in scores between African American and European American students. In the future, the inclusion of variables measuring wealth, as well as socioeconomic status in large-scale studies of education should be included, so that the relationship between wealth and educational performance can be understood more accurately.

Although it is not possible in a correlational study to establish a causal relationship among variables, this study provides support for the likelihood that there is a causal relationship between wealth and the academic outcomes for African American students. These findings, and previous studies (Conley, 1999; Orr, 2003; Shapiro, 2004), suggest that wealth/assets, rather than SES alone, may be the best predictor of whether African American students are academically successful. The authors suggest that future studies examine more of the influence of wealth on

various forms of academic experiences. Researchers should also consider the influence of variables related to the historical and cultural trends that exist in the African American community. These types of explorations can provide schools and policymakers with a better insight into the relationship between economics and the academic experiences of African American students.

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