



PROJECT MUSE®

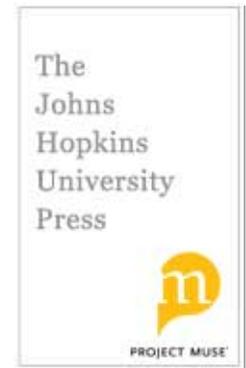
Who Will Succeed in College? When The SAT Predicts Black Students' Performance

Jacqueline Fleming

The Review of Higher Education, Volume 25, Number 3, Spring 2002, pp. 281-296 (Article)

Published by Johns Hopkins University Press

DOI: <https://doi.org/10.1353/rhe.2002.0010>



➔ *For additional information about this article*

<https://muse.jhu.edu/article/30150>

The Review of Higher Education

Spring 2002, Volume 25, No. 3, pp. 281–296

Copyright © 2002 Association for the Study of Higher Education

All Rights Reserved (ISSN 0162-5748)

Who Will Succeed in College? When the SAT Predicts Black Students' Performance

Jacqueline Fleming

African American students feel greater than usual concern over whether the Student Aptitude Test (SAT) gives a true reading of academic aptitude but have little understanding of when the SAT does and does not predict the grades they will achieve in college. Clearer insights about predictive validity issues for them may come from several nontraditional studies based on academic and psychosocial data. While educational underachievement prior to test-taking (Bracey, 1993; Horn & Carroll, 1997; Smith & Choy, 1995a, 1995b; Young & Smith, 1997) and issues activated during test taking are important (Jencks & Phillips, 1998; Steele & Aronson, 1995; Watson, 1972), this discussion focuses on the consequences of a given test score for future success in college. Data from several sources provide analyses of predictive validity by dominant race of the college and by gender. Analyzing SAT correlates sheds new light on the problem of predictive validity in minority populations.

JACQUELINE FLEMING is the Retention Specialist at Texas Southern University in Houston. She presented an earlier version of this article at the Stanford University Conference on Race: "African Americans: Research and Policy Perspectives at the Turn of the Century," on November 11, 1999. Address queries to her at 6UAC, General University Academic Center, Suite 120, Texas Southern University, 3100 Cleburne Avenue, Houston, TX 77004. Telephone: (713) 313-7490; fax: (281) 489-8610; e-mail: JacquelineFleming@yahoo.com.

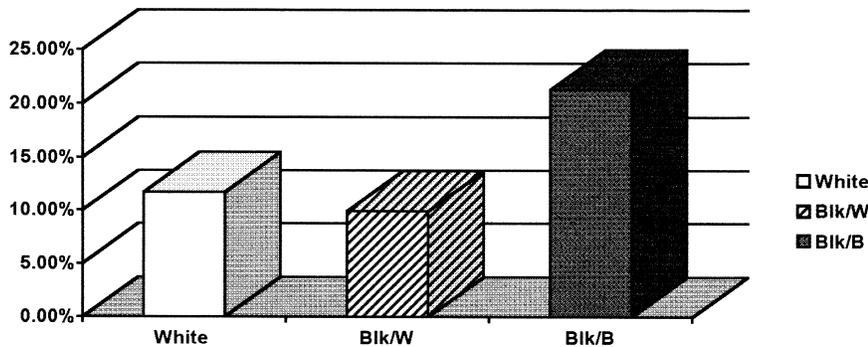


Figure 1. Percentages of variance in grades accounted for by SAT for White students, Black students in White colleges, and Black students in Black colleges. Adapted from Fleming (1990).

PREDICTIVE VALIDITY FOR WHITE AND BLACK STUDENTS

Within certain important limits, the SAT tells us which *White* students will succeed in college, despite charges that test scores do not reflect ability and do not help colleges make better selection decisions (Crouse & Trusheim, 1988; Neill & Medina, 1989). Nonetheless, the SAT-College GPA correlations among majority students are consistent. While prediction from SAT scores to grades usually includes high school grades and may lead to complex prediction equations, the SAT-College GPA correlation is the essential predictive validity statistic. Fleming and Garcia's (1998) review of 12 studies of predictive validity among White students, which included studies conducted for up to thirteen years with up to eleven different samples, found that the average correlation was 0.342. The square of the correlation indicates the amount of variance accounted for by the SAT in college GPA; in this case the variance accounted for was 11.7%. (See Fig. 1.) With the exception of a study by Pennock-Roman (1990) which produced generally low correlations, the remaining eleven studies were distinguished by the consistency with which test scores showed either moderate or strong ability to predict college grades. In short, few measures rival test scores in consistency of prediction. Virtually the only other measure able to indicate how a student will fare in college is the high school grade point average.

SAT scores may not give the same reading of future success for African American students because the predictive validity is lower than for White students. However, the evidence for lower Black predictive validity is actually inconsistent and does not fall neatly into a single category. Some researchers have found strong positive SAT-GPA correlations for Black students

(e.g., Breland, 1978; Morgan, 1990), while other authors have reported that the SAT score bore no relationship to grades (e.g., Boyd, 1977; Miller & O'Connor, 1969), that students performed *better* than their test scores would indicate (Houston, 1983), and that students performed *worse* than their test scores would indicate (Breland, 1978; Crouse & Trusheim, 1988; Nettles, Thoeny, & Gosman, 1986; Kane, 1998; Temp, 1971; Vars & Bowen, 1998). Indeed, contrary to popular opinion, over-prediction (performing worse) is the most consistent occurrence in Black predictive validity studies, and few cogent explanations have been offered.

Fleming and Garcia (1998) examined eight validity studies reporting correlations for Black students (Fig. 1). The average correlation was 0.315, accounting for an average of 9.9% of the variance in college grades. While this figure is lower than that for majority students, it is a difference of only 1.8%—not as low as opinion would suggest. This difference does not support an argument for differential predictive validity. Jencks (1998) comes to a similar conclusion: that test scores have a moderate correlation with grades and that test scores predict a little better for Whites than for Blacks. Fleming and Garcia (1998) also found that the variability in correlations was substantially greater for Black student samples, where correlations ranged from $-.01$ to 0.48 (from 1% to 23% of the variance). It may be that the greater variability, which has yet to be adequately explained, creates the impression of inconsistency and therefore unreliability of prediction. Also, the Black students in these eight studies were all attending predominantly White colleges.

PREDICTIVE VALIDITY AND RACE OF COLLEGE ENVIRONMENT

Are there certain subgroups of Black students whose success the SAT can foretell with better accuracy? That is, are there minority students for whom the SAT does predict as well as for White students? The answer is yes. The SAT predicts success better for Black students attending historically Black colleges and universities.

Fleming (1990) reported the first indication of such a trend. Five predominantly Black colleges participated in that study. Each submitted test scores (either SAT or ACT), high school grade averages, and college grade point averages for freshmen and seniors for whom all three indices were available. A total of 1,551 students were included in the analysis. The five colleges chosen were different in key respects. The first was a single-sex (male) institution. The second was a nonselective institution with an open admissions policy. The third was a Catholic college. The fourth was a large urban university. The fifth was a small private school in the rural south. These institutional differences represent much of the variety of college types found among historically Black institutions. The results indicated that in all five colleges, standardized test scores predicted college grade point aver-

age exceptionally well. The correlations ranged from .340 to .570, with an average correlation of .456. Thus, the average variance accounted for was a high 20.1%. Test scores, then, appear to be more than adequate predictors of college grades in Black colleges.

In addition, Fleming (1990) reported data from three institutional studies. An unpublished study from Morehouse College (1984) found that test scores correlated from .41 to .48 with college grades. Another unpublished report from Xavier University (1984) found that test scores strongly predicted grades with a correlation of .61. Finally Ramist, Lewis, and McCamley-Jenkins (1994), in a then-unpublished study, found that the SAT score predicted college grades moderately well at 11 predominantly Black colleges. The average correlation was .38. The average correlation from these three studies was 0.478, accounting for an average of 22.9% of the variance. As shown in Figure 1, when correlations from all four studies were considered, the average correlation was 0.462, accounting for an average of 21.4% of the variance. The fact that such strong results occurred in eight different samples, one of which included eleven colleges, demonstrates a consistency of effect that is unusual in studies of Black students. This degree of consistency has been typical only in studies of White students. The difference in predictive validity (i.e., variance accounted for) between White and Black students in White colleges was only 1.8% in favor of White students, but the difference between White students and Black students in Black colleges was 9.7% in favor of Blacks in Black colleges. Furthermore, the difference between Blacks in White colleges and Blacks in Black colleges was 11.5% in favor of Blacks in Black colleges. These effects occurred despite lower average test scores among Blacks in Black colleges and a more constricted range of scores.

There has been no suggestion in the psychometric literature that the predominant race of the college or the quality of student adjustment could influence predictive validity. These findings, however, suggest that college environment makes a considerable difference: Being at a Black colleges facilitates the SAT-GPA correlation among Black students. The findings also imply that differential adjustment to the college environment has an influence on SAT predictive validity.

PREDICTIVE VALIDITY, COLLEGE ENVIRONMENT, AND GENDER

Are there any finer distinctions that would shed light on those for whom the SAT works best? To answer this question, Fleming and Garcia (1998) reanalyzed freshmen in 15 college samples from Fleming's (1984) *Blacks in College* study. The data bank allowed an unusual opportunity to examine predictive validity by race of college environment. The resulting analysis provided some confirmation of the previous findings and showed that when the freshmen samples were split by sex, the predictive validity of the SAT was best for Black males in Black colleges.

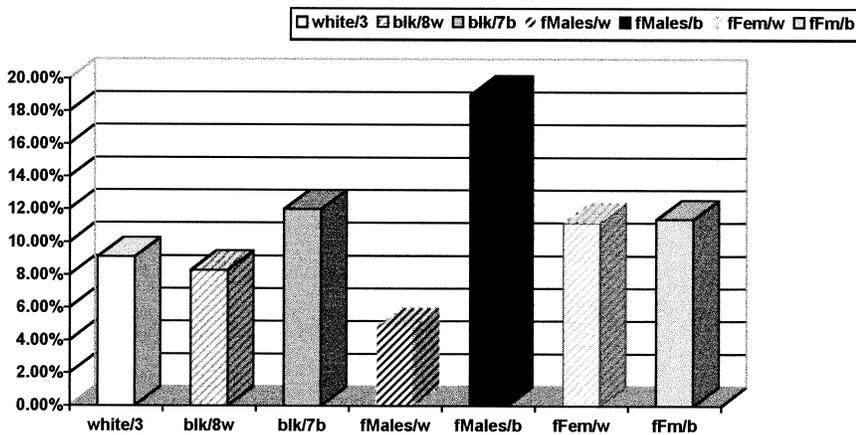


Figure 2. Percentage of variance in grades accounted for by SAT by race, predominant race of college, and sex, interacting with race of college. Adapted from Fleming and Garcia (1998).

Subjects for the study included 1,069 Black freshmen in 15 different colleges for whom test scores and transcripts were available. There were 543 freshmen in seven predominantly Black colleges (229 males and 314 females), and 526 Black students in eight predominantly White colleges (200 males and 326 females). In addition, there were 204 White freshmen in three White colleges (124 males and 80 females). Average sample size was 78 for students in Black colleges and 66 for Blacks in White colleges. The 15 colleges were located in four states: Georgia, Texas, Mississippi, and Ohio.

Approximately 29% of the test scores in Texas and Mississippi were ACT scores, which we converted to SAT scores using the Marco and Abdel-Fattah (1991) formula. We examined correlations for test scores with semester as well as cumulative grade averages. This analysis reports correlations using semester GPA. Ramist, Lewis, and McCamley-Jenkins (1994) have cautioned against pooling course grades into a composite GPA with no control for comparability of courses, but they also found that pooling was not an important problem for African American student scores. Further, there was no correction for restriction of range of test scores, which may underestimate the size of the predictive validity coefficients (Ramist, Angoff, Broudy, Burton, Donlon, Stern, & Thorne, 1984).

When we examined composite freshmen samples, the differences in predictive validity were not as dramatic as those Fleming (1990) found. (See Fig. 2.) This time, SAT predictive validity was better for Black freshmen in White colleges (0.304 or 9.2% of the variance) than for White freshmen in

White colleges (0.298 or 8.9% of the variance), but the difference was only 0.3%. Predictive validity was better for Black freshmen in Black colleges (0.397 or 15.8%) compared to Black freshmen in White colleges (0.298 or 9.2%), with a difference of 6.6%. The constricted differences in predictive validity estimates in this analysis (Fleming & Garcia, 1998) compared to Fleming (1990), may stem from the fact that the latter study's results had been obtained from one researcher using similar methods, instead of from a review which drew estimates from many different studies using different procedures. On the other hand, Fleming and Garcia (1998) included only 15 colleges, while the estimates in Fleming (1990) included a much larger number of samples.

When the samples were split by sex, the differences were startling. (See Fig. 2). Among Black freshmen males, the average correlation in Black colleges was 0.436 (accounting for 19.0% of the variance) versus 0.219 (accounting for 4.8%) in White colleges. Again, the variability of predictive validity coefficients for males was significantly greater in White colleges and included strong positive correlations, zero-order correlations (the SAT was unrelated to performance), and even negative correlations (the better the SAT scores, the worse the academic performance). Among Black freshmen females, there was virtually no difference in predictive validity: 0.334 (11.2% of the variance accounted for) in Black colleges versus 0.338 (11.4%) in White colleges.

In short, predictive validity is best for Black males in Black colleges, poor for Black males in White colleges, with no differences for Black females. Clearly, the consequences of the college environment for SAT predictive validity are vastly different for Black males and females. These differences support literature findings that Black males develop best in Black, not White, colleges (Fleming, 1984; Gibbs, 1988) and parallel society's differential treatment of Black males and females. Better predictive validity coefficients may well reflect adjustment advantages in general or a relative lack of prejudice and racism in particular.

CORRELATES OF THE SAT

These differences are illuminating but, except for differences in average variance, not statistically significant in a sample of 15 colleges. Predictive validity was not significantly different by sex or race of college environment, even though the disparities in estimates were dramatic for the predictive validity literature. This finding raises the question of whether there is some statistically significant way of foretelling the success of Black students. Therefore, Fleming (in press) analyzed whether SAT correlates would shed light on adjustment issues. The findings indicate that the SAT in White colleges is associated with a significantly larger number of psychosocial correlates that appear to undermine academic adjustment.

Previous research makes it clear that Black students adjust better to Black colleges than to predominantly White colleges. Black students who attend predominantly Black schools tend to have higher average grades, a richer learning environment, better relationships with faculty members, exhibit better cognitive development and display greater effort and engage in more academic activities than Black students who attend White schools (Berry & Asamen, 1989; Bohr, Pascarella, Nora, & Terenzini, 1995; DeSousa & Kuh, 1996; Ford, 1996; Kraft, 1991). In Black schools, Black students show better social adjustment, have more extensive social support networks, show greater social involvement, and engage in more organizational activities (Allen, 1985; Cheatham, Slaney, & Coleman, 1990; Jay & D'Augelli, 1991; Nottingham, Rosen, & Parks, 1992; D'Augelli & Herschberger, 1993; Schwitzer, Griffin, Ancis, & Thomas, 1999).

However, there is virtually no research on the relative adjustment of Black high achievers in both Black and White colleges, if high achievement is defined by higher SAT scores. Systematic studies of a wide range of correlates of standardized tests that might inform the nature of adjustment of high achievers to college are rarely conducted. Miller and O'Connor (1969) described an achiever personality, while recent research has identified math and foreign language proficiency (Pelavin & Kane, 1990), and a proactive orientation to college life—particularly help-seeking behavior (Fleming, Garcia, & Embaye, 1997). Unfortunately, higher SAT scores among minority students are also associated with low or lack of teacher support (Fleming & Morning, 1998).

I wanted to fill a void in the literature about African American students by going beyond the question of the SAT's predictive validity. To do so, I examined the wide-ranging consequences of SAT scores for academic adjustment and psycho-social functioning. I analyzed correlates of the SAT in the 15 colleges (seven samples from historically Black colleges and eight from predominantly White colleges) in which students responded to the same instruments. Subjects for the study were freshmen and seniors in Fleming's (1984) study of *Blacks in College* for whom test scores were available. The sample consisted of 1,485 students, including 746 Black students in seven Black schools (543 freshmen and 203 seniors); and 739 Black students in eight White schools (526 freshmen and 213 seniors). I grouped freshmen and seniors, not differentiating by gender. I examined consequences of the SAT for college adjustment using ten measures of academic performance, seven measures of math and verbal performance, two categories of academic adjustment measures, seven categories of measures of psychosocial adjustment, and two categories of measures of background information including SES. (For details, see Fleming, in press).

Previous analyses have looked at SAT correlations with social class and other background variables *across* institutions, concluding that SAT scores

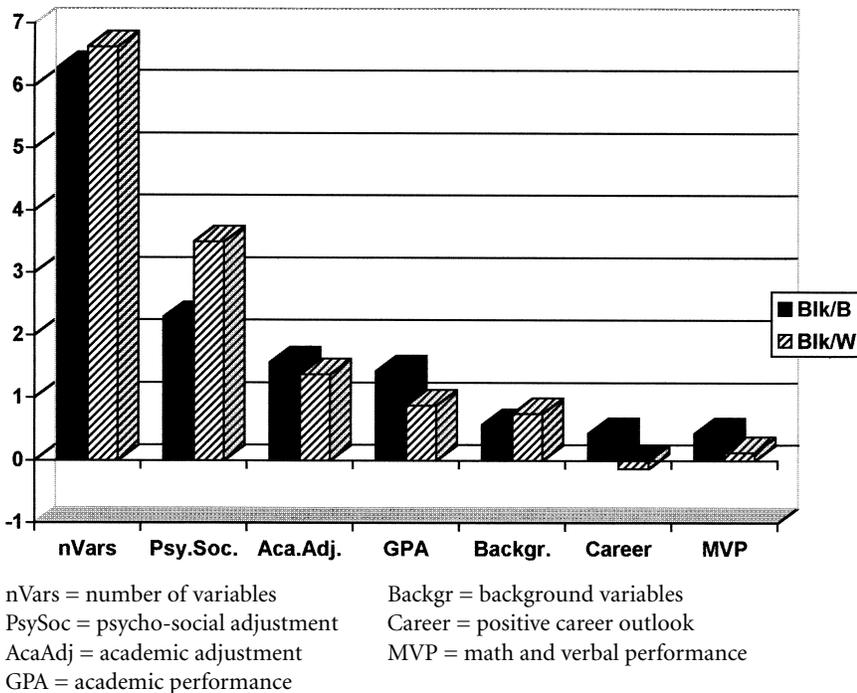
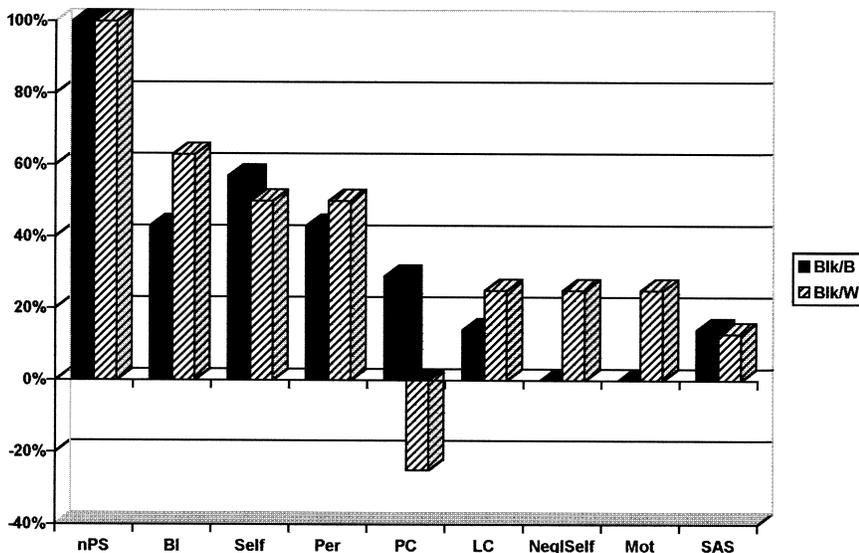


Figure 3. Summary of regressed SAT correlated: mean number of correlates per school in selected categories for Black students in seven Black and eight White colleges. Adapted from Fleming (in press).

increase with social advantages (Chambers, 1988). This study, however, examined correlates *within* colleges where SAT scores were more similar than different and where the range of socioeconomic status scores was more restricted than in the general population of test takers. I controlled SES through partial correlations, i.e., by eliminating any correlate that was reduced to nonsignificance after conducting a correlation that partialled out the effects of SES. However, a measure of SES was never significantly correlated with the SAT in any of the 15 samples.

This investigation determined the frequency with which variables or categories of variables were correlated with the SAT and concerns only important correlates of the SAT—that is, those contributing unique variance in a regression equation. For each of the 15 samples, the SAT (or its ACT equivalent) was correlated with each variable or measure in the study. Correlates that were statistically significant at or beyond the .05 level of significance, and which produced correlation coefficients of .30 or higher (i.e., a moder-



nPS = percentage of colleges with all psychosocial adjustment correlates
 BI = Black ideology correlates
 Self = self-concept correlates
 Per = Personality correlates
 PC = physical (psychosomatic) complaint correlates
 LC = life changes correlates
 NeglSelf - negative intellectual self-concept correlates
 Mot - motivation correlates
 SAS = social assertiveness correlates

Figure 4. Percentage of colleges with psychosocial adjustment correlates in selected categories for Black students in seven Black colleges and eight White colleges. Adapted from Fleming (in press).

ate effect size, visible to the naked eye), were selected for further analysis (Cohen, 1988). I entered correlates that survived the partial correlations at significant levels into a multiple regression equation. This discussion is limited to correlates that contributed unique variance in regression equations for the 15 colleges and to correlates loading first in regression equations for each college. (For an analysis of all first-order correlates, see Fleming, in press). Thus, the analysis describes trends in important correlates of standardized tests. Correlations rarely emerged for the same variable in more than a few colleges, even when a substantial number of correlations appeared in the same category of variables. To fully utilize all 15 samples or cases, I converted significant regressed variables to present-absent categorical variables for later groupings.

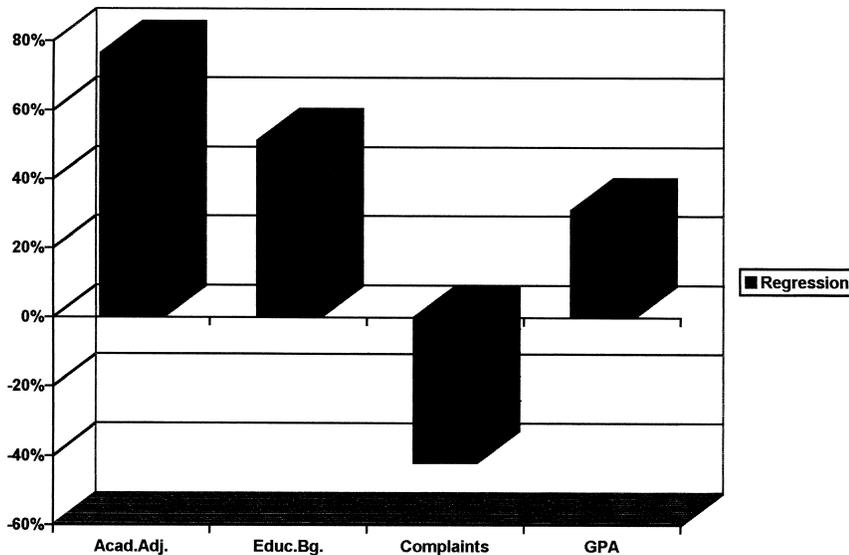
The results showed that higher test scores were most strongly associated with a preponderance of psychosocial correlates as opposed to academic correlates. Furthermore, high SAT scorers in Black colleges did indeed exhibit evidence of better academic adjustment. (See Fig. 3.) The profile of the African American high-SAT scorer gleaned from regressed correlates showed that test scores were associated with:

- Psycho-social attributes, averaging 2.93 correlates per school in 100% of the colleges. The largest category was Black ideology correlates, 75% of which indicated low Black ideology, including 100% of the correlates in Black colleges and 67% of the correlates in White colleges. The second major category was self-concept, the vast majority of which were positive intellectual self-concepts. (See Fig. 4.)
- Academic adjustment correlates, averaging 1.47 per college in 87% of the colleges. They were largely career related but included both positive and negative career issues (e.g., aspires to medical career, frustrated by teacher attitudes).
- Academic performance correlates, averaging 1.13 per college in 80% of the colleges.
- Education-related background correlates averaging 0.67 per college in 53% of the colleges.

High scorers could thus be described as (a) having an intellectual identity, if not a strong Black identity, (b) being focused on both positive and negative academic adjustment issues, (c) being better academic performers, and (d) having backgrounds richer in educational advantages.

Consideration of the variables that loaded first in each regression equation confirms the importance of psychosocial variables for African American students. In order of frequency, 40% of the strongest correlates were psycho-social, 33% were academic performance correlates, 23% were academic adjustment correlates, and 7% were math and verbal performance.

It appears that the pattern of correlates may be related to the pattern of predictive validity estimates. Considering regressed correlates, students in White colleges exhibited fewer father-related background advantages and a less positive career outlook, but fewer indications of psychosomatic symptoms. The strongest correlates of the SAT showed no statistically significant differences as a function of predominant race at the college. However, in White colleges psychosocial correlates were most likely to load first (in 63% of the colleges), while in Black colleges GPA correlates were most likely to load first (in 43% of the colleges). Thus, for Black students in White colleges, higher SAT scores were less likely to be associated with career optimism or the advantages associated with educated fathers. Their relatively low SAT predictive validity appears consistent with the findings. These results suggest that the greater occurrence of psychosocial correlates of the



Acad.Adj. = schools with academic adjustment correlates
 Educ.Bg. = schools with education-related background correlates
 Complaints: schools with physical (psychosomatic) complaints
 GPA = schools with GPA correlates of SAT

Figure 5. Predicting predictive validity: Regression of SAT correlates on SAT=GPA correlation coefficient in 7 Black and 8 White colleges.

SAT in predominantly White colleges somehow interferes with academic performance.

PREDICTING PREDICTIVE VALIDITY OF THE SAT

Do any of the correlates of the SAT portend success better than the interaction of the student's sex and the predominant race at a given college? With these correlates, the next analysis attempted to predict predictive validity. That is, I correlated the presence (or frequency) of categories of correlates with the Fleming and Garcia (1998) SAT-GPA correlations. My objective was to identify the types of correlates that were associated with higher predictive validity. I entered significant correlates of the SAT into a regression equation with predictive validity as the dependent variable. (See Fig. 5.)

Using the SAT-GPA correlation with semester GPA as the dependent variable, I found four significant regressed correlates. The variable loading first

in the regression equation was “colleges with academic adjustment correlates of the SAT” ($b = .764$)—that is, not the number of academic adjustment correlates per college, but the presence or absence of academic adjustment correlates in a given college. The category of academic adjustment correlates was 60% negative. Attempts to separate the components of this variable into positive and negative adjustment issues did not improve prediction. Thus, this finding suggests that in schools where high scoring students are concerned with academic adjustment issues in general, the SAT-GPA correlation is higher.

The second factor was “colleges with the presence of education-related background correlates of the SAT” ($b = .511$). Again, this variable assessed not the number of such correlations but their presence. In short, a global measure of social class provided insignificant correlations with the SAT, while specific advantages related to education—such as good high school preparation—were far more significant. The third factor was “colleges with the absence of psychosomatic complaints” ($b = .419$). Psychosomatic complaints were SAT correlates in 20% of the predominantly Black colleges but were counter-indicated (by negative SAT correlations) in 25% of the predominantly White colleges. This finding suggests that both psychological health and physical health are critical to optimal functioning. The fourth factor was “colleges with GPA correlates” ($b = .310$). Again, it is the presence of any such correlations with the SAT, rather than the number, that is significant. These four variables accounted for 93% of the variance in SAT-Semester GPA predictive validity ($F = 31.33, p < .001$).

Taken together, the results suggest that high-scoring African American students will perform better academically: (a) if they are more focused than other students on academic adjustment issues, including satisfactions and frustrations alike; (b) if they bring educational background advantages with them to college; and (c) if they are physically and psychologically healthy. Stated another way, if high SAT scorers are in colleges where they (the students) are able to focus on academics, their background advantages can make a positive difference in performance.

WHO WILL SUCCEED IN COLLEGE?

This research has shown that the predictive validity of the SAT in a series of samples is better for Black students in Black colleges, particularly for Black males. While psychosocial issues were more characteristic of high SAT scorers in White colleges, they were not directly linked to predictive validity. Similarly, the preponderance of psychosocial correlates appear at first to have implications for how SAT scores translate into better grades, but a formal test reveals that they do not. Instead, predictive validity was associated primarily with academic adjustment issues. Hence, it is not solely the

predominant race of the college or the student's sex per se that has such predictive value. Rather, the key factor is concentrating on things academic. While academic adjustment overlaps considerably with the college's predominant race, it is not synonymous with it. It seems that the effects of White colleges in general and Black colleges for women are too often distracting for high achievers. High-scoring students appear distracted by issues of race, identity conflicts, depression, and psychosomatic illness, among other factors. These distractions take the student's focus away from where it needs to be: on academic issues.

These findings imply both good and bad news. The bad news is that colleges differ in the extent to which they facilitate Black student achievement; and most students, unaware of what they are up against, fall victim to the prevailing winds in their college setting. The good news is that individual students can perform up to and beyond their ability by choosing to focus their energies on academics. The SAT score may indicate some, perhaps wide, limits to academic potential, but the student also has wide latitude to make ability count.

REFERENCES

- Allen, W. R. (1985). Black student, White campus: Structural, interpersonal and psychological correlates of success. *Journal of Negro Education, 54*, 135–147.
- Berry, G. L., & Asamen, J. L. (1989). *Black students*. Newbury Park, CA: Sage.
- Bohr, L., Pascarella, E. T., Nora, A., & Terenzini, P. T. (1995). Do Black students learn more at historically Black or predominantly White colleges? *Journal of College Student Development, 36*, 75–85.
- Boyd, W. M. (1977). SAT's minorities: The dangers of under-prediction. *Change, 9*, 48–64.
- Bracey, G. W. (1993). The third Bracey Report: The condition of public education. *Phi Delta Kappan, 2*, 105–117.
- Breland, H. M. (1978). Population validity and college entrance measures. *Research Bulletin* (RB 78–6) Princeton, NJ: Educational Testing Service.
- Chambers, G. A. (1988, March 7). *All of America's children: Variants in ACT test scores—what principals need to know*. Paper presented at the NASSP Annual Convention, Anaheim, CA. Available from author, Division of Educational Administration, University of Iowa, Iowa City, IA 52242.
- Cheatham, H. E., Slaney, R. B., & Coleman, N. C. (1990). Institutional effects on the psycho-social development of African American college students. *Journal of Counseling Psychology, 37*, 453–458.
- Cohen, J. (1988). *Statistical power analysis in the behavioral sciences*. New York: Academic Press.
- Crouse, J., & Trusheim, D. (1988). *The case against the SAT*. Chicago: University of Chicago Press.

- D'Augelli, A. R., & Herschberger, S. L. (1993). African American undergraduates on a predominantly White campus: Academic factors, social networks, and campus climate. *Journal of Negro Education*, 62, 67–81.
- DeSousa, D. J., & Kuh, G. D. (1996). Does institutional racial composition make a difference in what Black students gain from college? *Journal of College Student Development*, 37, 257–267.
- Fleming, J. (1984). *Blacks in college: A comparative study of students' success in Black and in White institutions*. San Francisco: Jossey-Bass.
- Fleming, J. (1990). Standardized test scores and the Black college environment. In K. Lomotey (Ed.), *Going to school: The African American experience* (pp. 145–154). Albany: State University of New York Press.
- Fleming, J. (in press). The significance of historically Black colleges for high achievers: Correlates of standardized test scores in African American students. In K. Freeman & M. C. Brown (Eds.), *Historically Black colleges at the millennium: Perspectives, policy and practice*. Stamford CT: Ablex Press.
- Fleming, J., and Garcia, N. (1998). Are standardized tests fair to African Americans? Predictive validity of the SAT in Black and White colleges. *Journal of Higher Education*, 69, 471–495.
- Fleming, J., Garcia, N., & Embaye, F. (1997). The approach to college of the high SAT scorer: An analysis of correlates in minority students. *Texas Southern University Research Journal*, 5, 54–75.
- Fleming, J., & Morning, C. (1998). Correlates of the SAT in minority engineering students: An exploratory study. *Journal of Higher Education*, 69, 89–108.
- Ford, C. A. (1996). *Student retention: Success models in higher education*. Tallahassee FL: CNJ Associates.
- Gibbs, J. T. (Ed.) (1988). *Young, Black and male in America: An endangered species*. Dover MA: Auburn House.
- Horn, L. J., & Carroll, C. D. (1997). *Confronting the odds: Students at risk and the pipeline to higher education*. Statistical Analysis Report. OERI Publication No. NCES 98–094. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Houston, L. N. (1983). The comparative predictive validities of high school rank, the Ammons Quick Test, and two Scholastic Aptitude Test measures for a sample of Black female college students. *Educational and Psychological Measurement*, 43, 1123–1126.
- Jay, G. M., & D'Augelli, A. R. (1991). Social support and adjustment to university life: A comparison of African American and White freshmen. *Journal of Community Psychology*, 19, 95–108.
- Jencks, C. (1998). Racial bias in testing. In C. Jencks & M. Phillips (Eds.), *The Black-White test score gap*. Washington DC: Brookings Institution Press.
- Jencks, C., & Phillips, M. (1998). The Black-White test score gap: An introduction. In C. Jencks & M. Phillips (Eds.), *The Black-White test score gap* (pp. 1–51). Washington DC: Brookings Institution Press.
- Kane, T. J. (1998). Racial and ethnic preferences in college admissions. In C. Jencks & M. Phillips (Eds.), *The Black-White test score gap* (pp. 431–456). Washington DC: Brookings Institution Press.

- Kraft, C. L. (1991). What makes a successful Black student on a predominantly White campus? *American Research Journal*, 28, 423–443.
- Marco, G. L., & Abdel-Fattah, A. A. (1991). Developing concordance tables for scores on the enhanced ACT assessment and the SAT. *College & University*, 66, 187–194.
- Miller, D. M., & O'Connor, P. (1969). Achiever personality and academic success among disadvantaged college students. *Journal of Social Issues*, 25, 193–116.
- Morehouse College (1984). *Computational Chart: Freshman predicted index*. Atlanta, GA: Author.
- Morgan, R. (1990). Predictive validity within categorizations of college students: 1978, 1981, and 1985. ETS Research Report 90–14. Princeton, NJ: Educational Testing Service.
- Neill, D. M., & Medina, N. J. (1989, May). Standardized testing: Harmful to educational health. *Phi Delta Kappan*, 688–697.
- Nettles, M. T., Thoeny, A. R., & Gosman, E. J. (1986). Comparative and predictive analyses of Black and White students' college achievement and experience. *Journal of Higher Education*, 57, 289–318.
- Nottingham, C. R., Rosen, D. H., & Parks, C. (1992). Psychological well-being among African American university students. *Journal of College Student Development*, 33, 356–362.
- Pelavin, S. H., & Kane, M. (1990). *Changing the odds: Factors increasing access to college*. New York: College Examination Board.
- Pennock-Roman, M. (1990). *Test validity and language background: A study of Hispanic American students at six universities*. New York: College Entrance Examination Board.
- Ramist, L., Angoff, W. H., Broudy, I. L., Burton, N. W., Donlon, T. F., Stern, J., & Thorne, P. A. (1984). The predictive validity of the ATP tests. In T. F. Donlon (Ed.), *The College Board technical handbook for the scholastic aptitude and achievement tests*. New York: College Entrance Examination Board.
- Ramist, L., Lewis, C., and McCamley-Jenkins, L. (1994). *Student group differences in predicting college grade: Sex, language, and ethnic groups*. College Board Report No. 93–1, ETS RR No. 94–27. New York: College Entrance Examination Board.
- Schwitzer, A. M., Griffin, O. T., Ancis, J. R., & Thomas, C. R. (1999). Social adjustment experiences of African American college students. *Journal of Counseling and Development*, 77, 189–197.
- Smith, T. M., & Choy, S. P. (1995a). *High school students ten years after "A nation at risk." Findings from: "The condition of education 1994."* OERI Publication No. NCES 95–764. Washington DC: U.S. Department of Education, National Center for Education Statistics.
- Smith, T. M. & Choy, S. P. (1995b). *The educational progress of Black students: Findings from: "The condition of education 1994."* OERI Publication No. NCES 95–765. Washington DC: U.S. Department of Education, National Center for Education Statistics.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69, 797–811.

- Temp, G. (1971). Validity of the SAT for Blacks and Whites in thirteen integrated institutions. *Journal of Educational Measurement*, 8, 245–251.
- Vars, F. E., & Bowen, W. G. (1998). Scholastic aptitude test scores, race, and academic performance in selective colleges and universities. In C. Jencks & M. Phillips (Eds.) *The Black-White test score gap*. Washington DC: Brookings Institution Press.
- Watson, P. (1972, September). IQ: The racial gap. *Psychology Today*, 48.
- Young, B. A., & Smith, T. M. (1997). *The social context of education. Findings from: "The condition of education 1997."* OERI Publication No. NCES 97–091. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Xavier University of Louisiana (1984, March). *Student success at Xavier*. Institutional Research, Xavier University.