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## A survey of the criteria for the admission of minority students to Iowa colleges and universities with special emphasis on the University of Northern Iowa freshman class entering in 1979

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## **A survey of the criteria for the admission of minority students to Iowa colleges and universities with special emphasis on the University of Northern Iowa freshman class entering in 1979**

### **Abstract**

Prior to 1954, when *Brown vs the Board of Education* irreversibly changed the hue of the nation's schools from "colored and white" to "integrated," there was no need for special admission criteria for minority students. Due to prejudice and high tuition costs, less than 1% of Black students attended white colleges. Those who did attend white colleges were admitted under traditional admissions criteria (Thomas, 1981).

A SURVEY OF THE CRITERIA FOR THE ADMISSION  
OF MINORITY STUDENTS TO IOWA COLLEGES AND  
UNIVERSITIES WITH SPECIAL EMPHASIS  
ON THE UNIVERSITY OF NORTHERN IOWA  
FRESHMAN CLASS ENTERING IN 1979

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A Research Paper  
Presented to  
The Department of Educational Administration  
and Counseling  
University of Northern Iowa

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts in Education

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by  
Phyllis Wyatt-Woodruff

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This Research Paper by: Phyllis Wyatt-Woodruff  
Entitled: A Survey of the Criteria for the Admission  
of Minority Students to Iowa Colleges and  
Universities with Special Emphasis on the  
University of Northern Iowa Freshman Class  
Entering in 1979

has been approved as meeting the research paper  
requirement for the Degree Master of Arts in Education.

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## Chapter 1

### INTRODUCTION

Prior to 1954, when *Brown vs the Board of Education* irreversibly changed the hue of the nation's schools from "colored and white" to "integrated," there was no need for special admission criteria for minority students. Due to prejudice and high tuition costs, less than 1% of Black students attended white colleges. Those who did attend white colleges were admitted under traditional admissions criteria (Thomas, 1981).

Within ten years of this historic human rights decision, federally funded financial aid made higher education affordable to any student admitted to college. In the next five years, 1964-1969, amid riots and the death of Martin Luther King, Blacks demanded that white colleges and universities open their doors and admit minority students. Traditional admissions criteria were accused of posing a barrier to the admission of minority students to predominately white colleges and universities. Stanley (1971) found that colleges and universities had responded to the problem of admitting minority students in a variety of ways, ranging from the waiver of a criteria to refusal to even consider the possibility that a

different set of criteria might be needed to determine the admissibility of minority candidates.

Soon, however, a new social consciousness awoke on campuses and a movement began to try to develop valid predictors of minority student success in colleges and universities (Bailey, 1978). Predominately white colleges and universities were being asked to evaluate the admissibility of students who in many cases did not have the opportunity to receive college preparatory courses in high school.

Williams et al. (1983) described the basic problem as one of assessing which minority students can best compete at the college level, despite the predicted failure often shown when traditional admissions criteria are applied.

Studies have been conducted to investigate the validity of traditional criteria as predictors for minority students as compared to white students (Clearly, 1968; Stanley, 1971; Green, 1969). More recent studies have leaned toward rejecting the idea of the existence of valid correlations between the American College Test (ACT) or the Scholastic Aptitude Test (SAT) and high school grade point average (GPA) and success in college as determined by predicted college GPA (Slack & Porter, 1980; Goldman & Hewitt, 1976; Grant & Singleton, 1982). Despite elaborate



correlation tables and regression charts, most of the data is inconclusive.

As a result of charges of cultural bias, over prediction and under prediction when using the criteria of standardized tests (Boyd, 1977; Fallows, 1980; Goldman & Widawski, 1976), many colleges and universities have begun to use noncognitive measures previously used only by selective colleges. Research on these measures of academic potential includes various personality traits such as self control and sociability (Sedlacek & Webster, 1978; Pfeifer & Sedlacek, 1978).

#### Statement of the Problem

The primary purpose of this study is to investigate the admissions criteria used by Iowa colleges and universities for minority students with special emphasis on the University of Northern Iowa class of 1979. More specifically, the following research questions will be addressed: 1) What are the admissions criteria used by Iowa colleges and universities in making freshman admissions decisions? 2) What factors other than admissions criteria appear to affect the success of minority students? 3) How effective are admissions formulas in predicting college success of minority students? 4) What criterion is reported to be most effective in predicting the success of minority students?

### Importance of the Study

Although 45% of the U.S. population is minority, estimates of the college age minority population (18-22) range between 15-18% of the total U.S. population (Crossland, 1971). Currently minority students represent less than 11% of the enrolled college and university student population. Minority students are under represented racially and by age group. Finding valid predictors of college success becomes more imperative in light of the statistics that show less than 43% of those minority students that begin college complete their studies as compared with 59% of the enrolled white student population. Colleges and universities are losing a disproportionate amount of an already under represented student population (Crossland, 1971).

These factors point to the necessity of finding new ways to predict the college success of minority students. As part of that process it is necessary to identify the criteria being used and correspondingly the predictive validity of that admissions criteria.

### Assumption

An assumption in making predictions of college success, according to Bailey (1979) is, "the best predictions of future behavior can be made by observing and analyzing relevant or similar behavior" (p. 3). In this

particular research, it is assumed that the respondents to the survey "Criteria for Minority Student Admissions," completed the questionnaires as honestly as possible.

#### Limitations of the Study

The present study was limited by the following factors. The U.S. Census Bureau indicates 3.4% of Iowa's population is minority. This represents less than .02 of 1% of the total United States minority population. The representativeness of minority student population may be questionable (Grant & Eiden, 1982).

The determination of the predictive validity of admissions criteria used to admit freshmen minority students in the Fall of 1979 at the University of Northern Iowa was limited to those students who indicated minority status at registration. There is no way of knowing the characteristics of those minority students who did not indicate ethnic origins.

Another limitation in the study of Iowa colleges and universities is that there are no predominately minority colleges. This limited the study to successful predictions for minority students at integrated colleges and universities.

## Definitions

This study was conducted using the following definitions:

Minority student: Any student who is a U.S. citizen or permanent resident and is a member of one of the following ethnic backgrounds: Hispanic (Puerto Rican or Mexican-American), Black/Afro-American, American Indian or Alaskan Native, Asian or Pacific Islander (U.S. Census Bureau, 1980).

Academic success: GPA of 2.00 or better after the first semester in college or graduation from college.

ACT: A test which measures academic achievement in the areas of Math, English, Natural Science and Social Science.

SAT: A test which measures verbal and math aptitude.

Standardized test: ACT or SAT test.

HSDR: High School Decile Rank, 1 being the lowest decile and 9 being the highest, signifying at least 90% of the student's classmates received lower grades.

GPA: Grade point average.

Traditional admissions criteria: High school GPA, standardized test scores, high school rank, an essay submitted with the application, personality characteristics as shown in an admissions interview, letters of recommendation or extra-curricular activities.

Admissions formula: A mathematical formula using standardized test scores and high school GPA or high school rank in predicting success in college.

Selective college: Majority of accepted freshmen in the top 25% of their high school graduating class.

Highly selective college: Majority of accepted freshmen in the top 10% of their high school graduating class.

Traditional college: Majority of the accepted freshmen in the top 50% of their high school graduating class.

Liberal college: Many students in the top 50% of their high school graduating class.

Open admission: Any student who has graduated from high school or has obtained a general education equivalency diploma is accepted.

## Chapter 2

### REVIEW OF THE LITERATURE

Traditional admissions criteria serve as a means to predict which students will be able to academically achieve in college. The effectiveness of these predictors has been criticized as being irrational, imprecise (Morris, 1979) and merely a means of narrowing the field (Temp, 1974). This review will survey the literature.

#### ACT/SAT Scores

Standardized test scores although in use for over 50 years as an admission criteria, continue to receive attacks. Fallows (1980) sums up the problem as "Do tests really discover best and brightest; do they chiefly identify the richest and most expensively education?" (p. 37). The Carnegie Council (1977) adds

They (test scores) are best at determining at one end those applicants likely to distinguish themselves academically and at the other end those likely to fail. They are not suitable for fine tuning in between. A 525 score is not clearly better than a 500 score.

Clearly (1968) in a study of three large eastern colleges tested the predictive validity of the SAT for white students and Black students. In two of the universities the SAT was judged to be as predictive for Blacks as for white students. The GPA was over predicted

for Black students at the third college. Adding high school grades and HSDR only increased the positive bias.

The question of whether a test that is predictively valid for an entire population is valid for each subgroup of the population was investigated by Pfeifer and Sedlacek (1971). The results showed significant over prediction occurred when predictive index weights were used based on the SAT scores of a predominately white population.

Stanley (1971) took the bias question one step further and studied educationally disadvantaged minority students. He found test scores predict college grades of educationally disadvantaged students at least as well as they do for the advantaged. He further reported high school grades augment successful prediction.

Thorndike (1971) defined a system of qualifying levels based on the mean test scores of each subgroup. The base rates for each group would be set in proportion to the fraction of students in that group succeeding in college if the test scores were not used.

In a study of the predictive validity of equations based on the scores of white students, Goldman and Richards (1974) found significant over prediction in the GPA of Mexican American students. When a separate equation was calculated for the Chicano students, he

found the SAT to be as predictively valid for Mexican American students as white students.

Three comprehensive studies of SAT predictive validity were done at four of the campuses of the University of California (Goldman & Widawski, 1977; Goldman & Hewitt, 1974, 1976). The subjects were white, Black, Chicano and Asian students. Multiple correlations were done of high school GPA, SAT scores and college GPA. When the same prediction formulas were used for minority and white students, Chicano and Black GPAs were under predicted. Using the SAT as a predictor for Chicanos reduced the admissible number of students by 14% but without improving the predictive value of the high school record alone. The prediction formula was as valid for Asian students as white students.

More inter-ethnic studies were done by Silverman (1976). He explored the ACT/HSDR based formulas for bias against Black, Jewish and white students. He concluded that using a formula based on the scores of a predominately white student body under predicted the success of Jewish students and over predicted the success rate of Black students.

Boyd (1977, 1980) conducted a longitudinal study of Black and Hispanic students attending competitive integrated high schools and going on to attend 20 highly



selective colleges (8 Ivy League) from 1969 to 1971. Although the mean SAT score of the minority students was 200 points lower than their white classmates, their persistence rate in college differed by only 2%, 75% for whites vs 73% for minority students. Furthermore, the highest attrition rate was among the minority students with the highest SAT scores.

A definitive study of ACT scores, high school GPA and college GPA was done at Arizona State University. The subjects were Black, Hispanic, Indian and white students. The means of all three minority students were significantly below the white student mean of 21. Thirty-six percent of the minority students admitted below the criterion mean of 21 succeeded in college, while only 28% of the students admitted with scores above the mean succeeded (Stock & Schmid, 1980).

SAT scores ranked third as a successful predictor of college achievement. The high school GPA ranked first and college board achievement test second in predictive value. A formula using the SAT score and high school GPA only increased predictiveness .06 points over use of high school GPA as a lone criterion (Slack & Porter, 1980).

### HSDR

The high school decile rank is often generalized as being the most important predictor of success (Dalton, 1974). It puts perspective on the competitiveness of the high school and the student's achievements. The preponderance of the literature previously cited states it is the HSDR not the SAT score that is the effective predictor.

Sanford (1982) analyzed the admissions received of minority students graduating in 1974. He concluded 64.8% of minority students would be correctly classified as successful using HSDR as the only criterion.

### High School GPA (HSGPA)

Two national studies have confirmed the HSGPA as the most popular admissions criterion (Sedlacek & Pelham, 1976; Williams et al., 1983). A popular saying in admissions states, grades predict grades.

Thomas and Stanley (1969) called aptitude and achievement tests "relative" and label HSGPA as the better predictor of college grades for Blacks than whites. They qualify their findings with the fact that correlation of college grades and high school grades are sometimes poor predictors for Black males but are better than test scores. This study was based on a sample of students from a primarily Black college.

Thomas, Alexander and Eckland (1979) studied the effects of race, sex and class on college GPA. The sample was 13,618 Black and white students who participated in the 1972 national longitudinal study of high school seniors. He concluded colleges and universities should put less emphasis on test scores and more on grade performance because HSGPA and HSDR are less influenced by class, sex and race than standardized tests.

This contradicts the Carnegie Council (1977) findings which state, "grades are less helpful than they once were because of all pervasive grade inflation" (p. 10). Uncontrolled variations in grading systems, different levels of difficulty among high schools and courses, the effects of social interaction between teachers and students make grades too biased to be a good predictor of college success according to Grant and Singleton (1982).

#### Noncognitive Criteria

Extracurricular activities, letters of recommendation, and interviews are all noncognitive admissions criteria. They have been criticized by some as unobjective (Bailey, 1978) and praised by others (Green, 1969). Consideration of these variables allows admissions officers to take into account attitudinal characteristics, diverse backgrounds, aspirations and environmental factors (Carrol, 1977).

Pfeifer and Sedlacek (1974) tried to find out if traditional academic predictors are invalid, what else worked. To answer the question, a study was conducted at the University of Maryland. They found a correlation at the .05 level in Black freshmen students' college GPA and the students' sense of well being, responsibility, communality, achievement vs conformance, achievement vs independence and intellectual efficiency. These variables were measured by the California Psychological Inventory and the Holland Vocational Preference Inventory. The correlation was not as strong as SAT and GPA. There was no correlation found between college GPA and cultural factors.

The need for effective affective measures was emphasized in a study of Black students at private liberal arts colleges by Tatham and Tatham (1974). Since the study of academic measures did not differentiate at the .05 level students who succeeded in college from those who did not, it appeared motivation and socio-economic background needed to be explored.

Hedges and Majer (1976) were equally unable to correlate high school GPA and SAT with GPA in a study of EOP students in 1972. Astin et al. (1982) was not able to quantify his findings but found a positive relationship between persistence in college, socio-economic

background, study habits and attending an integrated high school.

A study of 75 Hispanic students in a transitional year program showed nontraditional variables such as low family income to be superior to traditional admissions criteria in predicting the success of Hispanic students. Lowman and Spuck (1975) explained the need for noncognitive measures in assessing Chicano students as a way of judging potential despite language difficulty, test anxiety and a cultural tendency to work slower but not less accurately on tests.

Research by Duran (1983) showed the overall dimensions of a student's personal characteristics can affect college achievement. Duran listed those factors as:

(1) aspirations, (2) academic skills, (3) academic self management, (4) communication skills, (5) the financial needs of students, and (6) the financial demand on the student (p. 127).

Leadership, motivation, maturity, good interpersonal relationships, persistence, and service were the traits demonstrated by students in research by Torrance (1977), Sedlacek and Webster (1978), and Valdez (1981). Torrance created a test of creative thinking and recommended a biographic inventory of life experiences. Valdez suggested a performance centered model be developed based

on successful and unsuccessful performances with the rating system determined by the faculty. Sedlacek and Webster would measure noncognitive variables primarily through interviews and counseling sessions.

## Chapter 3

### DESIGN OF THE STUDY

This study was designed to learn more about the criteria for admission of minority students to Iowa colleges and universities. There was special emphasis on the University of Northern Iowa (UNI) freshman class entering in 1979. In this chapter the reader will find the procedures used.

#### Population

The design of the study required two populations. The first population consisted of the Directors of Admission at all nonproprietary colleges in Iowa. The second population included 39 freshman minority students entering the University of Northern Iowa in the fall of 1979.

#### The Instrument

The questionnaire was one page and consisted of six questions. Three of the questions surveyed the criteria used in admissions decisions and asked for a ranking or weight. A fourth question sought to determine whether the institution thought its rate of successful prediction as determined by retention was the same for whites and Blacks. The last two questions concerned the institution's

demographics. Each questionnaire contained a three-digit code to insure the confidentiality of responses. The code number related with a listing of institutions, public and private colleges in Iowa.

### Methodology

With the assistance of the University of Northern Iowa Office of Admissions, a survey questionnaire and cover letter were developed. The cover letter detailed the purposes of the study.

A questionnaire and cover letter were sent by first class mail to the Director of Admissions of all 63 colleges and universities in the State of Iowa. A stamped and self addressed return envelope was included in the mailing. Each returned survey was recorded by response. One questionnaire was eliminated because the college does not accept freshmen.

Two weeks later a second mailing was sent to all but two nonrespondents. It was necessary to eliminate these colleges and universities from the sample because it was later learned they did not admit freshmen.

In order to determine the predictive validity of the UNI admissions formula, the office of the Registrar provided a list containing the identification number, name, current status, and ethnic category of all students entering the University of Northern Iowa in 1979. The



ethnic code was used to identify minority students. The total was 39 students. Student transcripts and admission applications were reviewed to obtain cumulative college and high school grade point averages. Additional information on the transcripts allowed transfer students and foreign students to be eliminated. The Office of Educational Research at the University of Northern Iowa provided the ACT scores, first semester GPA and high school decile rank (HSDR) for the students, as well as a prediction formula based on the ACT scores and high school decile rank.

Of the identified 39 freshman students only 31 had complete data. A predicted GPA was calculated for this sample. A computerized correlation of college cumulative GPA, high school GPA, college first semester GPA, HSDR, ACT scores, predicted GPA, college hours and grade points was calculated by the UNI office of Computer Services.

## Chapter 4

## ANALYSIS OF THE DATA

The following chapter contains an analysis of the responses to the Survey of Iowa Colleges Criteria for Minority Student Admissions. (See Appendix C.) A discussion of the profile data on the freshman minority students entering the University of Northern Iowa in 1979 is also included.

The survey had a response rate of 85%. The 51 respondents clearly felt the high school record to be the strongest predictor of success. Table 1 shows the weight given to eight admissions criteria when making freshman admissions decisions. Only one institution gave the most weight to a criteria other than high school GPA or HSDR. That institution gave test scores the most consideration. The responses to the survey question, what do you consider the most important single predictor of success for minority students, overwhelmingly referred to the high school record.

The first research question, what are the admissions criteria used by Iowa colleges and universities in making freshman admissions decisions for minority students, can be answered as follows. Thirty-nine percent of Iowa's colleges and universities use the high school diploma or

Table 1

Admissions Criteria for Minority Students

Admissions Criteria	Average Weight <sup>a</sup>	Respondents <sup>b</sup>	Rank
High School GPA	27*	24	2
ACT/SAT Test Scores	25	29	3
Rank in Class	27**	23	1
Application Essay	11	7	7
Letters of Recommendation	20	20	4
Admission Interview	13	13	6
Extracurricular Activities	8	6	9
High School Curriculum	17	19	5
Other	9	3	8
High School Diploma/GED (Open Admissions)		20	
Admissions Formula		10	

<sup>a</sup>Average weight given to criterion when used in making an admissions decision (numbers rounded to the nearest whole number). <sup>b</sup>Number of institutions using this criterion in making an admissions decision. Total respondents = 51.

\*26.65. \*\*27.19.

General Equivalency Diploma as the only criteria for admission. The remaining 69% of Iowa's colleges and universities use the high school GPA, HSDR, ACT or SAT test scores, high school curriculum, letters of recommendation or admissions interviews. Less than 14% of the responding institutions indicated they used the application essay or extra-curricular activities as a criterion. Fewer than 1% of the institutions use some criteria other than those previously mentioned. Ninety-seven percent of the Iowa colleges and universities that do not have open admissions require ACT or SAT scores.

There does not appear to be any relationship between weight of criteria and type of institution. See Table 2 for a description of institutional respondents. Fifty-six percent of the selective colleges had a higher attrition rate of minority students than white students. This represented 42% of the total institutions indicating retention to be a problem at their institution. Two thirds of the liberal institutions indicated an unequal retention rate for minority and white students, 16% of the total. The remaining 42% of the respondents were traditional institutions and 28% of all institutions in the traditional category.

Table 2

Institutional Descriptions of Survey Respondents

Type of Institution	2 year	4 year	Total
Public Universities	20	3	23
Private Universities with Religious Affiliation	1	21	22
Private Universities without Religious Affiliation	<u>0</u>	<u>6</u>	<u>6</u>
	21	30	51

  

	Private	Public	Total
Highly Selective	0	0	0
Selective	7	2	9
Traditional	17	1	18
Liberal	2	1	3
Open	<u>2</u>	<u>19</u>	<u>21</u>
	28	23	51

Table 3 ranks the reasons Iowa colleges and universities gave for high attrition of minority students. The results are from the Criteria For Minority Student Admissions Survey of Iowa Colleges. The data in Table 3 address the research question, what factors other than admissions appear to affect the success of minority students. Although no relationship was apparent between type of institution and reasons for low retention, there was a consensus that study skills, cultural adjustment problems and admission of underprepared students contributed to the low retention of minority students. Although only 42% of the survey respondents indicated admissions of underprepared students to be a factor in retention, it was given such a consistently strong weight, it ranked highest as the cause of low retention of minority students.

Table 4 contains a summarization of the admissions material and college record of a sample of the minority students in the freshmen class entering in 1979. It was accumulated as of February 27, 1984. The formulas used in determining the predicted college GPA were:

males =  $[4.79(\text{ACT}) + 11.66(\text{HSDR}) + 58.10] / 100$  and

females =  $[5.33(\text{ACT}) + 15.4(\text{HSDR}) + 35.12] / 100$ .

The third research question, how effective are admissions formulas in predicting the success of minority

Table 3

Ranking of Reasons for High Attrition of Minority Students

Reasons for Attrition	Frequency of Response	Rank of Weight of Responses
Too many underprepared students are admitted	5	1
Psycho-social adjustment problems	7	4
Insufficient study skills	7	2
Cultural adjustment problems	8	3
Mismatch of student interest and college offerings	7	5
Other	0	-
Don't know	2	6

<sup>a</sup>Total institutions with higher minority student attrition than majority student attrition = 12.

students, was answered through analysis of Table 5. The formulas are effective in predicting first semester and cumulative GPAs 61% and 65% of the time respectively. The errors in prediction for both first semesters were split, half were over predicted and half were under predicted. Nineteen percent of the cumulative GPAs were over predicted and 16% were under predicted.

Table 4

Minority Student Admissions Data and College Record

Minority Students	HSGPA	ACT	HSDR	Predicted GPAP	1st Semester GPA
1	2.28	15	4	1.77	1.18
2	2.75	19	5	2.07	3.44
3	1.76	7	2	1.15	1.55
4	2.83	11	6	1.10	0.25
5	3.56	21	9	2.64	3.27
6	3.63	10	8	1.99	2.62
7	2.65	22	5	2.22	0.80
8	1.75	14	3	1.60	0.00
9	2.12	11	3	1.46	2.08
10	3.56	25	8	2.91	1.67
11	3.75	22	8	2.76	2.82
12	3.03	25	7	2.76	2.87
13	2.92	20	6	2.24	0.00
14	2.88	14	6	2.02	1.42
15	3.25	21	4	2.09	1.73
16	2.17	13	3	1.55	0.00
17	3.57	23	9	2.73	2.63
18	1.69	11	3	1.46	0.17
19	2.50	18	3	1.71	1.36
20	2.20	7	2	1.03	1.67
21	3.12	15	7	2.12	2.85
22	3.68	19	8	2.42	2.44
23	2.45	11	4	1.55	1.67
24	2.06	11	0	0.94	0.75
25	1.86	16	4	1.82	1.31
26	2.71	15	6	2.08	1.31
27	2.09	19	1	1.61	2.50
28	1.80	6	7	1.68	3.33
29	2.49	17	4	1.86	2.62
30	2.40	24	4	2.20	2.00
31	2.13	9	2	1.25	2.92
Mean	2.67	16	5	1.90	1.78



Table 4 (continued)

Minority Students	Cumulative GPA	Ethnic Code*	Sex	Hours	Grade Points
1	1.79	3	M	91	159.00
2	2.92	2	M	130	380.02
3	2.07	2	M	103	213.33
4	0.17	2	M	3	18.00
5	3.56	2	M	124	124.00
6	2.27	2	M	66	66.00
7	1.42	5	M	49	38.00
8	0.00	2	M	0	14.00
9	1.43	2	M	27	40.00
10	1.67	4	F	15	25.00
11	3.10	4	F	79	79.00
12	2.90	5	F	127	122.00
13	2.08	3	M	52	60.00
14	1.00	2	F	17	41.00
15	1.40	3	F	37	47.00
16	0.00	2	M	0	12.00
17	3.03	3	M	125	112.00
18	0.17	2	M	1	12.00
19	2.04	2	F	114	233.00
20	1.40	2	F	2	25.00
21	1.56	2	M	23	39.00
22	2.88	2	M	130	120.00
23	1.20	2	F	37	51.00
24	0.69	2	M	11	26.00
25	2.83	2	F	117	120.00
26	1.80	4	F	22	28.00
27	1.60	5	M	38	47.00
28	3.09	2	M	58	58.00
29	1.88	2	M	112	211.00
30	1.84	2	M	115	212.04
31	1.98	2	M	127	252.01
Mean	1.80			63	96.3

\*2 = Black      3 = American Indian/Alaskan Native  
 4 = Asian      5 = Hispanic

Table 5

Accuracy of Prediction Formulas

Predicted GPA	1st semester GPA		Cumulative GPA	
	Below 2.00	Above 2.00	Below 2.00	Above 2.00
3.00-4.00				
2.75-2.99	1	2	1	2
2.50-1.74		2		2
2.25-2.49		1		1
2.00-2.24	5	3	5	3
1.75-1.99	2	2	1	4
1.50-1.74	4	2	5	
1.25-1.49	1	1	3	
1.00-1.24	3	1	2	1
0.00-0.99	1		1	

A correlation of the quantifiable admissions criteria, ACT, HSDR, predicted GPA and high school GPA and the first semester and cumulative GPA was calculated to answer the research question, what criterion is most effective in predicting the success of minority students. Table 6 charts the results of a computerized correlation of the data.

Table 6

Intercorrelation of Admission Criteria and College Record

	ACT	HSDR	Predicted GPA	1st sem. GPA	Cumulative GPA
HSDR	.445**				
Predicted GPA	.840**	.804**			
1st semester GPA	.172	.399*	.390*		
Cumulative GPA	.368*	.555**	.585**	.768**	
High school GPA	.608**	.810**	.782**	.368*	.519**

\*p > .05      \*\*p > .01

N = 30

The HSDR had the strongest correlation with the first semester GPA. There was only .009 points difference between the strength of the correlation of first semester GPA and HSDR and first semester GPA and predicted GPA. Because the predicted GPA is a combination of HSDR and ACT, we can conclude that ACT has little value in predicting first semester GPA. The ACT alone did not show a significant correlation.

The cumulative GPA had significant correlations with all four admissions criteria. The predicted GPA had the strongest correlation coefficient. The addition of the ACT to the correlative strength of the HSDR was .03 in this case.

## Chapter 5

## SUMMARY AND RECOMMENDATIONS

The conflicting evidence given in the literature leads to one conclusion. There is no single best predictor of success. It also leads us to conclude differences in colleges and universities, high schools and students make a generalizable set of criteria impossible.

A restatement of the problem is, what criteria are currently used in making admissions decisions for minority students in Iowa colleges and universities and which criteria are most effective in predicting the college success of minority students. A special emphasis was given to freshmen minority students entering the University of Northern Iowa in 1979.

The analysis of that data indicated the high school record including the HSGPA and HSDR is the best indicator of success in college. The survey of Iowa colleges and universities confirmed the analysis done of UNI students.

Still these variables allow many students to slip through the cracks. We need better indicators to prevent over and under prediction of minority student success. A measure of noncognitive variables would probably enable

us to judge which low achievers in high school would succeed in college and conversely, which high achievers would not succeed in college. A refinement of the predictive process is needed.

Stock and Schmid (1980) suggest each institution do a self study and come up with criterion that insure "(1) the right of an individual applicant to a fair chance of being selected and (2) criterion be based on relevant variables" (p. 78).

Based upon the review of the literature and the study of the UNI class of 1979, I make the following recommendations:

1. Admissions criteria should be tailor made to fit the rigors of each institution.

2. Criteria should be based on the past success rates of minority students.

3. Criteria should include weights based on the competitiveness of the high school.

4. Data should be gathered by each college and university that would indicate the course content of classes on the applicant's high school transcript.

5. A criteria should be developed by each institution to measure the motivation and ability to withstand pressure of applicants.

6. A study should be done by each college and university to determine what characteristics are exhibited by successful minority students at each institution.

7. Each institution should become aware of what it offers in the way of support for students by determining a profile of the student that works best in that system.

8. Campus research should be done to discover what forces on campus are working against the success of minority students and either alleviate the negative forces or determine what attributes a student will need to overcome these obstacles.

The purpose of these recommendations and this research is to work toward a better match of college and students. The admissions of minority students is only a partial goal. The success of the student is a paramount concern.

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APPENDIX A



## COVER LETTER

February 10, 1984

Dear Colleague:

The attached brief survey on criteria used to admit minority students to college is being sent to all colleges and universities in the state of Iowa. I would very much appreciate your being part of the study.

As former admissions counselor at St. Olaf College and University of New Haven, I am keenly aware of the need to accurately identify students who will benefit from the educational experiences offered by Iowa colleges and universities. This research study, under the direction of Dr. Jack Kimball, University of Northern Iowa, is designed to provide a foundation for developing better predictors of academic success.

Your response will be essential to the quality of the study. Please complete the enclosed form prior to February 20, 1984 and return it in the enclosed self-addressed envelope. All responses will be held in the strictest confidence.

I would be pleased to send you a summary of the survey results, if you desire. If you have any questions, please feel free to call at 319-273-6136. Thank you for your cooperation.

Sincerely,

Phyllis Wyatt-Woodruff  
Graduate Assistant  
Department of Educational  
Administration and  
Counseling

Enclosure

## APPENDIX B

## FOLLOW UP LETTER

February 24, 1984

Dear Colleague:

A survey for determining the criteria used by Iowa colleges and universities to admit minority students was mailed to your office on February 10, 1984. Although the initial response to the survey "Criteria for Minority Student Admissions" has been good, we need your input to insure the study will be representative. Thus, I am sending this letter as a follow up.

Enclosed you will find a stamped, addressed envelope. Please return the survey no later than March 5, 1984.

Sincerely,

Phyllis Wyatt-Woodruff  
Graduate Assistant to the  
Department of Educational  
Administration and  
Counseling

P.S. The confidentiality of all responses is assured.

Enclosure

## APPENDIX C

## CRITERIA FOR MINORITY STUDENT ADMISSIONS

## SURVEY OF IOWA COLLEGES

1. Weigh the following criteria in making freshman admissions decisions for minority candidates. (List percentage, total = 100%)

High School GPA  
 ACT/SAT Test Scores  
 Rank in Class  
 Application Essay  
 Letters of Recommendation  
 Admissions Interview  
 Extracurricular Activities  
 High School Curriculum  
 Other (Specify) \_\_\_\_\_

2. What do you consider the most important single predictor of success for minority students? Explain.

\_\_\_\_\_

\_\_\_\_\_

3. Do you use a formula to predict success in college, such as a combination of GPA or Test Scores?  
 Yes  No If yes, explain on back or attach prediction Charts or Tables.

4. Is the retention rate at your institution equal for minority and majority students?  Yes  No  
 (If yes, skip to 5)  
 If the retention rate for minority students is lower, which of the following factors contribute to the high attrition rate. (Rank order your choices from 1 = low and 5 = high.)

Too many underprepared students are admitted.  
 Psycho-Social adjustment problems.  
 Insufficient study skills.  
 Cultural adjustment problems.  
 Mismatch of student interest and college offerings.  
 Other (Explain) \_\_\_\_\_  
 Don't know.

5. How many minority students do you have on campus?

\_\_\_\_\_

A. The above represents what percentage of your student body? \_\_\_\_\_%

6. Which of the following terms best describes your institution?

- A. \_\_\_\_\_ Highly Selective (majority of accepted freshman in top 10%)  
 \_\_\_\_\_ Selective (majority of accepted freshmen in top 25%)  
 \_\_\_\_\_ Traditional (majority of accepted freshmen in top 50%)  
 \_\_\_\_\_ Liberal (many accepted freshmen in lower half)  
 \_\_\_\_\_ Open (all high school graduates accepted to limit of capacity)
- B. \_\_\_\_\_ Public  
 \_\_\_\_\_ Private without Religious Affiliation  
 \_\_\_\_\_ Private with Religious Affiliation
- C. \_\_\_\_\_ 2 year Community or Junior College  
 \_\_\_\_\_ 4 year or more College or University