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A COMPARATIVE STUDY OF BLACK FRESHMEN SPECIAL ADMIT STUDENTS AND REGULAR ADMIT STUDENTS AT MICHIGAN STATE UNIVERSITY

By

Orchid L. Brown

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree os

DOCTOR OF PHILOSOPHY

Department of Higher Education and Administration

ABSTRACT

A COMPARATIVE STUDY OF BLACK FRESHMEN SPECIAL ADMIT STUDENTS AND REGULAR ADMIT STUDENTS AT MICHIGAN STATE UNIVERSITY

By

Orchid L. Brown

The primary purpose of this study was to determine if systematic differences existed between the freshmen black students according to several selected variables:

1) awareness of support services, 2) use of support services, 3) need for additional supportive services, and
4) checklist of problems (generalized from the Mooney survey).

An instrument was developed which included variables relating to each basic topic of the study. The study was conducted of Michigan State University black freshmen students. The instrument was given to each student by the author without a particular structured pattern.

A profile analysis was conducted using the repeated measure technique to determine if differences existed between the special admit and regular admit students. The repeated measure was tested for significance

through use of the F-stastic and was found significant at the .05 and .01 level for the checklist of problems.

Percount analysis revealed differences between the special admit and regular admit student for the three other basic topics of this study.

Major findings of this study included:

- 1. There were differences between the regular admit students and special admit students in the use of support services, with the largest percentage above 90 percent for counseling, tutoring, and financial aid.
- 2. There were differences between the regular admit students and special admit students in the need for improved services.
- 3. There were differences between the regular admit and special admit students on specific problems adjusting to college work explained in statement eight and nine.
- 4. Regular admit students use the resident advisor 15 percent more than the special admit student.
- 5. Special admit students indicated better reallocation of resident funds to include black activities by 30 percent more than the regular admit students.
- 6. Regular admit students indicated more legal aid assistance desired was 16 percent more than the special admit student.

- 7. Regular admit students requested a need for more counselors in residence halls than the special admit students by 48 percent.
- 8. Regular admit students percentage value "for too many required courses are not practical" as 16 percent more than the special admit students.
- 9. Regular admit students indicated worry about grades by 22 percent more than the special admit students.
- 10. The variable that stood out most of all was feeling inerior. Regular admit students response was 35 percent, and special admit students response was 64 percent.

As this study progressed recommendations became very apparent. Those recommendations were presented to serve as a guideline that may be used as a broad frame of reference for support services at any university.

In the final section, suggestions for future research were presented.

PLEASE NOTE:

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To:

J.T.L.

W.L.B.

S.E.B.

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To Dr. Eldon R. Nonnamaker for his assistance and understanding throughout the entire period of study.

To Dr. Thomas Gunnings and Dr. Richard Featherstone for their cooperation as members of the doctoral committee.

To my mother, who gave financial and emotional support.

And to my children Walton and Samuel, who were willing to make some significant sacrifices to share in the undertaking, with deepest gratitude, "Thank you."

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CHAPTER I

INTRODUCTION

The higher educational system in the United States, particularly with the development of the land grant and community college concepts, has been considered a major factor in upward mobility. As society has grown increasingly technological, college training has become an imperative in most sections of the economy. Yet, it is obvious that America's minorities have not benefitted from higher education anywhere near the proportion of the population and are therefore excluded from a share of America's affluence. Blacks are the largest minority group in America; they constitute 11.2 percent of the population and 6 percent of the college population (with the majority in "separate" colleges).

In response to a growing pressure that college populations reflect more accurately the many cultural groups that exist in the pluralistic society, college administrators have looked primarily to their admissions policies. Many colleges and universities have appointed special committees to reevaluate their admission criteria,

2

and have developed policies that will insure a more heterogeneous ethnic college population.

The black student has been excluded methodologically from higher education. The poor quality of public schools for blacks for all of their history in America is well documented. However, the extended effect of massive poor education of blacks as recently as a generation ago suggests the usefulness of citing some comparative statistics to illustrate a complex network on which past education experiences were built. The effects of the past create the problem of the present.

As late as 1952 the South was still spending \$132.28 per white pupil and \$90.20 per black pupil. This was a vast improvement over 1940 when the ratio was \$41.90 to \$16.29.

From 1940 to 1960, the percentage of blacks who had attended college more than doubled; from 1950 to 1960 the percentage of blacks who had completed high school rose from 14% to 22%, a faster rate than that of whites; and from 1950 to 1960, the median school years completed by adult blacks increased over a grade 6.9 to 8.2 years. 1

Black students who attend Northern urban schools are equally disadvantaged. In the elementary schools they are often labeled and isolated within their own classroom. In the high school the black student is often diverted from taking academic courses. His counselors guide him to vocational or trade courses and his chances for college are substantially reduced.

leric Lincoln, "The Relevance of Education for Black America," <u>Journal of Negro Education</u>, 38 (Summer, 1969), 1-18.

In recent years many colleges and universities have begun to make an effort to admit more black students. Some blacks have been admitted on a regular basis. Others, who have often been a product of inferior education, have been admitted, even though they may not meet established admissions criteria. There is an increasing need to know more about the values and needs of both groups. This study will attempt to identify and compare the needs of both regular admit and special admit black freshmen.

Statement of the Problem

This investigation is an attempt to create a better understanding of the needs of two groups of freshmen black students. The purpose of this study is to examine the needs of black freshmen students currently enrolled at Michigan State University and to determine what differences exist between regular admit students and special admit students according to several selected variables. These variables are:

- 1. Awareness of supportive services
- 2. Use of supportive services
- 3. Need for additional supportive services
- 4. Check list of problems with respect to:
 - a. sociological relationships
 - b. college adjustment
 - c. home and family
 - d. preparation for future
 - e. recreation
 - f. health and physical development
 - g. finances

The two groups will be compared with respect to the above variables using appropriate statistical techniques to assist in making the comparison.

Importance of the Problem

There is a paucity of published literature on the black college student, and even less on the special admit student, and as Joseph Katz and Harold Korn wrote:

Social scientists have given detailed accounts of almost any imaginable human group: distant primitive tribes, hometown street corner groups, printers' union, prostitutes, suburbia, deviants, but there have been few prolonged and detailed studies of the population right under the social scientists' window: students.²

The scarcity of research data on black students makes it all the more obvious that additional research is needed to understand students' needs. It is quite clear that the higher education of low income, minority group students is a problem. It is complex and little understood. It involves a vast, complex array of sociocultural, economic and educational factors. Minority group students suffer from educational deficiencies, motivational difficulties, financial problems, cultural shocks and attitudinal and value system discrepancies not often encountered by others. The statistics confirm

²Joseph Katz and Harold Korn, "After Listening to Students," Fordham, 2 (July 1968), 3-6.

Paul Akin, "The Effectiveness of a Behavior Oriented Therapy and an Insight Oriented Therapy on the Academic Achievement of Educationally Disadvantaged Students," unpublished Ph.D. dissertation, Michigan State University, 1969, p. 6.

that these problems overwhelm minority students. To counter the special problems which confront the low income, minority group student, universities have begun to respond with special programs involving recruitment and special selection procedures.

The rationale for this study comes from inadequate knowledge and understanding of the contributing factors of certain selected variables which may relate to the black student's academic achievement in the transitional period. Secondly, this study should aid in understanding what services the university should provide to assist the student in achieving academic success.

Definition of Terms

Edgerton's definition of high risk students are those students who lack money, have low standardized test scores, have erratic high school records, or who demonstrate some identifiable but unmeasurable quantity-motivation, creativity, resilience, leadership, or personality, which an admission officer might interpret as a sign of strength offsetting the customary indicators of probable success. The terms "high risk" and "special admit" students will be used interchangeably in this study.

Regular admit are those students who are admitted using normal admission procedure.

John Edgerton, "High Risk: Five Looks," Southern Education Report, 3 (March, 1968), 25-30.

Disadvantaged students refer to individuals who come from low income families, have academic potential, but who have been unable to realize the potential without special assistance because of their economic, cultural or educational background or environment (Michigan State University's presidential commission on admissions).

Support Services are those services designed to assist students in meeting academic, economic, personal, and social needs limited to financial aids, counseling, academic assistance, tutoring.

Minority are those individuals who face certain handicaps, are subject to discrimination, are objects of prejudice from many other people and who, for a variety of reasons, have been inadequately represented in institutions of higher learning.

Organization of the Study

The general plan of the thesis is as follows:

Chapter II is a review of the literature which contains

the related information concerning disadvantaged students

and support services. Chapter III is an account of the

methodology used in collecting and organizing the data

and the statistical techniques employed in analyzing them.

The results of the analysis are reported in Chapter IV.

⁵Presidential Commission on Admissions from the Subcommittee on High Risk Students, Minorities, and Open Admissions, Michigan State University, 1970.

The summary, conclusions, and implications for further study appear in the final chapter.

CHAPTER II

REVIEW OF RELATED LITERATURE

Within the last decade educational researchers and institutions of higher education have taken an increased interest in black students. Before this period, there was little available literature. Review of the literature reveals few studies on the needs of black students and support services.

Higher education in the United States has traditionally been for the elite minority, but flexible enough to admit some students whose academic and economic credentials placed them outside the winners circle; popularity and profitability of intercollegiate athletics have promoted hundreds of colleges and universities to admit these students. Higher education for high risk students—in spite of the precedents which athletics, foreign students and war veterans established—is still largely an unexplored territory for social minorities and the poor. McKendall

¹Edgerton, op. cit., 25-36.

²B. W. McKendall, "College and the Minority Student," <u>Urban West</u> (Jan., 1968), 8-11.

concludes that few colleges have the commitment, flexibility and daring to meet the needs of high risk students. The experiences of the colleges that have attempted new approaches show that students handicapped by discrimination and poverty can be helped by colleges and suggests that, in the presence of seeking and nourishing such talent, the nature of higher education will improve for all students.

In the early 60's, eight public institutions, including Michigan State University, with modest institutional commitment began to make some significant contribution to the education of disadvantaged youngsters. The most outstanding of these were Southern Illinois University, University of Wisconsin and the state universities and colleges of California—the only state in which the entire system of public higher education had resolved to help disadvantaged students. A few universities have made some effort to admit and assist Upward Bound graduates and others handicapped by poor preparation for college. 3

The federal government has also made a commitment toward the education of the disadvantaged. Title IV, Section 408 of the Higher Education Act of 1965, is an outgrowth of the Upward Bound and Talent Search programs funded by the Federal government.

³Ibid., (April), 25.

The Special Services for Disadvantaged Students in Institutions of Higher Education program is entering its second year of operation. The Higher Education Act of 1965, Title IV, Section 408, as amended, authorized:

Remedial and other special services for students with academic potential (a) who are enrolled or accepted for enrollment at the institution which is the beneficiary of the grant . . . and (b) who, by reasons of deprived education, cultural or economic background, or physical handicap, are in need of such services to assist them to initiate, continue, or resume their post secondary education.

Further, the legislation authorized that:

Special services for Disadvantaged Students in Institutions of Higher Education may provide among other services, for:

- (A) counseling, tutorial or other educational services, including special summer programs, to remedy such students' academic deficiencies,
- (B) career guidance, placement, or other student personnel services to encourage, or facilitate such students continuance or re-entrance in higher educational programs, or
- (C) identification, encouragement or counseling of any such students with a view of their undertaking a program of graduate or professional education. 4

Under the 1960 California Master Plan for public higher education some 4 percent of entering and transferring students were admissable by special provision and it was this 4 percent rule that is used for recruitment for Educational Opportunity Program students. Admission

⁴U. S. Department of Health, Education, and Welfare, Special Services for Disadvantaged Students in Institutions of Higher Education Program (Washington, D.C.: U. S. Government Printing Office, 1971), pp. 1-10.

standards were flexible enough to accommodate those who are academically deficient but promising.⁵

A higher education survey by the College Entrance Examination Board in 1970 reports recent experiences of Midwestern colleges in recruiting and enrolling minority Results were based upon responses of a represtudents. sentative group of 129 four-year institutions. Principle findings were: (1) three out of five senior institutions were actively working to enroll minority students. gross number of minority freshmen increased 25 percent from 1968 to 1969 and 30 percent by 1970; (2) recruiting methods regarded as most successful involved minority staff, special programs for minority students, direct contact with schools or minority students; (3) 41 percent of the minority students required full financial support; (4) approximately seven out of ten freshmen returned the next year--the same proportion for all freshmen; (5) many colleges reported marked increase in social involvement, and concern with student affairs and outside interest in affairs of the institution. 6

Hood discusses a survey conducted to determine programs needed for disadvantaged students at the college

⁵Heath G. Lewis, <u>Berkeley's Educational Opportunity</u>
<u>Program</u> (Washington, D.C.: U. S. Office of Education, 1968), pp. 1-11.

Midwest Committee for Higher Education Surveys,

Admission of Minority Students in Midwestern Colleges,

Report M-1 (Evanston, Ill.: College Entrance Examination
Board, 1970), p. 78.

level, programs underway in New York State, and the primary considerations of persons and institutions operating such programs. Of 167 schools contacted, 86 of the 134 that responded had programs at precollege or college levels. Roughly 64 percent of all colleges and universities in New York State operate programs for disadvantaged students, with state-affiliated institutions. Most of the programs are designed to help students find a place in a particular college program and, through guidance, financial aid, and counseling, to maximize the students' chances of college success. 7

The Education Opportunities Program (EOP) at the University of Iowa was established in April 1968 and provide financial support and academic assistance to students from educationally and economically disadvantaged backgrounds. Their supporting services included continuing orientation, counseling assistance and academic and tutorial assistance.

Spaights provides a model instructional support component for an educational opportunity program. In providing for structure in the support component, assessment

Wenford Hood, "Higher Education for the Disadvantaged in New York State: A Summary Report of Programs of Higher Education for the Disadvantaged at Colleges and Universities in New York State" (Albany, N. Y.: Division of Higher Education, 1969), p. 36.

⁸Phillip E. Jones, "Summary Report for Educational Opportunity Program 1968-69, 1969-70 (Washington, D. C.: U. S. Department of Health, Education and Welfare, U. S. Office of Education, 1970), p. 20.

variables held to be imperative of consideration are: past experiences, individual skill levels, environment influences, quality of learning, supervision, cost and availability of instructional materials, available facilities and operational costs. He also emphasizes counseling (academic advising, recruitment and duties of professional advisors).

Berg and Axtell¹⁰ developed three models for community colleges which included remedial courses, counseling and legal aid. Stein's¹¹ study reveals that need and values of black students were similar to those of the college and the ideal student. Knoell's¹² objective was to provide colleges with information about youth who might be recruited into community colleges in five cities

⁹Ernest Spaights, "Support Service for Disadvantaged College Students," Symposium papers read at the American Personnel and Guidance Association Convention, New Orleans, La., March, 1970.

¹⁰ Ernest Berg and Dayton Axtell, Programs for Disadvantaged Students: A One Year Followup, Peralta Junior College District, Eric Clearinghouse for the Junior College (Washington, D. C.: U. S. Office of Education, 1970), p. 97.

¹¹ Ruth Stein, Some Concepts Held by Los Angeles City College, Entrants on Probation Because of Low Scat Scores, RS-66-10, Clearinghouse for Junior College (Los Angeles, California: University of California, 1966), p. 21.

¹² Dorothy M. Knoell, People Who Need College, A report on Students We Have Yet to Serve (Washington, D. C.: American Association of Junior Colleges, 1970), 1970.

and to determine services needed. Gordon 13 stressed (1) similarities (2) unrealistic scheduling of classes (3) inability to communicate and (4) fear of failure.

Trent¹⁴ contributes a detailed and critical analysis of the accomplishments, implications and characteristics of compensatory programs across the country. Burke¹⁵ reports on compensatory programs and cost differentials to provide identification and quantification of educational need variables in providing equal educational opportunity.

Investigation by Austin¹⁶ examines the effects of college environments on the aspirations, achievements and attrition rates of disadvantaged students at the end of the freshman year. The Wilson¹⁷ study reports freshmen responded better to a black counselor than either a female or a male white counselor.

¹³ Charles Gordon, Problems of Culturally Different Youth in College, Personnel and Guidance Association Convention, Las Vegas, Nevada, March 30-April 3, 1969, p. 14.

William Trent, College Compensatory Program for Disadvantaged College Students, Eric Clearinghouse of Higher Education, Report No. R-3 (Washington, D. C.: George Washington University, 1970), p. 70.

¹⁵ Arvid Burke, et al., "Educational Programs for the Culturally Deprived, Need and Cost Differentials," National Educational Finance Project, Special Study No. 3 (Boston: Boston College, Massachusetts Institute of Human Science, 1970), p. 70.

Helen S. Austin <u>Educational Progress of Disadvan-taged Students</u> (Washington, D. C.: Bureau of Social Science Research, Inc., University Research Corporation, 1970), p. 77.

¹⁷ Ralph Wilson, The Effects of Special Tutoring and Counseling on the Academic Success of Negro Freshmen at Southern State College, Magnolia, Ark. (Washington, D. C.: U. S. Office of Education, Department of Health, Education and Welfare, Bureau of Research, 1970), p. 105.

Review of the literature by Stanley¹⁸ indicates that although some authors maintain that scholastic aptitude test scores of disadvantaged students are not clearly associated with college grades (Carlk and Platkin, 1963), most researchers have found the opposite to be true.

Admission to selective colleges should not be greater than explicit provisions for remediation, tutoring, coaching and curriculum reform can bridge.

Planning for disadvantaged youth according to Froe 19 must be characterized by a cycle of planning evaluation and replanning. Specific ways for meeting students needs will be determined often by the particular facilities and resources of an institution of higher education.

among the intellectual elite on other campuses (Harvard consider any student obtaining a composite SAT below 1,000 an extreme risk). At most colleges the disadvantaged are defined in the context of their own student bodies, that is, high risk students are those whose educational and economic background is considered markedly inferior to that of their regular students. Antioch College explains disadvantage to be primarily a financial limitation, not an

¹⁸ Julian C. Stanley, Predicting College Success of Educationally Disadvantaged Students (Baltimore, Md.: Center for the Study of Social Organization of Schools, 1970), p. 45.

¹⁹ Otis Froe, "Educational Planning for Disadvantaged College Youth," <u>Journal of Negro Education</u>, 33 (Summer, 1964), 290-303.

academic deficiency, therefore, the term "high risk" may have a slightly different connotation.

In 1970, Michigan State University began planning the initial phases of a pilot, non-federally funded support program. This rapidly developing network includes tutorial and counseling services and academic assistance. This network should, however, be flexible enough to expand to any area where the student can be helped. A sound program is built around the student, and is evaluated at all intermediate stops to determine weaknesses and alternatives that can be developed at each phase of development.

Summary

Few studies have been reported which explore the relationship between needs of black students and support services. A review of the literature in this chapter describes types of programs initiated, student input analysis, and extension of selection criteria. This study will attempt to examine the needs of the student, the use of supportive services, and attempt to determine if differences exist between the two groups of the freshmen population.

CHAPTER III

DESIGN AND METHODOLOGY

The general design and methodology of the study is described under the following headings: (1) sample selection, (2) instrumentation, and (3) analysis procedure.

Sample Selection

This study was composed of two samples. Each sample represented male and female students selected from a population of black freshmen at Michigan State University.

From a total campus population of 230 regular admit black freshmen students, a random sample of 60 students was chosen. A second list was prepared for high risk students using the same procedure and a sample of 34 was selected. The age of respondents ranged from eighteen to twenty years.

Instrumentation

The instrument is divided into four sections. 1
Part One lists the types of support services offered by

¹A copy of the instrument appears in Appendix A.

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the university and includes counseling, tutorial, financial aid, health, academic advising and the minority resident aide in residence halls. Students were asked to respond to their awareness of these services on this part of the instrument.

Part Two of the instrument requests the students to respond to the type and frequency of support services used.

Part Three lists those support services that students believe are needing improvement or need to be provided.

Part Four is a modified form of the Mooney² check-list broken down into seven subscales. The subscales are as follows: problems relating to (a) sociological relationships, (b) home and family, (c) adjustment to school work, (d) preparation for the future, (e) recreation and use of leisure, (f) health and physical development. Each subscale varies in the number of items appropriate for that scale.

The instrument was scaled according to the following sequence: Part One gives the respondent only one
alternative answer, yes or no, for variables one through
six. Part Two gives the respondent five alternative
answers for variables seven through sixteen. Part Three
included variables 17-27 and requests a one alternative

²Ross L. Mooney, <u>Bureau of Educational Research</u> (Ohio: Ohio State University).

yes or no response. There are 62 items in Part Four and five alternative responses were designated: of no importance = 1; of minor importance = 2; of moderate importance = 3; of major importance = 4; of very great importance = 5. A "5" was assigned to each response which reflects great concern for a need. A "1" represented the extreme of "5."

The first draft of the instrument consisted of 119 variables, the second draft 64 variables and the last draft 88 variables. The second revision was tested in a pilot study using upperclassmen from nine residence halls.

Reliability

The Hoyt method of reliability was used to assess the internal consistency of the instrument which, according to Hoyt, according to Hoyt, calculates the percentage of the obtained variance in the distribution of test scores that may be regarded as true variance. True variance represents "variance not due to the unreliability of the measuring instrument." The Hoyt method of reliability in determining the internal consistency gave a value of .85, and seemed adequate for this study.

Validity

The instrument was reviewed by persons in the area of service, hence, the instrument appears to have content and face validity.

³C. Hoyt, "Rest Reliability Estimated by Analysis of Variance, <u>Psychometrika</u>, 6 (1941), 153-160.

Validity: internal and external. Testing each item to determine if the items belong in the universe being treated is internal validity. External validity deals with the problems or prediction. McNemar includes factors that can affect reliability and/or validity and suggests that statements be concise in order for the respondent to understand the issues presented.

Kerlinger⁶ considers three types of validity:
content, predictive or concurrent and construct validity.
According to Ebel⁷ the second and third may be considered together as criterion-oriented. Here, the investigator is interested in some criterion which he wishes to predict.
Construct validation is involved whenever a test is to be interpreted as a measure of some attribute which is not "operationally defined." Content validity is concerned with the adequacy of sampling of a specified universe of content. Survey instruments are considered to have

⁴L. Guttman, "The Problem of Attitude and Opinion Measurement," in S. A. Stauffer, et al., eds., Measurement and Prediction (New Jersey: Princeton University Press, 1950), pp. 55-58.

⁵Q. McNemar, "Opinion Attitude Methodology," Psychological Bulletin, 43 (July 1946), 294-297.

F. N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1964), p. 429.

⁷Robert Ebel, <u>Measuring Education Achievement</u> (New Jersey: Prentice-Hall, Inc.), p. 380.

content validity. The instrument used in this study fits this category.

Analysis Procedure

A tailored statistical treatment of the data will be applied to this study. This chapter gives the rationale behind the statistical techniques used.

Profile Analysis

The appropriate statistical concept used in this study was the Profile analysis with sub-headings of split-plot factorial design better known as groups by repeated measures design, a two-way analysis of variance. The primary purpose of repeated measures on the same elements is the control that this kind of design provides over individual differences between subjects. Using different subjects under each of the treatment combinations in a factorial experiment has marked advantage of providing statistically independent estimates of treatment effects from all cells in the experiment. 8 This procedure assumes that N elements in a group are a random sample from a specified population of elements. In this type of experiment, treatment effects for subjects are measured relative to the average response made by subjects on all treatments. In this sense, each subject serves as his Responses of individual subjects to the own control.

⁸B. J. Winer, <u>Statistical Principles in Experimental Design</u> (New York: <u>McGraw Hill Company</u>), p. 300.

treatments are measured in terms of deviation about a point which measures the average responsiveness of that individual subject. Hence, variability due to differences in the average responsiveness of the subjects is eliminated from the experimental error.

In an analysis of this type the total variation is divided into two parts: one part is a function of differences between the means of groups; the other part is a function to the pooled variation within the groups. The total variation is the sum of the squared deviations of each observation about the grand mean. This source of variation has kn-l degrees of freedom. That part of the total variation due to differences between the mean of the people or between-people variation is a function of the squared deviations of the mean for the people about the grand mean. 10

This analysis considers the four parts of the instrument as four different measures (items, 1-6), -measure 1, (items, 7-16) -measure 2, (item, 17-32) -measure 3, and (items 33-89) -measure 4. Using the correct operational procedure these data are collapsed into a new set of variables. This new set was necessary to perform the repeated measures analysis. The mean and standard deviations using the Bastat were computed for all four measures.

⁹<u>Ibid</u>., p. 301.

^{10&}lt;sub>Ibid.</sub>, p. 307.

This is considered as standardizing the data. These data are used in transforming variables into a common unit of measurement for each interpretation. In this Z scores $(\mu=0,\ \sigma=1)$ are desired, therefore, aj = $\frac{1}{\sigma j}$ and bj = $^{\mu}j/\sigma j$ provide the appropriate linear transformation. To interpret the significance tests all variables or repeated measures must have a common unit of measurement. Linear transformations are used to convert scores into a common unit measurement which provides an easier method for interpretation.

Profile analysis performs a repeated measures or split-plot factorial analysis of variance with one between groups factor, one repeated measure and variable numbers of subjects per group. Groups and replicated measures are completely crossed while subjects are nested within groups at the same time crossed with repeated measures.

The design of this study uses a total of 94 observations or responses and 88 variables or items. There are 60 subjects in group one and 34 subjects in group two.

The array table appearing below illustrates an example of the repeated measure design. Suppose two persons are selected from each group and five items are as shown below,

I = Item

Z = score for subject in group 1

Y = score for subject in group 2

i = subject number 1

k = item number 1

TABLE 3.1. -- Repeated Measure Description.

		_	ı	¹ 2	13	1 ₄	15
GROUP I	CDOUD	1	^Z 11	^Z 12	^z 13	^Z 14	^Z 15
	I	2	^Z 21	^Z 22	^Z 23	^Z 24	^Z 25
Freshme	n GROUP	1	Y ₁₁	Y ₁₂	^У 13	Y ₁₄	Y ₁₅
II	2	Y ₂₁	Y ₂₂	Y ₂₃	Y ₂₄	Y ₂₅	

Each person is represented on one level of the factor, therefore, freshmen is considered to be nested within that factor. Now, suppose you look inside the diagram and denote the array table constructed; \mathbf{Z}_{12} represents respondent one from group one and his response to item 2; and \mathbf{Y}_{25} represents respondent two from group two and his response to item five.

This chart describes two ways of classifying each piece of data. For each observation or subject there is more than one response recorded for that person. Hence, the response to each variable are the repeated measures.

Results of these data required the use of the percount analysis to determine the frequency and percentage distribution per variable. Chi Square is used to determine the differences per variable, between the regular admit and special admit students.

Summary

University students were chosen for this study. A design based on Profile analysis was selected to determine the needs of students, their awareness and use of support services. From the results of this analysis a comparison was made between the regular admit and high risk student. The purpose of this research design and method of analysis has been to determine whether there are differences between the two groups of freshmen students. The standard deviation and means were used to transform the raw data by linear transformation to new variables using Z-scores to determine the amount of difference and if there was interaction in this study using repeated measures.

CHAPTER IV

ANALYSIS AND INTERPRETATION

This chapter is concerned with (1) the Bastat statistical routine used to compute the means, standard deviations by group, and total raw observations; (2) Profile analysis to assess the relationship between freshmen black regular admit students and high risk students on the four measures associated with support services and problems of concern to these students; (3) Percount analysis to determine the percentage response per observation and (4) Chi square analysis on selected variables.

Means and Standard Deviations

A summary of the means and standard deviations, between two groups using the Bastat routine is presented in Table 4.1. This statistical analysis represents the relationship between the regular admit and high risk students before the linear transformation.

The initial steps from Table 4.1 indicate that on measure-1 (awareness of support services) group 1, representing regular admit black students, had a lower mean

score (7.9) than did high risk admits (12.27). On measure -2 (use of support services) both groups of students had essentially the same mean score.

TABLE 4.1.--Means, Standard Deviation and Variance Between Regular Admit Black Students and Special Admit Students.

Variable	Mean	Standard Deviation	
	Group 1		
Measure -1	7.917	1.15	
Measure -2	19.00	4.13	
Measure -3	17.6	2.66	
Measure -4	163.95	35.10	
	Group 2		
Measure 1	12.27	4.76	
Measure 2	19.39	5.03	
Measure 3	5.36	8.37	
Measure 4	58.57	55.96	

On Measure -3 (need for support services) the regular admit students had a mean score of 17.6 and the high risk students a mean of 5.36, and on measure -4 (problems experienced by black students) the mean score of regular admit students was 163.95 as compared with 58.57 for high risk students.

The above interpretation of means and standard deviation were necessary to conduct the profile analysis.

Analysis of Variance (ANOVA) - Profile Analysis

The primary analysis used in this investigation is Profile analysis. This procedure, a two-way analysis of variance, can be seen in Table 4.2. This procedure was used to analyze the design discussed in Chapter III. The table is interpreted as follows: The four measures were investigated along several dimensions. The column labeled source indicates the questions the design is set to answer. This analysis determines if there are any systematic differences in the response to the items among the four measures.

Column F represents the experimental value of the test statistic for the analysis (ANOVA). Column F (.05) indicates the number that must be exceeded before one can be 95 percent confident that the experimental F happened other than by chance. F (.01) indicates the number that must be exceeded before one can be 99 percent confident that the experimental difference happened other than chance. If these figures exceed the observed figures, there is significance along these measures under investigation. In the analysis of variance, significance is denoted between the groups and the item.

Inspection of Table 4.2 reveals significant differences between the regular and special admit groups. The F ratio between groups according to the experimental evidence calculated a value of 7.913. The adjusted degrees of freedom for reference distribution for the conservative

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TABLE 4.2.--Analysis of Variance Table.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F(exp.)	F(.05)	F(.01)
Between Groups	1	1266.3	1266.3	7.913	3.92	6.85
Subjects w-g	92	14722.7	160.0			
Items	3	903225.83	301075.27	1859.43		
Groups by Items	3	3780.42	1260.	7.783		
Groups x Items Within Groups	276	44689.35	161.			
Total	375	967864.18				

is (1,92) and estimated is (1,92) therefore, according to Winer¹ the F distribution is 3.92. The table indicates correspondly that groups by repeated measures from experimental measurement calculated a value of 7.783 for the F ratio with (1,92) degrees of freedom. This again indicates significant differences between groups.

The last phase of Profile analysis was to determine if an interaction effect existed since the responses were classified along group and item dimensions. Table 4.3 indicates significant difference between the mean and standard deviation for measure -4. Since interaction was observed in this measure a Percount statistical analysis was conducted.

Percount Analysis

The next sequential step used was percount to analyze measure -4. The analysis determined the percent response, mean and standard deviation for the total observations and determined the percent response per group from selected variables. Variables were selected from each subscale on the basis of the twelfth and higher percentage response on the scale "5" which denotes of very great importance (most concern) and "1" denotes of no importance (least concern). See Tables 4.5 and 4.6.

¹B. J. Winer, <u>Statistical Principles in Experimental Design</u> (New York: McGraw Hill Company, 1964).

TABLE 4.3.--Mean and Standard Deviations for Four Measures, (Profile Analysis).

Group 2	Mean	Standard Deviation	Group 1	Mean	Standard Deviation
Ml	.270	.340	Ml	.268	0.389
M2	4.045	.111	M2	4.045	0.121
M3	0.013	1.06	мз	0.014	1.005
M4	101.958	22.175	M4	111.208	27.022

TABLE 4.4.--Problems of Greatest Concern.

		Gp 1%	Gp 2%	Total %
	Problems Relating to Soc	ial Situ	ations	
30	Too many cliques on campus	47	18	36.17
44	Wanting to change to another college	17	4	23.40
29	Lack black cultural func- tions (programs)	25	29	26.60
	Problems Relating to Adjustme	ent to S	chool Wo	rk
5 7	Assignments are too long	25	12	27.34
61	Too many required courses are not practical	40	26	35.11
63	Preparation in high school is inadequate for college courses	23	29	31.91
64	Too much emphasis placed on grades	48	21	38.30
65	Too easily discouraged	20	18	27.66
67	Worrying about grades	33	11	25.53
	Problems Relating to Recreation	n and Us	e of Lei	sure
75	Recreation is too expensive	33	11	25.53
	Problems Relating to	Financ	es	
84	Have too little money for social expenses	33	21	28.72

TABLE 4.5.--Problems of Least Concern.

		Gp 1%	Gp 2%	Total %
	Relating to School	Situatio	ns	
32	Age relationship	82	67	76.60
35	Feeling Inferior	35	62	46
	Relating to Home	and Famil	У	
49	Parents do not recognize the importance of college education	70	65	68.00
51	Heavy home responsibilities	53	41	49
53	Parent's drinking	65	66	69.0
54	Wishing I had a different family background	53	50	52
50	Parents resent changes in attitude toward religion, politics and career	43	56	48
	Preparation for t	he Future		
70	Plans for the future are made by parents	58	61	59
	Health and Physical	Developm	ent	
80	Unable to determine when to seek medical advice	57	56	71
83	Drug Problem	71	71	.56

Items of Least and Most Concern for Combined Groups

Measure -4 has seven subscales as outlined in Chapter III. The problems of most concern by both groups in problems relating to social situations are too many cliques on the campus (36%) and a lack of black cultural functions (26%). Least concern as evaluated is age relationships and thoughts of suicide. Problems under adjustment to school work indicates a high percentage of agreement that assignments are too long, too much emphasis is placed on grades, preparation in high school inadequate for college courses (31%), too many required courses are not practical (35%), and worrying about grades (25%). Evidence reveals that the other items were rated about evenly on the scale.

Data resulting from plans for the future seem to indicate an even percentage distribution with no response being relatively high. Both seem to agree that plans for the future by parents is no problem for the two groups.

In the area of recreation and leisure the problems of most concern are not enough time for recreation (24%) and recreation is too expensive (25%). The other variables have an approximately even spread. Unable to determine when to seek medical advice and a drug problem are of least concern under health and physical development. Having too little money for social expenses is of great concern for the two groups.

Items of Least and Most Concern for Differences Between Groups

The same variables by groups indicate the following responses: lack black cultural programs, as 4 percent higher for group 2; wanting to change to other college, 13 percent higher for group 1; too many required courses, 14 percent higher for group 1; inadequate preparation for college, 6 percent higher for group 1; too much emphasis placed on grades, 27 percent higher for group 1; too easily discouraged, 2 percent higher for group 1; worrying about grades, 22 percent higher for group 1; recreation too expensive, 22 percent higher for group 1; too little money for social expenses, 12 percent higher for group 1; too many cliques on campus, 25 percent higher for group 1.

Responses to items of least concern: difficulty making new friends, 4 percent higher for group 1; have too few intimate friends, 2 percent higher for group 1; age relationship, 15 percent higher for group 1; unskilled in conversation, 9 percent higher for group 2; being made fun of, 2 percent higher for group 2; feeling inferior, 27 percent higher for group 2; thoughts of suicide, 9 percent higher for group 2; do not know how to develop a philosophy of life, 11 percent higher for group 2; parents do not realize the importance of college education, 15 percent higher for group 2; parents resent changes in attitude toward religion, politics, careers, 13 percent higher

for group 2; heavy home responsibilities, 12 percent higher for group 1; parents drinking, 12 percent higher for group 2; wishing I had a different family background, 3 percent higher for group 1; plans for the future are made by parents, 3 percent higher for group 1; plans for the future are made by parents, 3 percent higher for group 2; drug problem, 1 percent higher for group 1.

Chi Square

Chi square was the last step used in the analysis to evaluate those variables of least concern and of greatest concern. Although percount analysis revealed variable 35, feeling inferior, had the highest percentage difference for variables of least concern, chi square indicated a value of .315 with four degrees of freedom and therefore is not significant at the .01 and .05 level. Variable 32, is concerned with age relationships has a chi square value of .047 and is significant at the .05 level.

The two variables of greatest concern with high percentage response have low chi square values, and are not significant at the .05 and .01 level. These two variables: too much emphasis is placed on grades have a chi square value of .456 and too many cliques on campus, has a chi square of .520. Variables 61, too many required courses are not practical, has a chi square of .038 and 67, worrying about grades, has a chi square of .015.

Experimental evidence indicate no significance at the .05 level for measure 1 and 2 and is represented in Tables 4.6, 4.7 and 4.8.

Problems of Least Concern that Stand Out Above 12%

Subscale	Variable	<u>Gpl</u>	<u>Gpl</u>	<u>x</u> 2
2	53	65	76	.186
2	51	53	41	.631
2	50	43	56	.155
1	37	33	44	.132
1	35	35	62	.315
1	32	82	67	.047
	Problems of Greatest	Concern	that Stand Ou	<u>t</u>
3	57	25	12	.253
3	61	40	26	.038
3	64	48	21	.456
3	67	33	11	.015
5	7 5	33	11	.399
7	84	33	21	.2786
1	30	47	18	.520

Tables 4.6, 4.7 and 4.8 are the responses in determining student use of support services, type of services used and need for additional or improvement of available services. Experimental evidence using chi square do not reveal any appreciable significance that needs investigation. Interpreting these data on a percentage basis indicate in Table 4.7 service needed or improved. Positive responses above 60 percent are considered and they are the following: needing more advice during orientation, 82

TABLE 4.6. -- Awareness of Support Services.

	Cell	% Total Yes	Gpl Yes	Gp2 Yes	
1.	Counseling	81	78	85	
2.	Tutorial	75	7 3	91	
3.	Financial Aid	87	92	94	
4.	Health Service	88	91	82	
5.	Ombudsman	31	30	30	
6.	Equal Opportunity Office	37	43	26	

percent for group 2 and 76 percent for group 1; need more black trained staff and supervisory personnel in counseling, group 2, 82 percent, group 1, 77 percent; each resident hall should provide more black magazines, group 1, 71 percent, group 2, 68 percent. The most significant variable is need more counselors in residence halls, 77 percent for group 1 and 29 percent for group 2.

Table 4.6, questions the awareness of support services. Awareness of: counseling (union), group 1, 78
percent, group 2, 85 percent; tutorial, group 1, 73 percent, group 2, 91 percent; financial aid, group 1, 92
percent, group 2, 14 percent; health services, group 1,
91 percent and group 2, 82 percent. Percentages for ombudsman, group 1, 30 percent, group 2, 30 percent; and equal opportunity, 43 percent and 26 percent respectively. Both groups use counseling 81 percent, tutorial 75 percent, financial aid 87 percent, health service 88 percent, ombudsman 31 percent, and the equal opportunity office, 36

TABLE 4.7.--Services Needed or Improved.

Cell	Total % Yes	Gpl Yes	Gp2 Yes
Better black student aids needed	. 53	46	47
Periodic art exhibits of minority groups on display in dorms	42	58	55
Each dorm should provide more black magazines	29	71	68
More advice during orientation (workshop before registration)	21	76	83
Need more counselors in residence halls	63	7 7	29
Need more black trained staff and supervisory personnel in counseling	21	7 7	82
Better reallocation of dormi- tory funds to include black activities	24	43	73
More supportive services that would advise and help coordinate assistance on budgeting	60	53	35
More legal aid assistance desired	46	70	56
More resident halls should have black cultural room	30	70	71

Total--94 Subjects.

TABLE 4.8.--Which Support Service Have You Used? (Percents).

	Counseling			Tu	itori	al		uden Aide	-	Resident Assistant		
	Т	Gl	G2	T	Gl	G2	T	Gl	Gl	Т	Gl	G2
Never use this service	62	70	55	64	60	70	36	40	29	39	33	50
Use this service several times per year	9.57	8	11	14	13	14	29	33	23	13	10	21
Use this service 1-3 times por quarter	21	13	26	11	11	8	18	15	23	30	36	21
Use this service 4-9 times per quarter	4	3	5	3	15		4	3	5	5	6	3
Use this service each week				9	10	5	11	8	17	10	13	6

Head Resident Advisor			adem visc	-	Financial Aid		Health Services			Ombudsman			Office of Equal Opportunity				
Т	Gl	G2	Т	Gl	G2	Т	G1	G2	Т	Gl	G2	Т	G1	G2	Т	Gl	G2
58	58	59	26	25	29	10	13	6	45	43	50	93	96	88	89	96	94
18	18	18	21	2 5	14	10	15	3	23	26	18	3	2	5	2	1	3
19	18	21	44	40	52	71	63	85	28	30	26	3	12	5	8	1	3
2	13	3	7	10	2	7	8	6	1		2						
2	1								1		2						

percent. According to Table 4.6 most students are aware of the services rendered as listed on the instrument but the ombudsman and the office of equal opportunity rating were low. This represents one comparison between Table 4.6 and 4.8.

Percentages above 65 percent as described in Table 4.8 titled as "which services have you used" indicates each support service as itemized on the instrument.

Financial aids is the only service well represented. The next service is the academic advisor. Of the combined groups 44 percent use this service per quarter, groups 1 and 2 use this service 40 percent and 50 percent respectively. Evidence indicates that few students use these services. Few students were aware of the services rendered by the ombudsman and the office of equal opportunity.

Analysis of these data reveal that students do not use the counseling service, head resident advisor and academic advisor each week. The analysis also indicates two areas with a percentage above 88 percent under the subheading, never use this service, for the ombudsman and the office of equal opportunity. Tutoring ranked from 60-70 percent, student aide ranked from 29-40 percent, resident assistant ranked from 33-50 percent, head resident advisor ranked from 58-59 percent, academic advisor ranked from 25-29 percent, health services ranked from 43-50 percent.

Two groups were to be compared in the investigation and the comparisons are as follows:

Tutoring and counseling in Table 4.6 can be compared with Table 4.8.

- l. a) Percount analysis indicated that the regular admit student was less aware of support services than the special admit student.

 Table 4.6 indicates an awareness of 78 percent for counseling the regular admit and 85 percent for the special admit. The special admit student used counseling 8 percent more than the regular admit.
 - b) Regular admit students were less aware of the tutoring service with a value of 73 percent and the special admit had a value of 85 percent. The regular admit student used 3 percent more service than the special admit.

Table 4.8 "support services used" indicates the services used 1-3 times per quarter (the subheading appeared to be more applicable according to the analysis) gave the corresponding values:

- 2. a) Special admit students use student aid 8 percent more than the regular admit student.
 - b) Regular admit students use the resident advisor 15 percent more than the special admit student.

- c) Regular admit students use the head resident advisor 3 percent more than the special admit student.
- d) Special admit students use the academic advisor 12 percent more than the regular admit student.
- 3. a) Table 4.7 indicates regular admit students requested a need for more counselors in residence halls than the special admit students by 48 percent.
 - b) Regular admit students indicated more black magazines needed by 3 percent more than the special admit students.
 - c) Special admit students indicated more advice during orientation (workshop before registration) by 8 percent more than the regular admit students.
 - d) Special admit students indicated a need for more black trained staff and supervisory personnel in counseling by 5 percent more than the regular admit students.
 - e) Special admit students indicated better reallocation of dormitory funds to include black activities by 30 percent more than the regular admit students.

- f) Regular admit students indicated more legal aid assistance desired by 16 percent more than the special admit student.
- g) Regular admit and special admit students agreed upon the variable more resident halls should have black cultural room from 70, 71 percent respectively.

There were two variables for the combined groups with percentages above 60 percent. These are:

- a) Need more counselors in residence halls,63 percent.
- b) More supportive services that would advise and help corrdinate assistance on budgeting 60 percent.

Summary

A Profile analysis using repeated measures was used to determine if there were differences between regular admit and high risk students in use of support services, need for additional or improvement of services and needs of freshmen black students.

According to the statistical analysis by analysis of variance there appears to be significant effects associated with items, groups, and items by group interaction.

M-4 was analyzed and 13 variables point out an interaction effect that there are differences between the two groups. Chi square indicates differences between the

two groups on two variables of greatest concern: worrying about grades and too many required courses are not
practical.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The major purpose of this investigation was to determine whether there were systematic differences between two groups of black freshmen students across four measures. The two groups of students were regular admit and special admit (high risk students).

Need for the Study

Educational researchers and institutions of higher education are taking an increased interest in lower middle class black students. Special services are provided at many institutions and these services include counseling, tutorial or other educational services for students with academic potential who are enrolled because of deprived education, cultural or economic background. These students are to be guided and encouraged to continue the higher educational programs funded by the federal government and institutions of higher education.

There is a paucity of literature but when a study can be made and standards developed choice or persistence of effort is influenced using the reference or standard.

Procedure of the Study

The instrument was based on gathering certain pertinent information which consisted of 88 variables. These variables were divided into four measures: (1) awareness of support services, (2) use of support services, (3) services that should be improved or provided, and (4) problems of concern. Twenty-seven of these items denoted support services and complementary services. Seventeen variables were based on a yes, no answer, ten were based on the five alternative responses. Part IV was based on the Likert scale for measuring problems of concern which included 62 variables.

The Hoyt method of reliability was the statistical procedure used to determine the internal consistency of the scale, by estimating the discrepancy in the experimental variance by using the analysis of variance. This method computed an internal consistency of .85 which seemed adequate for continuing the study.

The second statistical technique employed Bastat, computed the mean and standard deviation for the two groups separately and together (total). This step was necessary so that the Z-score equation could be used as constants in the linear transformation by collapsing the raw data into a new set of variables.

The third statistical technique was the profile analysis using analysis of variance. Experimental evidence from the analysis revealed differences between the two groups. This evidence, as indicated in Chapter IV, revealed interaction between groups and groups by repeated measure (item, variable). The repeated measure was tested for significance through use of the F-statistic. Through this statistical analysis, the F ratio was found to be significant at the .05 and .01 level.

Limitations

Limitations of this thesis should be noted. The list of needs, problems and support services should not be considered exhaustive or necessarily mutually exclusive. Secondly, the use, need for additional services and perceived problems can be interpreted only at this point in time for those students who participated in this study. This study is an attempt to provide information pertaining to the early recognition of student needs. Those needs which might keep them from developing their full academic potential can be given greatest attention and help the student understand himself as a person.

The experimental evidence revealed that the high risk and regular admit students are homogeneous in their reaction on the awareness of various support services, use of support services and improvement of these service. This is obvious by looking at Table 4.1 which lists the

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mean and standard deviation and by reviewing subjects' responses through each cell by determining the percentage response. The homogeneity of response, its effect on the study, and other related factors must be considered as a contributing effect on the study and a limitation of the instrument. This homogeneity limits the variability of response, which decreases the possibility of significance through a statistical analysis. Oftentimes, students answer statements to the reverse of their true feelings, therefore, they deliberately falsify the responses of the survey; this, too, may bias the study. The possibility of unreliable results is to be considered a weakness in the instrument used in this study.

Another limitation could be the number of variables in health and physical development, and finances. The number of variables were less in comparison to the other scales in measure -4. If the instrument had included other areas of concern, more information might have been provided.

Conclusions

- 1. There were differences between the regular admit students and special admit students in the use of support services, with the largest percentage above 90 percent for counseling, tutoring, financial aid.
- 2. There were differences between the regular admit students and special admit students in the need for improved services.

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- 3. There were differences between the regular admit and special admit students on specific problems adjusting to college work explained in statement eight and nine.
- 4. Regular admit students use the resident advisor 15 percent more than the special admit students.
- 5. Special admit students indicated better reallocation of resident funds to include black activities by 30 percent more than the regular admit students.
- 6. Regular admit students indicated more legal aid assistance desired was 16 percent more than the special admit student.
- 7. Regular admit students requested a need for more counselors in residence halls than the special admit students by 48 percent.
- 8. Regular admit students percentage value for "too many required courses are not practical" was 16 percent more than the special admit students.
- 9. Regular admit students indicated worry about grades by 22 percent more than the special admit students.
- 10. The variable that stood out most of all was feeling inferior. Regular admit students response was 35 percent, and special admit students response was 64 percent.
- 11. Black students have not been informed about the functions of the Office of Equal Opportunity programs, nor the Ombudsman, with percentages lower than 43 percent for special admit and regular admit students.

Discussion

Regular admit students were aware of support services but did not use these services. This may be because the regular admit student required a shorter period of adjustment and is better able to realize the requirements of the university, therefore, the interest in seeking support services was less. The period for adjustment may be longer for the special admit student.

Regular admit students differed in the need for improved services. The regular admit students probably used the resident advisor more because these persons were better informed and were aware of the recent changes in rules and regulations, and the university's interpretation of the regulations. The special admit students would seek advice from student aides and some of these student aides were more understanding and more empathetic.

Special admit students rated feeling inferior as very low; this feeling is very high for a variable of least concern. This researcher questions this variable even though chi square was used and was not considered as happening other than by chance.

Special admit students depend upon student aides more than the regular admit students. The student aides and resident assistants should better inform the special admit students on the use of the reallocation of resident funds. To make sure students are aware of the prorated resident funds, resident assistants and student aides should

send by direct mail or post the itemized budget reports per resident hall.

Regular admit students indicated worry about grades more than the special admit student. These students seem to be aware of the necessity for high grade point averages to increase the possibility of entering the senior university and college graduation.

Regular admit students indicated, as did most students, a need for an evaluation of college courses; the college courses are not relevant to their goals in the world of work. From previous statements it would seem that special admit students would see a need for more resident counselors, therefore, the regular admit student has adjusted better and need more empathy in the resident halls. The special admit was more interested in the reallocation of funds and at this point in time both seem to be searching in the same direction, for more and better advice.

Regular admit students realize they are given more responsibility and are expected to maintain the boundaries agreed upon. If they do not understand the regulations other means, such as legal aid, must be used to interpret the boundaries.

Recommendations

This study compared two groups of black freshmen students at Michigan State University. The data attained

in this study and the information acquired from reviewing the literature suggest the following areas of importance and suggested implementation of an organizational structure for each area.

Each area considered as support services should interact and overlap in a cohesive pattern so that students will develop confidence and utilize the available resources.

Financial Aid

Special admit students' needs are different from the average student population. Financial assistance should be evaluated more often for minority students than the average college population. The data indicate that special admit students use financial aid 2 percent more than the regular student. Parents cannot finance the college tuition rates and students unable to pay their bill need constant financial evaluation. This procedure should include financial counselors who can direct these students into developing a budgeting system or to aid in determining priorities. These students have had limited experience in determining priorities and spending money.

Rosen points out that Negro life situations do not encourage the belief that one can manipulate his environment or the conviction that one can improve his

Bernard Rosen, "Race, Ethnic and Achievement,"

American Sociological Review, Volume 24, No. 2 (February, 1959).

condition by hard work and long term planning. Many young college students have had only a minimum of exposure in developing the concept of self internalization and responsibility to oneself as one of the concepts but not a sufficient condition for successful mastery of the college situation.

Academic Advising

Twelve percent of the special admit students use academic advisors more than the regular admit students. This area should be evaluated to determine specific changes required to meet the needs of its students. Thirty percent of regular admit and 26 percent special students, respectively, indicated preparation in high school inadequate for college courses. This does not mean the students should be boxed in taking remedial courses but the traditional procedure cannot be considered. College can be extended into a five-year program depending on the successful coordination of university requirements. The student must understand the objectives of the instructor, therefore, the instructor must help these students understand the nature of the work expected.

Counseling and Tutoring

Minority students need counselors: (1) that have empathy and understand their prior experiences, (2) whom they can relate and have confidence, (3) whom they can

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trust, and the transfer of knowledge or information and assistance would be accepted without doubt.

The special counseling and tutoring component should not be considered as boxing the student in. Students have other problems besides academic adjustment and should be able to utilize all areas of the major counseling center.

Black students have not been informed about the functions of the Office of Equal Opportunity Programs nor the Ombudsman and were not aware of this service. The orientation committee should be initiated to include an explanation of these services, and the EOP should meet the students in each residence to explain their services.

Regular admit students supported more legal aid assistance. Most students do not use the services of the black student aide. Students do not attend scheduled meetings which could supply more informal information, therefore, the student aide must become more functional.

Student aides should inform the special admit students on use of the allocation of funds when they are not aware of the prorated distribution.

Implications for Further Research

Each section of support services should maintain constant evaluation. Comparisons should be made between each section and remain flexible to provide for constant change.

Further research is needed on other problem areas, to modify conditions responsible for the existence of the problems in this study. Similar investigations should be replicated in other settings, i.e., rural, urban, ghetto colleges, south, cross sectional settings, contrasting similarities and differences, on other levels of the college population.

Specifics and generalizations should be developed from powerful evaluation techniques through various studies and yet should be flexible enough to work in any given situation.

The results of this study suggest direction for future research on the underlying problems with which students find themselves perplexed.

APPENDIX A

SURVEY OF THE PROBLEMS OF COLLEGE STUDENTS

This survey is being conducted in 3 parts. Part one is an effort to determine the types of support services used. Part two requests information on additional support services needed. Part three is an effort to determine the problems which cause worry or concern.

F		
		Major
		College
		Thank you for your patience and understanding.
Plea	ise a	answer each question
I.	Do y	you know where to go to obtain the lowing support services?
	1.	Counseling Centeryesno
	2.	Tutorial Serviceyesno
	3.	Financial Aidyesno
	4.	Health Servicesyesno
	5.	Ombudsmanyesno
	6.	Office of Equal Opportunityyesno

11.		eck one answer to each question)
	7.	Counseling Services (Union) a) never use this serviceb) use this service several times per yearc) use this service 1-3 times per quarterd) use this service 4-9 times per quartere) use this service each week
	8.	Tutorial Service a) never use this serviceb) use this service several times per yearc) use this service 1-3 times per quarterd) use this service 4-9 times per quartere) use this service each week
	9.	Student Aidea) never use this service _b) use this service several times per year _c) use this service 1-3 times per quarter _d) use this service 4-9 times per quarter _e) use this service each week
	10.	Resident Assistant a) never use this serviceb) use this service several times per yearc) use this service 1-3 times per quarterd) use this service 4-9 times per quartere) use this service each week
	11.	Head Resident Advisor a) never use this serviceb) use this service several times per yearc) use this service 1-3 times per quarterd) use this service 4-9 times per quartere) use this service each week
	12.	Academic Advisor a) never use this serviceb) use this service several times per yearc) use this service 1-3 times per quarterd) use this service 4-9 times per quartere) use this service each week
	13.	Financial Aid a) do not have need for this serviceb) applied for financial aid, but did not receive aidc) receiving financial aid d) other sources

14.	a) never use this serviceb) use this service several times per yearc) use this service 1-3 times per quarterd) use this service 4-9 times per quartere) use this service each week
15.	Ombudsmana) never use this serviceb) have used this service oncec) have used this service several times
16.	Office of Equal Opportunity a) never use this serviceb) I applied for help, but my request was rejectedc) I have received assistance from this service
уоч	ease indicate which of the following services u would like to see improved. Check as many atements as you wish.
17.	Better black student aides needed
18.	Periodic art exhibits of minority groups on display in dorms
19.	Each dorm should provide more black magazines
20.	<pre>More advice during orientation (workshop before registration)</pre>
21.	Need more role model counselors in residence halls
22.	Need more black trained staff and supervisory personnel in counseling
23.	Better reallocation of dormitory funds to include black activities
24.	More Supportive services that would advise and help coordinate assistance on budgeting
25.	More legal aid assistance desired
26.	More resident halls should have black cultural room
27.	Better supportive counseling to encourage decision making

IV.		se rank the following needs in an ord crucial to you, as described below	ler	tha	ti	s	
	NI	l of no importance					
	LI	2 of minor importance					
	SI	3 of moderate importance					
	GI	4 of major importance					
	VGI	5 of very great importance					
		Problems Relating to Social Situati	ons	<u>.</u>			
	28.	Difficulty in making new friends in college group	1	2	3	4	<u>5</u>
	29.	Lack black cultural functions (programs	1_	2	3	4	5
	30.	There are too many cliques on the campus	1_	2	3	4	5
	31.	Have too few intimate friends	1	2	3	4	5
	32.	Younger () or older () than most persons in my college class (check appropriate word)	1_	2	3_	4	5
	33.	Unskilled in conversation	1	2	3	4	_5
	34.	Being made fun of	1_	2	3	4	5
	35.	Feeling inferior	1	2	3	4	_5
	36.	Thoughts of suicide	1_	2	3	4	5
	37.	Do not know how to develop a philosophy of life	1_	2	3	4	<u>5</u>
	38.	Dislike talking about personal affairs	1	2	3	4	_5
	39.	Unwilling to face a serious problem now	1	2	3	4	5
	40.	Having no one to tell my trouble to	1	2	3	4	5
	41.	Sometimes wishing I'd never decided to enter college	1	2	3	4	5

42.	Vocabulary too limited	1	2	3	4	5			
43.	Wanting to leave college	1_	2	3	4	5			
44.	Wanting to change to another college	1_	2	3	4	5			
45.	Do not have enough time for social functions	1	2	_3	4	5			
46.	Do not have enough time to meditate	1	2	3	4	5			
47.	Unable to decide upon social organization to join	1	2	3	4	5			
48.	Difficulty in establishing satisfactory relations with opposite sex	1_	2	3	4	_5			
	Problems Relating to Home and Fami	<u>ly</u>							
49.	Parents do not realize the importance of college education	1	2	3	4	5			
50.	Parents resent changes in attitude toward religion, politics, and career	1	2	3	4	5			
51.	Heavy home responsibilities	1_	2	3	4	5			
52.	Parents expecting too much of me	1	2	3	4	5			
53.	Parent's drinking	1	2	3	4	5			
54.	Wishing I had a different family background	1	2	3	4	<u>5</u>			
Problems Relating to Adjustment to School Work									
55.	Inability to concentrate	1_	2	3	4	_5			
56.	Do not get enough personal attention from faculty	1	2	3	4	5			
5 7.	Assignments are too long	1	2	3	4	5			
58.	Do not have a good place to study	1		3	4	5			
59.	Weak in logical reasoning	1	2	3	4	5			

60.	Not smart enough in scholastic ways	1_	2	3	4	<u>5</u>	
61.	Too many required courses are not practical	1_	2	3	4	5	
62.	Do not know how to study	1_	2	3	4	5	
63.	Preparation in high school is inadequate for college courses	1	2	3	4	5	
64.	Too much emphasis is placed on grades	1	2	3	4	5	
65.	Too easily discouraged	1_	2	3	4	5	
66.	Do not like to study	1_	2	3	4	_5	
67.	Worrying about grades	1_	2	3	4	5	
68.	Lacking self confidence	1	2	3	4	5	
69.	Feel "lost" in a lecture type classroom procedure	1_	2	3	4	_5	
Pr	oblems Relating to Preparation for the	e F	utu	re			
70.	Plans for the future are made by parents	1_	2_	3	4	_5	
71.	Do not know how to select a vocation at which I can succeed	1_	2	3	4	5	
73.	Fear that work in college will not be practical in the future	1_	2	3	4	5	
74.	Unable to obtain proper counseling on vocational plans	1	2	3	4	5	
Problems Relating to Recreation and Use of Leisure							
75.	Recreation is too expensive	1_	2	3	4	<u>5</u>	
76.	No organized recreation is available	1_	2	3_	4	5	
77.	Not enough time for recreation	1	2	3	4	5	
75.	A "date" is necessary for too many activities	ז	2	3	4	5	

79.	Spend too much time in recreation because of inability to study	1	2	3	4	5
Probl	ems Relating to Health and Physical D	eve	lop	men	t	
80.	Unable to determine when to seek medical advice	1	2	3	_4_	5
81.	Not enough suitable clothes to wear	1_	2	3	4	5
82.	Having a drinking problem	1	2	3	4	5
83.	Drug problem	1_	2	3	4	_5
84.	Problems Relating to Finances Have too little money for social expenses	7	2	3	4	E
85.	-	<u>+</u>	2	3	_ 	<u>5</u> <u>5</u>
86.	Difficulty in determining how much to spend for clothes	1_	_22	3	4	<u>5</u>
87.	Want to take more financial responsibilities	1	2	3	4	_5
88.	Whether or not to get a part-time job	1	2	3	4	5

BIBLIOGRAPHY

BIBLIOGRAPHY

- Akin, Paul. "The Effectiveness of a Behavior Oriented Therapy and an INSIGHT Oriented Therapy on the Academic Achievement of Educationally Disadvantaged Students." Unpublished Ph.D. dissertation, Michigan State University, 1969.
- Austin, Helen. Educational Progress of Disadvantaged
 Students. Washington, D. C.: Bureau of Social
 Science Research, Inc., University Research
 Corporation, 1970.
- Berg, Ernest and Axtell, Dayton. Programs for Disadvantaged Students: A One Year Followup. Per Alta Junior College District, Eric Clearinghouse for the Junior College. Washington, D. C.: U. S. Office of Education, 1970.
- Burke, Arvid, et al. Educational Programs for the Culturally Deprived Need and Cost Differentials.

 National Educational Finance Project. Special Study No. 3. Boston: Boston College, Massachusetts Institute of Human Science, 1970.
- Ebel, Robert. Measuring Education Achievement. New Jersey: Princeton Hall, Inc.
- Edgerton, John. "High Risk: Five Looks." Southern Education Report. 3 (March) 1968.
- Guttman, L. "The Problem of Attitude and Opinion Measurement." In S. A. Stauffer, et al. (eds.), Measurement and Prediction. New Jersey: Princeton University Press, 1950.
- Froe, Otis. "Educational Planning for Disadvantaged College Youth." <u>Journal of Negro Education</u>. 33 (Summer), 1964.
- Gordon, Charles. Problems of Culturally Different Youth in College. Personnel and Guidance Association Convention. Las Vegas, Nevada, March 30, 1969.

- Hood, Wenford. "Higher Education for the Disadvantaged in New York State: A Summary Report of Programs of Higher Education for the Disadvantaged at Colleges and Universities in New York State."
 Albany, N. Y.: Division of Higher Education, 1969.
- Hoyt, C. "Test Reliability Estimated by Analysis of Variance. Psychometrika. 6 (1941), 153-160.
- Jones, Phillip E. Summary Report for Educational Opportunity Program 1968-69, 1969-70. Washington, D. C.: U. S. Department of Health, Education and Welfare, U. S. Office of Education, 1970.
- Katz, Joseph and Korn, Harold. "After Listening to Students." Fordham. 2 (July 1968), 3-6.
- Knoell, Dorothy. "People Who Need College." A Report on Students WE HAVE YET TO SERVE. Washington, D. C.: American Association of Junior Colleges, 1970.
- Kerlinger, F. N. Foundations of Behavioral Research.

 New York: Holt, Rinehart and Winston, Inc., 1964.
- Lewis, Heath G. Berkeley's Educational Opportunity Program. Washington, D. C.: U. S. Office of Education, 1968.
- Lincoln, Eric. "The Relevance of Education for Black American." <u>Journal of Negro Education</u>. 38 (Summer, 1969).
- McKendall. "College and the Minority Student." <u>Urban</u>
 West (January, 1968).
- McNemar, Q. "Opinion Attitude Methodology." <u>Psychological</u> <u>Bulletin</u>. 43 (July 1946).
- Rosen, Bernard. "Race, Ethnic and Achievement." American Sociological Review. Vol. 24, No. 2 (Feb. 1959).
- Spaights, Ernest. "Support Service for Disadvantaged College Students." Symposium papers read at the American Personnel and Guidance Association Convention. New Orleans, La., March, 1970.
- Stein, Ruth. "Some Concepts Held by Los Angeles City College." Entrants on Probation Because of Low Scat Scores, Rs-60-10. Clearinghouse for Junior College, Los Angeles, California: University of California, 1966.

- Stanley, Julian C. Predicting College Success of Educationally Disadvantaged Students. Baltimore, Md.: Center for the Study of Social Organization of Schools, 1970.
- Trent, William. "College Compensatory Program for Disadvantaged College Students." Eric Clearinghouse of Higher Education, Report No. 3. Washington, D. C.: George Washington University, 1970.
- Wilson, Ralph. The Effects of Special Tutoring and Counseling on the Academic Success of Negro Freshmen at Southern State College, Magnolia, Ark. Washington, D. C.: U. S. Office of Education, Department of Health, Education and Welfare, Bureau of Research, 1970.
- Winer, B. J. Statistical Principles in Experimental Design. New York: McGraw Hill Company, 1964.
- U. S. Department of Health, Education and Welfare.
 "Special Services for Disadvantaged Students in
 Institutions of Higher Education Program." Washington, D. C.: Government Printing Office, 1971.
- Midwest Committee for Higher Education Surveys, Admission of Minority Students in Midwestern Colleges.

 Report M-1. Evanston, Ill.: College Entrance Examination Board, 1970.