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ABSTRACT

The way that the University of North Carolina, Chapel Hill, has tried to depoliticize minority admissions through the use of predicted graduation equations that are race specific is examined. Multiple regression and discriminant analyses were used with nine independent variables (primarily academic) to predict graduation status of 1974 entering freshmen, and 64.8 percent of the students were correctly classified. For blacks the most important predictor variable that enters the regression first is high school rank in class; for whites, residence status for tuition purposes is most important although high school rank is second. Scholastic Aptitude Test (SAT) scores are not particularly important in any of the regressions, and this parallels the school's experience in that admissions tends to place much more emphasis on class rank than on SAT scores. While the results of the research were not adopted by the university, they did show that: (1) admissions' criteria are related to actual graduation from college; (2) minority student admissions could be linked to a definite educational outcome; and (3) subjectivity in admission could be lessened somewhat although it can and should never be removed completely. It is claimed that the research supports minority admissions because it shows that black and white students, measured on the same scales, can perform and achieve on a reasonably equal basis in college despite noticeable differences in entering academic credentials. Tabular data are presented to provide background on minority admissions, achievement, retention, and graduation at the university. Issues that tend to make minority admission politically sensitive are also reviewed. (SW)

DEPOLITICIZING MINORITY ADMISSIONS THROUGH PREDICTED GRADUATION EQUATIONS

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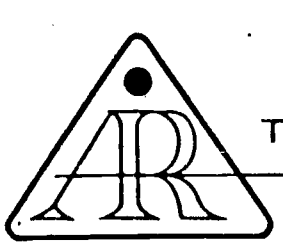


THE ASSOCIATION FOR INSTITUTIONAL RESEARCH

This paper was presented at the Twenty-Second Annual Forum of the Association for Institutional Research held at the Denver Hilton Hotel in Denver, Colorado, May 16-19, 1982. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum papers.

D. R. Coleman, Chairman
Forum Publication
Advisory Committee

Abstract

Minority admissions is a sensitive issue in postsecondary education, and colleges and universities may try to cope passively with the issue or they may try to confront the problem directly. The purpose of this paper is to show how a major research university has tried to depoliticize minority admissions by developing predicted graduation equations which are race specific. Multiple regression and discriminant analyses were used with nine independent variables (primarily academic) to predict graduation status of 1974 entering freshmen; 64.8% of the students were correctly classified. The research shows that traditional admissions criteria are valid and that minority admissions can be linked to a definite educational outcome.

Depoliticizing Minority Admissions Through Predicted Graduation Equations

Even if your institution has not been involved with the Federal Office for Civil Rights over the desegregation of your student body, there is a very good chance that your institution has had to come to grips with admitting minority students, however "minority" is defined at your institution. At The University of North Carolina at Chapel Hill (UNC-CH), the admission of black students has taken us in and out of the courts innumerable times since the late sixties. While one would be foolish to say that this extended litigation has not been a problem to the university, one can say that the actual admitting of minority students has been nowhere near the problem that the surrounding issues have made of it. Quite simply, and at the risk of sounding totally naive, admissions at UNC-CH have succeeded and have not been much of a problem because the admission of black students was handled professionally; that is, in a straightforward fashion just as the admission of other potentially sensitive groups whether they be athletes, gifted artists, or children of alumni. The purpose of this paper, though, is not to review the past fifteen years of admissions at Carolina (the number one basketball team in the country); rather, the purpose is to look specifically at some work done in the Office of Institutional Research in terms of its contribution to depoliticizing the issue of minority admissions.

Before getting to that research and to heighten the suspense a bit, the second part of this paper will look at the issues which tend to make minority admission politically sensitive. Part three will examine some basic tabular data to give you some background on minority admissions, achievement, retention, and graduation at UNC-CH. Finally, then, part four will review the predicted graduation equations which are the subject of this paper.

The Political Nature of Minority Admissions

Regardless of whether your institution considers minority to mean black , white , hispanic, men, women, or some other possible human collection, the fact remains that introducing a different group into the student body causes problems. Ignoring the wide range of difficulties which may arise after the group arrives on campus, this section of the paper will stick with those problems which are particularly germane to the admissions process. First of all, one must decide just how different the group is in terms of the usual things done by the admissions office.* The resolution of this issue entails answering a number of questions.

Question One: where do we find members of the different group? Do they attend the same schools at which we normally recruit? Are they in touch with our informal grapevine of alumni, professors, and friends so that we can expect members of the group to be referred to us? Though fairly simple in nature, this question raises two problems. First, unless additional admissions' staff are added to handle the new group, less can be expected regarding contact and recruitment of the traditional applicant pool. Secondarily, the institution becomes vulnerable to the charge either of ignoring the regular high school applicant or of failing to recruit the new group sufficiently because they did not recruit in the right places and/or with enough diligence.

Question Two: having found potential applicants among the new and different group, how do we get them to apply and enroll? Probably this should be two separate questions because generating applications does not insure that enrollments will follow. However, the issues involved are the same so the two can be reviewed together even though they are rarely solved simultaneously. What about our campus attracts members of the new group? How can we convince members of the group to come here when so few of their group are currently enrolled here?

* The time is right to insert a disclaimer here that the author does not represent the admissions' staff at UNC-CH and that the views expressed here are solely those of the author.

What different services and social opportunities do we need to appeal to new students? How can we be reasonably sure that our new students will stay once we overcome the initial barriers to their application and enrollment?

As with question one, this question also raises potential problems for the institution. No matter how well intentioned your college or university may be, someone will perceive that you are stepping on their toes. Dormitory room assignments, student financial aid, student leadership opportunities, class offerings -- all of these can be changed as a result of attempted recruitment of a new student clientele. Just as your institution must change to attract new students, it is fairly certain that the changes which occur will deter some of your usual student applicants from enrolling at your institution.

Question Three: now that we have an applicant pool full of members of the new group who are excited about coming to our campus, how do we decide which ones to admit? As Fred Sanford (no relation) of "Sanford and Son" used to say to Lamont, "this is the big one!" With luck, your institution may find that the new recruitment group is highly qualified on your usual admissions' measures. But if you live in the real world along with the rest of us, you will find that things do not work out that ideally. So assuming that there are differences between your new applicants and your usual ones and that you are morally obligated if not legally bound to admit a respectable number of the new students, what do you do? One alternative may be Question Four: where can former admissions' officers find work? But, things need not be that bleak although some institutions might be better served to have some of their employees select such an option. The other alternative is to ascertain the dimensions of the differences, to make informed judgments based upon professional knowledge and experience, to get some research started on the relationship between admissions criteria for the new group and their success at your institution, and to let the chips fall where they may.

To continue a questionable metaphor, the chips which fall will be faculty concern that standards are being lowered, alumni complaints that their Susie and Billy cannot get in because too many of the new group can, and lawsuits filed claiming reverse discrimination. On top of this if past experience is any indication, your institution also will encounter concerns, complaints, and lawsuits from members and friends of the newly admitted group who feel that enough changes are not being made, enough members of the group are not getting in, and the institution is not really committed to seeing that members of the group get a college education. Interaction with persons espousing either type of dissatisfaction can be disastrous if the admissions' process is not grounded in truth and defensible data, but that brings us to a later part of the paper.

Background Data from UNC-Chapel Hill

Increased admission of minority students to UNC-CH has not been an easy process, and we continue to search for better answers to the questions raised above. Finding potential applicants has been easy compared to getting them interested in coming to college in Chapel Hill; however, progress has been made and admissions' procedures have become necessary to deal with the minority applications. In general we treat all applicants the same, there are no special admission categories for such students, and the same types of admission criteria are used for all students. Differences do exist, though, in the average academic credentials which are presented by blacks as compared to the more traditional white pool of applicants. As Carolina is fortunate to be faced with the need for very selective admissions, the necessity has arisen for us to adjust for the average differences between black and white admissions' credentials, primarily SAT scores. Lest one feel that such an adjustment is solely motivated by race, note should be made that UNC-CH has had differential admissions' policies for non-residents of the State of North Carolina for many years. Hence, our use of admissions' criteria which are group specific is neither unusual nor motivated only by our desire

to increase the enrollment of blacks on campus.

Table 1 presents applied, accepted, and enrolled freshman applicant data for black and white in-state students spread by SAT score categories for 1979 and 1980. The purpose in presenting the table is two-fold: first, one can easily see that the acceptance ratio is different for blacks and whites for most SAT categories; second, the data clearly show that the university is not discriminating against black applicants. For example, the Fall 1979 section of Table 1 shows that 59 of 59 (100%) black applicants with SAT scores ranging from 1000 to 1099 were accepted as compared to 1034 of 1315 (78.6%) comparable white applicants. The table also shows, one should note, that acceptance does not guarantee subsequent enrollment for either blacks or whites and that blacks had a larger enrollment ratio than whites in 1979 but a lower rate in 1980.

As useful as this table may be in demonstrating an institution's good intentions regarding the admission of minority applicants, one could use the same table to try to show reverse discrimination since black applicants are slightly favored over white applicants with similar SAT scores. This is no small matter and should not be ignored which is one reason why we have gone beyond this initial data collection effort. Information to be presented later on in this paper will provide additional explanation of this issue.

Table 2 shows the broad distribution of cumulative grade point averages (GPA) for all undergraduates at UNC-CH by race for the fall semesters from 1976 to 1980. The university is not particularly pleased with the data in this table because it shows that black students are not performing as well as our other students. The table is included here, nevertheless, to show you some measure of student achievement as a way of bridging the gap between student admission and graduation which will be examined shortly. One small bright spot in Table 2 is the finding that the percentage of black students with GPA in the 3.0 - 4.0 range has increased slightly while a decline has been evident among white students. The decline, on

TABLE 1

In-State Freshmen Applicant Comparisons by Race and SAT Scores for UNC-Chapel Hill

FALL 1979

SAT SCORES	Blacks					Whites				
	Applied	Accepted		Enrolled		Applied	Accepted		Enrolled	
	#	#	%[1]	#	%[2]	#	#	%[1]	#	%[2]
1500-1600	0	0	-	0	-	5	5	100	2	40.0
1400-1499	0	0	-	0	0	73	71	97.3	32	45.1
1300-1399	2	2	100	1	50.0	222	218	98.2	119	54.6
1200-1299	8	8	100	1	12.5	540	496	91.9	325	65.5
1100-1199	22	22	100	15	68.2	1006	879	87.4	604	68.7
1000-1099	59	59	100	38	64.4	1315	1034	78.6	744	72.0
900-999	106	106	100	78	73.6	1145	709	61.9	511	72.1
800-899	168	159	94.6	116	73.0	620	237	38.2	168	70.9
700-799	137	115	83.9	97	84.3	213	43	20.2	29	67.4
Below 700	96	53	55.2	43	81.1	48	4	8.3	3	75.0
Total[3]	598	524	87.6	389	74.2	5187	3696	71.3	2537	68.6
FALL 1980										
1500-1600	0	0	-	0	-	6	6	100	1	16.7
1400-1499	1	1	100	1	100	70	69	98.6	36	52.2
1300-1399	1	1	100	0	0	219	208	95.0	118	56.7
1200-1299	4	4	100	0	0	532	491	92.3	299	60.9
1100-1199	27	27	100	9	33.3	945	795	84.1	525	66.0
1000-1099	58	56	96.6	36	64.3	1307	961	73.5	706	73.5
900-999	122	116	95.1	77	66.4	1099	592	53.9	464	78.4
800-899	165	160	97.0	104	65.0	611	189	30.9	132	69.8
700-799	129	113	87.6	74	65.5	213	28	13.1	16	57.1
Below 700	125	61	48.8	43	70.5	66	2	3.0	1	50.0
Total[3]	632	539	85.3	344	63.8	5068	3341	65.9	2298	68.8

[1]Percentage of applicants who were accepted.

[2]Percentage of accepted students who enrolled.

[3]SAT scores not available for all students.

Office of Institutional Research, 5/15/81

TABLE 2

Cumulative Grade Point Average Distribution by Race
For All Undergraduates at UNC-CH after Fall Semesters, 1976 - 1980

		Cumulative Grade Point Average						
		0.0 - 1.999		2.0 - 2.999		3.0 - 4.0		Total
		#	%	#	%	#	%	#
1976:	Black	360	41.5	440	50.7	68	7.8	868
	White	1566	12.1	6624	51.1	4778	36.8	12,968
	Other	37	23.7	74	47.4	45	28.8	156
	Total	1963	14.0	7138	51.0	4891	35.0	13,992
1977:	Black	324	37.2	477	54.8	69	7.9	870
	White	1771	13.7	6500	50.3	4647	36.0	12,918
	Other	48	28.4	77	45.6	44	26.0	169
	Total	2143	15.4	7054	50.5	4760	34.1	13,957
1978:	Black	377	39.7	498	52.4	75	7.9	950
	White	1763	13.7	6760	52.5	4341	33.7	12,864
	Other	54	25.8	96	45.9	59	28.2	209
	Total	2194	15.6	7354	52.4	4475	31.9	14,023
1979:	Black	467	41.7	560	50.0	94	8.4	1,121
	White	1740	13.1	7161	54.0	4350	32.8	13,251
	Other	54	21.9	116	47.0	77	31.2	247
	Total	2261	15.5	7837	53.6	4521	30.9	14,619
1980:	Black	489	40.1	627	51.4	103	8.4	1,219
	White	1768	13.3	7335	54.6	4330	32.2	13,433
	Other	55	20.8	124	46.7	85	32.2	264
	Total	2312	15.5	8086	54.2	4518	30.3	14,916

(Source: Walbrun, 1981:4.)

the other hand, suggests that perhaps grade inflation is less important now than it was in the early seventies.

Turning to student retention data as shown in Table 3, one sees that black students do not persist at UNC-CH in quite the same proportion as white students. More fluctuation from year to year is evident for blacks, and one also notices that the difference between blacks and whites is narrowing gradually. Actually, some of our research has suggested that part of the problem in the difference in retention rates between blacks and whites may be one of perception; that is, the rate for black students is not that low, the rate for white students is just quite high. Of course one would hope for parity in retention rates so that race did not seem to be an issue, but we have noticed that everytime our black retention rate creeps upward our white rate goes up even more. If we recall the GPA data from Table 2, however, we may not be surprised to find a difference in retention rates.

Corollary to retention rates are persistence to graduation rates as presented in Table 4. Once again the difference between blacks and whites is clearly evident, and the drop for the 1975 freshman class is particularly puzzling. Compared to other universities and national data, though, our graduation rates compare rather favorably. Figures from the American Council on Education (Jackley and Henderson, 1979) suggest that only 40% of an entering freshman class continue on at the same institutions through graduation in four years. Thus, while we cannot boast of the fact that black students graduate from Carolina at the same rate as white students, we are not too dissatisfied with our overall retention and graduation data.

While it is difficult if not impossible to equate the admissions data from Table 1 to the retention data in Table 3 and the graduation rate data in Table 4 while taking into account the GPA data in Table 2, that is precisely what needs to be done. Subjectively, we feel that the retention and graduation rate data

TABLE 3

Percentage by Race of Entering UNC-CH Freshmen, 1974-79, Still Enrolled or Graduated

After One Year

	(Base #)	Blacks	Whites	Other*	Total
1974	(2887)	79.9	91.4	87.0	90.3
1975	(2957)	78.5	89.8	85.4	88.7
1976	(2895)	88.6	90.1	84.6	89.9
1977	(3048)	88.3	89.3	86.3	89.1
1978	(3070)	86.0	89.9	77.9	89.3
1979	(3444)	80.2	90.5	79.4	89.0
Average	(18301)	83.0	90.2	82.3	89.4

After Two Years

1974	(2887)	69.8	83.1	69.6	81.6
1975	(2957)	72.1	82.6	77.1	81.6
1976	(2895)	80.3	82.2	76.9	82.0
1977	(3048)	75.7	81.8	70.6	81.2
1978	(3070)	76.1	83.4	66.2	82.3
Average	(14857)	74.5	82.6	71.4	81.7

After Three Years

1974	(2887)	65.7	80.0	69.6	78.5
1975	(2957)	67.2	80.2	72.9	78.9
1976	(2895)	75.1	79.7	76.9	79.3
1977	(3048)	72.1	80.6	70.6	79.8
Average	(11787)	69.5	80.1	72.3	79.1

After Four Years

1974	(2887)	59.7	78.3	63.0	76.3
1975	(2957)	54.3	77.3	68.8	75.1
1976	(2895)	64.8	77.5	74.4	76.6
Average	(8739)	59.6	77.7	68.4	76.0

After Five Years

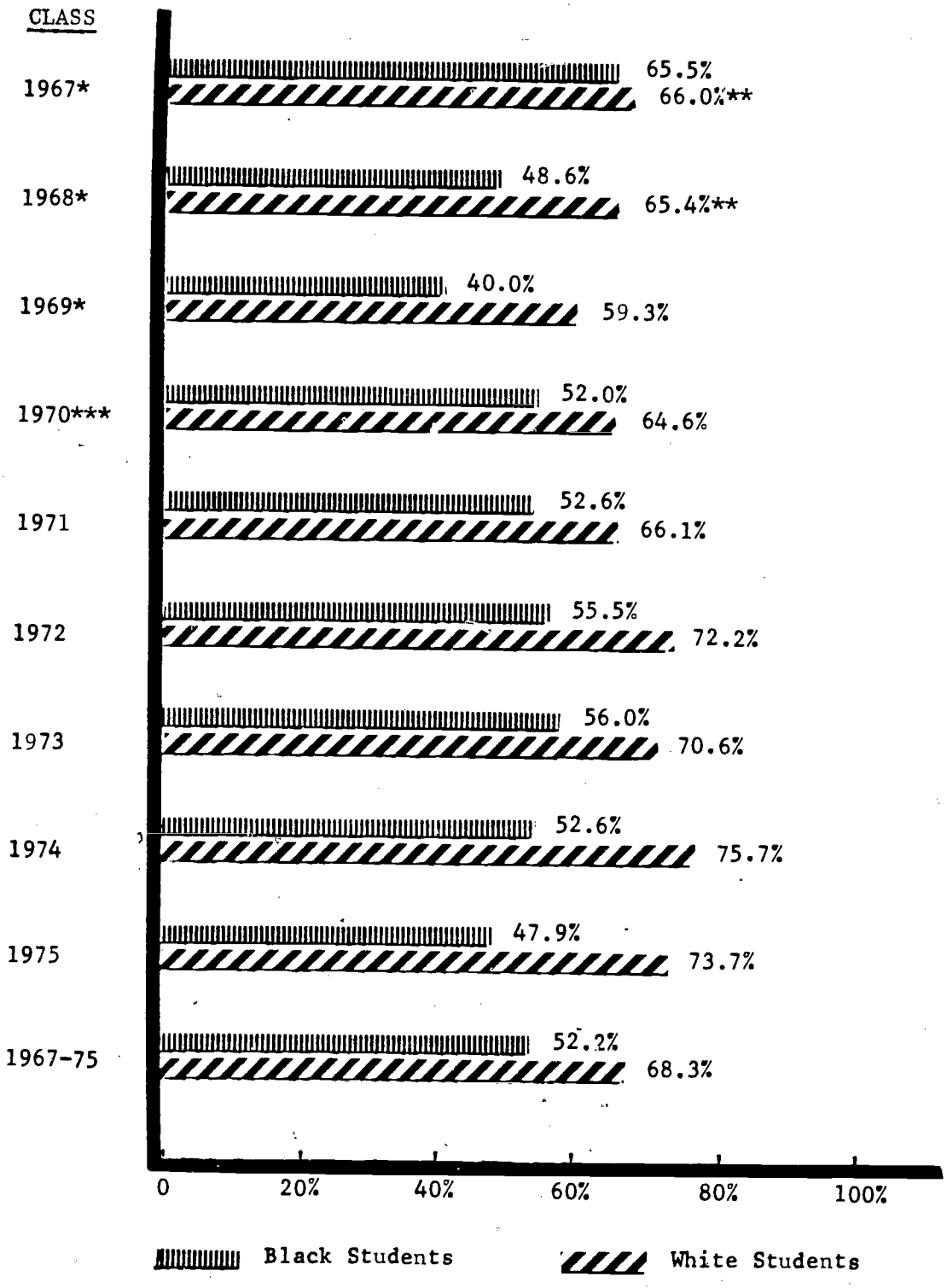
1974	(2887)	59.3	78.2	67.4	76.3
1975	(2857)	54.3	77.5	62.5	75.1
Average	(5844)	56.8	77.8	64.9	75.7

*Other includes Asian or Pacific Islander, Hispanic, American Indian or Alaskan Native, and all Non-Resident Alien students.

(Source: Naylor & Sanford, 1982.)

TABLE 4

GRADUATION RATES OF STUDENTS ENTERING UNC-CH AS FRESHMEN, BY RACE, 1967-75, AFTER FIVE YEARS



* Not five years after entering; figures as of December 1973 graduation.

** Figures for white students in 1967 and 1968 include minorities other than black.

*** Not five years; as of May 1976 graduation.

(Source: Sanford, 1981.)

confirm our admissions' policies which tend to accept a higher proportion of black students than white students for any given range of SAT scores. Our attempts to quantify this relationship make up the remainder of this paper.

Predicted Graduation Equations

Just as white students have attended, graduated from, and even flunked out of The University of North Carolina at Chapel Hill for almost 200 years, black students have done the same things although for a shorter period of time. What this rather simple and definitely obvious statement is intended to say is that black students do succeed at UNC-CH despite their relative disadvantage to whites in admissions' qualifications, grades, retention, and graduation rates. This has been the ultimate purpose of this institution's efforts to admit minority students, and it is important that we not lose sight of this.

At the same time, realism forces us to face the fact that admissions are competitive and that blacks on the average do not compare well to whites on traditional academic measures. The need, then, arose for some way to measure or predict those black applicants who had the best chance of succeeding at Carolina. With this in mind, the Office of Institutional Research worked in conjunction with the Office of Undergraduate Admissions to find predicted graduation equations (PGE) which would assist admissions in its work.

As the research into formulating predicted graduation equations has been published elsewhere (Sanford, 1982; reprints available from the author for $1.00), this paper will not present the study completely. Rather, the focus will be on selected findings with some discussion of the potential which PGE offers an institution.

Table 5 shows the results of three expanded multiple regression analyses which regressed the full range of dependent variables upon graduation status. For black students, a Multiple R of 0.37934 was achieved with R^2 equal to 0.14390.

TABLE 5

Expanded Multiple Regression Analyses on Graduation Status and Predicted Graduation Equations (PGE) for Black and White Fresh-Entering The University of North Carolina at Chapel Hill in 1974

1974 Black Freshmen

Variables	Multiple R	R^2	r	Beta
High School Rank	0.29828	0.08897	-0.29828	-0.28633
Residency Status (out)	0.34010	0.11567	0.13454	0.16781
Major (undecided)	0.35333	0.12484	-0.09887	-0.10365
High School Size	0.36556	0.13363	-0.11275	-0.09498
SATV	0.37602	0.14139	0.14835	0.06240
Sex (female)	0.37844	0.14321	0.04727	-0.04212
SATM	0.37927	0.14385	0.13164	0.02617
PGA	0.37934	0.14390	0.25717	0.01651

$$PGE = [1.367 - 0.947(HSR) + 0.384(RES) - 0.145(MAJOR) - 0.0003(HSS) + 0.0004(SATV) - 0.042(SEX) + 0.0002(SATM) + 0.023(PGA)]^2$$

1974 White Freshmen

Variables	Multiple R	R^2	r	Beta
Residency Status (out)	0.14283	0.02040	0.14283	0.16105
High School Rank	0.21253	0.04517	-0.13306	-0.15181
High School Size	0.21721	0.04718	0.07199	0.04572
Major (undecided)	0.21885	0.04789	-0.04485	-0.02795
Sex (female)	0.22023	0.04850	0.00824	-0.02482
SATV	0.22069	0.04870	0.07771	0.01494

(PGA & SATM not significant)

$$PGE = [1.585 + 0.201(RES) - 0.605(HSR) + 0.0001(HSS) - 0.031(MAJOR) - 0.021(SEX) + 0.0001(SATV)]^2$$

1974 Freshmen (Blacks & Whites)

Variables	Multiple R	R^2	r	Beta
High School Rank	0.18433	0.03398	-0.18433	-0.18927
Residency Status (out)	0.25319	0.06410	0.14914	0.15972
Race (white)	0.26577	0.07063	0.14024	0.07582
Major (undecided)	0.26762	0.07162	-0.04684	-0.03322
High School Size	0.26914	0.07243	0.05336	0.02826
Sex (female)	0.27053	0.07319	0.00850	-0.02609
SATV	0.27119	0.07354	0.13024	0.03023
PGA	0.27122	0.07356	0.18121	-0.02457
SATM	0.27133	0.07362	0.13742	0.01418

$$PGE = [1.364 - 0.720(HSR) + 0.210(RES) + 0.113(RACE) - 0.038(MAJOR) + 0.0001(HSS) - 0.023(SEX) + 0.0001(SATV) - 0.024(PGA) + 0.0001(SATM)]^2$$

Notes:
1. High School Rank is coded in reverse so the negative signs are of no importance.
2. PGE computed by squaring the predictive equation for the graduation status variable; standard errors of the predictive equations are 0.46809 (blacks), 0.41528 (whites), and 0.42121 (both combined).

Comparable figures for whites were 0.22069 and 0.04870 and for blacks and whites combined were 0.27133 and 0.07362. The PGE's yield results similar to the standard four point grading scheme except that the low value is 1.0 instead of 0.0. For blacks the most important predictor variable which enters the regression first is high school rank in class while for whites, residency status for tuition purposes is most important although high school rank is second. SAT scores are not particularly important in any of the regressions, and this parallels our own experience in that admissions tends to place much more emphasis on class rank than on SAT scores.

The results of three discriminant analyses using the same predictor variables are shown in Table 6. Interestingly, the same variables turned out to be significant for blacks, whites, and the combined group (race also entered in here). Even more interesting is the finding that a higher rate of correct predictions was achieved for blacks than for whites although a slightly higher percentage of white non-graduates were predicted. Somehow, one is rather pleased to note that the traditional measures used by college admissions' offices can predict graduation for black students as well as for white students.

The predicted graduation equations resulting from this research have been found useful by the university although they have not been adopted by the admissions office. Usefulness, just like beauty, may lie in the eyes of the beholder and the uses which we have made of the equations are subtle. First and most importantly have the PGE's been of value in affirming the use of high school class rank and SAT scores as admissions' criteria. While the need has not arisen to defend these criteria in a court of law by using this research, the underlying feeling is that we have linked those measures used in admitting students to a definite education outcome -- graduation. Secondly, this research shows promise for the future, and we are collecting data on the 1979 entering freshman class which will allow for a wider range of predictor variables in the future.

TABLE 6

Discriminant Analyses of Graduation Status of Black and White Freshmen Entering The University of North Carolina at Chapel Hill in 1974

1974 Black Freshmen

A. Significant Variables

	Unstandardized Coefficients
Sex (female)	0.52170
Residency Status (out)	-2.16520
Major (undecided)	1.03106
High School Size	0.00149
High School Rank	6.19064
(Constant)	-1.34874

B. Classification Results:

Graduation Status	#	Predicted Graduation Status: Non-Graduates	Graduates
1. Non-Graduates	111	68 (61.3%)	43 (38.7%)
2. Graduates	151	50 (30.1%)	101 (66.9%)

Overall Percentage of Correct Predictions is 64.5%.

1974 White Freshmen

A. Significant Variables

	Unstandardized Coefficients
Sex (female)	0.37073
Residency Status (out)	-2.34225
Major (undecided)	0.27842
High School Size	0.00096
High School Rank	6.54670
(Constant)	1.52991

B. Classification Results:

Graduation Status	#	Predicted Graduation Status: Non-Graduates	Graduates
1. Non-Graduates	549	342 (62.3%)	207 (37.7%)
2. Graduates	1966	858 (43.6%)	1108 (56.4%)

Overall Percentage of Correct Predictions is 57.65%.

1974 Freshmen (Blacks & Whites)

A. Significant Variables

	Unstandardized Coefficients
Sex (female)	0.34444
Race (white)	-1.13410
Residency Status (out)	-1.94310
Major (undecided)	0.31536
High School Size	0.00047
High School Rank	6.03855
(Constant)	3.04532

B. Classification Results:

Graduation Status	#	Predicted Graduation Status: Non-Graduates	Graduates
1. Non-Graduates	660	322 (48.8%)	338 (51.2%)
2. Graduates	2117	640 (30.2%)	1477 (69.8%)

Overall Percentage of Correct Predictions is 64.78%.

(Source for Tables 5 and 6: Sanford, 1982.)

As mentioned, the PGE's are not being used by admissions primarily because the level of prediction is not high enough. In considering why we were not able to do better on predicting who will graduate, three reasons come to mind. First, as alluded to above, the variables used in the PGE's may not be the best ones for predicting graduation from college. The variables used, mostly academic ones, are theoretically defensible and form the basis for most admissions work, but they are not the only ones which may be related to student success in and graduation from college. Secondly, the population from which the PGE's were derived and on which they were tested was rigorously pre-selected. They had already passed through our admissions' process and were highly likely to graduate from UNC-CH anyway. A full test of predicted graduation equations would require an experimental research design consisting of random admissions, and this alternative is not viable for us. The third reason for the rather low prediction level achieved may be due to the uncertain nature of the relationship between students and college. Several studies (for example, Bean, 1980; Pantages and Creedon, 1978) have not found any clear and consistent explanation for those students who drop out of college before graduation, and it is likely that the same uncertainty affects our ability to predict graduation accurately.

Conclusion

The purpose of this paper has been to show how a major, research university in the South has tried to depoliticize minority admissions through the use of predicted graduation equations which are race specific. While the results of the research were not adopted by the university, they did show that 1) admissions' criteria are related to actual graduation from college; 2) minority student admissions could be linked to a definite educational outcome; and 3) subjectivity in admissions could be lessened somewhat although it can and should never be removed completely.

The implications of this research are important within the field of postsecondary education both to practitioners and theoreticians. Practitioners should be interested

because of the rather obvious value of predictive graduation equations to admissions; i.e., knowing with some certainty (on the average) who will persist to graduation eliminates much of the guesswork of the admissions process. In particular is such information valuable for use with minority applicants in that the politically sensitive issue of reverse discrimination can be defused, somewhat, by showing that such students have a good chance of graduating based on the performance of similar students in the past. Also, practitioners should be interested because of the potential value of such equations to the institution in the near future when the traditional college-going age group is predicted to decline by 25% or more. Fewer new students need to be recruited if more currently enrolled students can be retained at the institution from each freshman class. Theoreticians, on the other hand, will find the work interesting and possibly useful in clarifying the relationship between entry to (admission) and exit from (graduation/discontinuance) college. Even though the focus of the research was not on causal analysis, that does not negate the possible value of the work in theory development.

Now we have reached the point where we lean back in the chair, put our feet up, and ask ourselves what all this means if anything. Without wanting to demean my own work too much but yet feeling some responsibility for truth and realism, there is one major message in this work. I believe that the research supports minority admissions because it shows that black and white students, measured on the same scales, can perform and achieve on a reasonably equal basis in college despite noticeable differences in entering academic credentials. In short, admitting blacks with lower SAT scores than whites is fair -- not because they are black, not because whites owe it to them because our ancestors had slaves, but because they do as well as whites in graduating from college.

References

Bean, J. P. "Dropouts and Turnovers: The Synthesis and Test of a Causal Model of Student Attrition." Research in Higher Education, 12 (2), 1980, 155-187.

Jackley, J. P. and Henderson, C. "Retention: Tactic for the Eighties." ACE Policy Brief. Washington, D.C.: American Council on Education, December 1979.

Naylor, P. D. and Sanford, T. R. "Intrainstitutional Analysis of Student Retention Across Student Levels." College and University, 57 (2), 1982, 143-159.

Pantages, T. J. and Creeden, C. F. "Studies of College Attrition: 1950-1975." Review of Education Research, 48 (1), 1978, 49-101.

Sanford, T. R. "Freshmen Persistence to Graduation Update, 1967-76." Chapel Hill, NC: Office of Institutional Research, July 1981.

Sanford, T. R. "Predicting College Graduation for Black and White Freshman Applicants." College and University, 57 (3), 1982, 265-278.

Walbrun, J. "Cumulative Grade Point Averages of Undergraduates at The University of North Carolina at Chapel Hill after Fall Semester, 1976-80." Chapel Hill, NC: Office of Institutional Research, May 1981.