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## THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

## ACADEMIC ACHIEVEMENT OF MINORITY GROUP FRESHMEN IN A SPECIAL SERVICES PROGRAM

A DISSERTATION<br>SUBMITTED TO THE GRADUATE FACULTY in partial fulfillment of the requirements for the degree of<br>DOCTOR OF PHILOSOPHY

## BY

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Norman, Oklahoma
1971

ACADEMIC ACHIEVEMENT OF MINORITY GROUP FRESHMEN IN A SPECIAL SERVICES PROGRAM


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# ACADEMIC ACHIEVEMENT OF MINORITY GROUP FFESHMEN IN A SPECIAL SERVICES PROGRAM 

## CHAPTER I

## INTRODUCTION

Academic failure in college often results from the fact that students do not possess the skills necessary for successful achievement at this level. The reason for their skill deficiencies may relate to a lack of motivation by students as individuals; or they may have been deprived of educational opportunities that would enable them to acquire the needed skills. Although these problems are not confined to those who come from families with low incomes and who are from racial minorities, a disproportionately large percentage are from such backgrounds.

The problem of the collegiate dropout is not new. In an effort to reduce the dropout level, many colleges and universities have been providing various types of remedial services for some of their students for many years. With elizil rights legislation and various other changing circumstances in the society as a whole, colleges and universities
have admitted larger numbers of students from among the poor and racial minorities. Since many of these students suffer from skill deficiences of the type previously alluded to, many institutions of higher learning have established expanded programs specifically designed to help these students acquire the skill necessary to their success in college. In many instances, federal funds have been made available to help support such activities. If the programs are effective, they will lead to reductions in attrition rates while helping students prepare themselves for a more productive and satisfying career than would have been possible had they failed to succeed in college.

## Background And Need For The Study

According to Summerskill, American colleges lose, on the average, approximately half their students in the four years after matriculation. Some forty per cent graduate on schedule, while an additional twenty per cent eventually receive the baccalaureate degree. ${ }^{1}$ The large per cent who never graduate give college admission offices greatest cause for concern, because they are by-products of college selection and retention criteria. The significance of dropout figures

[^0]increases when one considers that college populations have doubled in the past fifteen years, reaching approximately $6,900,000$ students in 1970 , with projected enrollment by 1980 estimated to be $10,200,000 .{ }^{2}$

The problem of selection rests with individual colleges and is controlled by them to a certain degree. However, the matter of retention is of more universal concern since there are similarities in the problems encountered by all collegiate dropouts regardless of the institution. McConnell and Heist have shown that diversification of admission policies allows high school graduates of all levels of ability to gain admission to some institution. ${ }^{3}$ However, being accepted by an institution does not assure that a student will not have need of some type of supportive educational service if he is to remain in college until he graduates.

The recognition by colleges that some applicants are high academic risks should not remove from them the responsibility of providing such students an opportunity to attend their irstitution. Colleges, however, are confronted with the costs of maintaining existing programs and the dropout becomes a fiscal liability which very few can afford. For

[^1]this reason, some institutions attempt to justify the exclusion of potential dropouts.

Iffert found that colleges can substantially reduce high attrition rates simply by raising admission requirements with respect to a student's secondary school academic achievement. ${ }^{4}$ He cites 10 of 11 studies which showed college dropouts as having lower averages in high school than those who graduate.

The use of this means of lowering attrition rates is more prevalent among private colleges than the public, tax supported institutions. Carlson and Wegner suggest that a concerted effort be made to lower attrition rates rather than raise admission standards. Their research showed that we know very little about effective techniques which would prevent students from becoming dropouts. They suggest colleges re-evaluate their own programs of teaching and philosophies governing admissions and retention. 5

Some of the factors that have been shown to be important in relation to academic success in college are affective rather than cognitive. Fuchs points up the significant influence of affective factors on academic achievement among

[^2]minority students. ${ }^{6}$ Not only must cognitive skilis be emphasizeci, but equal efforts to strengthen self-acceptance and self-esteem must be made. These factors, according to Rogers, are regulators of a person's behavior. ${ }^{7}$

The various expanded programs that have been initiated to help minority students in many colleges and universities ought to be evaluated so that the feasibility of such approaches can be determined. It is to meet the need for such evaluation that this study was developed.

## Project Threshold

In the summer of 1968 the University of Oklahoma initiated a special services program entitled Threshold. It was designed to give assistance to students who were minimally prepared for college and who were rated as poor academic risks. Students admitted to the program ranked in the lower $10 \%$ of incoming freshmen based on their ACT composite scores and their high school grade point average.

Threshold operated during the summer terms of 1968 , 1969, and 1970. By means of a federal grant, the project was expanded to include the Fall and Spring semesters of 1970-71. It is an example of the types of programs being undertaken to meet the needs of students who have been

[^3]admitted to colleges and universities as a result of liberalized admission policies. This program was seen as most appropriate for use in obtaining data to investigate the problem of this study.

## Statement Of The Problem

The problem of this study was to investigate the effects of certain types of special services provided in the university setting, whose purpose is to enhance the possibilities for academic success among students who are potential dropouts from universities.

The research questions posed were as follows:

1. Do minimally prepared students achieve above predicted grade point averages (GPA) when given special instructional, tutorial, and guidance services?
2. Are there significant differences in achievement among minority sub-groups of Negroes. Indians and MexicanAmericans who participate in these special services?
3. Do significant changes occur in individual selfconcept of minority students who have received special instructional, tutorial and guidance services?

## The Hypotheses

The following null hypotheses were formulated from the statement of the problem:
$\mathrm{H}_{01}-$ There will be no statistically significant
difference in the number of students who
achieve above their predicted GPA and those
who achieve below their predicted GPA.
$\mathrm{H}_{02}-$ There will be no statistically significant difference in the number of feriale Threshold students who achieve above their predicted GPA and male Threshold students who achieve above their predicted GPA.
$\mathrm{H}_{03}$--There will be no statistically significant difference in the number of Negro Threshold students who achieve above their predicted GPA and Indian Threshold students who achieve above their predicted GPA.
$\mathrm{H}_{04}-$-There will be no statistically significant difference in the number of Negro Threshold students who achieve above their predicted GPA and Mexican-American Threshold students who achieve above their predicted GPA.
$\mathrm{H}_{05}$--There will be no statistically significant difference in the number of Indian Threshold students who achieve above their predicted GPA and Mexican-American Threshold students who achieve above their predicted GPA.
${ }^{H} 06$--There will be no statistically significant difference in the percentage of fall Threshold students who achieve above their predicted GPA and the percentage of summer Threshold students who achieve above their predicted GPA.
$\mathrm{H}_{07}$--There will be no statistically significant difference in the percentage of Threshold students who achieve below 1.4 GPA and the percentage of students in the freshman class, with ACT composite scores of 16 , or below, who achieve below 1.4 GPA for Fall semester.
$H_{08}-$ There will be no statistically significant difference in the percentage of dropouts of Threshold students and the percentage of dropouts in the entire freshman class at the end of the fall semester.
$\mathrm{H}_{09}-$ There will be no statistically significant
difference in the percentage of Threshold females who drop out at the end of the fall semester, and the percentage of freshman females, not in Threshold, whose ACT composite is 16 , or below, who drop out at the end of the fall semester.
$\mathrm{H}_{\mathrm{O} 10 \text {-- There will be no statistically significant dif- }}^{\text {ference in the percentage of Threshold males }}$
who drop out at the end of the fall semester,
and the percentage of freshman males, not in
Threshold, whose ACT composite is 16 , or below,
who drop out at the end of the fall semester.
$\mathrm{H}_{\mathrm{O}}^{\mathrm{O} 11 \text {-- There will be no statistically significant }}$
relationship between changes in self concept
of the Threshold students, as measured on pre/
post tests of the TSCS, and changes in their
academic achievement for fall semester.

## Procedural Pattern

The testing of the hypotheses was accomplished through the use of an ex-post-facto design which allowed the use of existing data extrapolated from the student's high school transcript, his ACT Composite Score, and university records.

Ir 1968 American College Test Research Scientist, Donald Hoyt, published a report encitled Forecasting Academic Success In Specific Colleges. ${ }^{8}$ The report described in detail how he had developed a formula for predicting academic achievement in college based on previous studies by A. W. Austin who had published college profiles for over 1,000 accredited fouryear colleges in 1965.9 From Austin's "profile scores" Hoyt was able to estimate means needed to make generalized predictions for all colleges. Through statistical procedures described in the report he arrived at ACT Composite Means and Regression Constants for a total of 985 colleges. This

[^4]widely accepted and often used formula for predicting academic success in college was chosen as a means for recording a Predicted GPA for students involved in this study.

The data necessary for comparison of dropout rates and academic achievement of Threshold students with other students from the regular freshman class were obtained from individual pupil personnel records.

Data used for testing the relationship of achievement to self concept were compiled from pre and post tests of the Tennessee Self Concept Scale. ${ }^{10}$

Statistics used to treat the data were the Chi Square ${ }^{11}$ and the Student $t$ formulas. ${ }^{12}$ Significance was set at the . 05 level, 1 tail.

## Definition of Terms

The following definitions of terms were used for this study:

Minority Student - That student who is not Caucasian in ethnic background.

Predicted GPA - That grade average arrived at by the use of existing data obtained from past academic records and a formula using ACT Research data.

[^5]Achieved GPA - The Average of the actual grades earned by the student during the Fall semester of 1970 .

## Organization Of The Study

This study was organized into five chapters. The introductory chapter presented the background and need for the study, Project Threshold, the problem, the hypotheses, procedural pattern, definition of terms and organization of the study.

Chapter II was devoted to a review of research and literature related to the study.

Chapter III dealt with the design of the study. Chapter IV contained the presentation and analysis of data and Chapter $V$ presented the summary, findings, conclusions and recommendations.

CHAPTER II

## REVIEW OF RELATED RESEARCH AND LITERATURE

The purpose of this study was to evaluate the effects of special instruction, tutorial and individual guidance and counseling services afforded a group of minority freshmen at the University of Oklahoma.

This chapter presents a review of related literature and research relevant to the study. The first section presents studies and literature related to college admission policies. The second section cites literature which identifies some of the psycho-sociological factors prevalent among school dropouts. The third section depicts attempts to label and define those students who are classed as 'culturally deprived' or 'socially disadvantaged.' The fourth and final section reviews literature and research studies related to achievement among minority students.

Studies And Literature Related To College Admission Policies

Of all the goods and privileges so distributed. the privilege of higher education is one of the most important, for it is an avenue which leads to a still greater preferential status, to all the professions,
and to the positions where most social policies are determined. 1

The above statement points up the importance of acquiring a college education. The process of getting accepted and being admitted to a college often become major obstacles in the path of those who aspire to post high school academic experience. A general overview of the problem of admission and retention criteria among colleges is pertinent to the problem in this study, specifically as it relates to students from minority and low income families.

Crossland struck at the heart of the problem when he stated:

The day must come when students move from high school to colleges as easily as from elementary to secondary, but it will not come unless and until our institutions of higher learning put aside their petty rivalries and jealousies and agree to cooperate in meaningful fashion. ${ }^{2}$

Crossland's attempt to blame the lack of smoothness in transition from high school to college on the policies of recruitment and admission perhaps merits consideration when the results of studies from the Center for the Study of Higher Education of UCAL at Berkeley are examined. According to
${ }^{1}$ Robert Bell, The Sociology of Education (Homewood, Ill: The Dorsey Press. Inc. 1962) cited by William B. Ragan and George Henderson, Foundations of American Education (New York: Harper and Row, 1970), p. 224.
${ }^{2}$ Crossland, p. 299.

McConnell and Heist, the center conducted extensive studies of the composition of student bodies and of the differential selectivity of particular colleges and universities. They found the following:
". . . an underlying premise has been that in addition to measured ability, other student characteristics such as social and cultural background, personality traits or dispositions, attitudes, interests, and goals are important determinants of general institutional climate, of peer cultures and subcultures, and also of educational 'product.'3

In 1938 Learned and Wood made a study of forty-nine Pennsylvania Colleges. The general level of intellectual attainment as indicated by average scores on achievement tests in a principal academic field proved to be strikingly different among several colleges and universities. Scores on a mentai ability test presented a similar picture of diversities. This tended to characterize certain institutions and formed certain academic cultures to which certain types of students were drawn. 4

It is recognized that other criteria are considered by college admission offices in selection procedures but common in all policies is the important significance placed on academic records and scholastic performance of those who apply for admission. Defending the role of tests in admission

3 McConnell and Heist, $p, 229$.
${ }^{4} \mathrm{~W}$. S. Learned and B. D. Wood, "The Student and His Knowledge: : Bulletin \#29 (New York: The Carnegie Foundation For The Advancement of Teaching, 1938) from The American College: edited by Nevitt Sanford (New York: John Wiley and Sons, 1967), p. 227.
policies, Whitla of Harvard states:
The role of tests is restricted yet specific. They provide a standard against which we can compare our candidate's relative aptitudes. In combination with school records they give us information that we can expect if we admit him. 5

Havighurst found that colleges are not always successful in recruiting the most capable academic student because some of the more capable academic prospects never choose to attend any college. Studies in 1960 revealed that $34 \%$ of entering males and $23 \%$ of entering females came from the top two quartiles in ability, but that $16 \%$ and $27 \%$ respectively from the same levels were not in any college. ${ }^{6}$

Stice, Mollenkopf and Torgerson discovered that even among students in the top ten per cent of ability one-fifth ( $20 \%$ ) had no expectation of entering college. ${ }^{7}$

Wolfle showed in 1954 that only $53 \%$ of the top onefifth of high school graduates entered college and that $17 \%$ of the lowest one-fifth also entered college. ${ }^{8}$

Holland suggests that other factors should be considered
${ }^{5}$ Dean K. Whitla, "Admission to College: Policy and Practice," Phi Delta Kappan XLVI (March, 1965), 303-06.
${ }^{6}$ Robert J. Havighurst, American Higher Education In The 1960s (Columbus: Ohio State University Press 1960) cited by McConnell and Heist in The American College, edited by Nevitt Sanford (New York: John Wiley \& Sons: 1967) , p, 229.

7Stice, Go, Mollenkopf, Wm. Fo. Torgerson, W, S. "Background Factors and College-Going Plans Among High-Aptitude Public High School Seniors," (Princeton, N. J.: Educational Testing Service, 1956).
8. Wolfle, America's Resources of Specialized Talent (New York: Harper Bros. 1954) cited by McConnell and Heist. in The American College, edited by Nevitt Sanford (New York: John Wiley \& Sons, 1967), p. 229.
in addition to those of academic potential. He states:
To rely on academic potential as the chief method of selection is in fact, then, an ineffective method for the selection or encouragement of a variety of student talents. Academic and non-academic accomplishments are independent divisions of human endeavor. ${ }^{9}$

Holland participated in a similar study with Nichols. They concluded that selection on the basis of a broad range of high school achievements results in a broad range of achievement in college without lowering the level of academic performance. Their findings also revealed that selection by rank in high school produces students who will give superior academic performance but not necessarily in other kinds of achievement. ${ }^{10}$

The minority and low income students present additional problems of selection to admissions offices. McKendall states the problem clearly when he says:

Admission officers however cannot see the necessity of turning down a white who can do the work and accept a negro who is doubtful, and generally needing financial assistance. ${ }^{11}$

William Moore, Jr., in his book entitled Against The
Odds, accuses admission offices of discrimination when he says:
$9^{\text {John L. Holland, "Some New Dimensions Of Service }}$ and Research In College Admissions," Phi Delta Kappan. XLVI (March, 1965), 322-24.
$1^{10}$ Robert Nichols and John Holland, "Selection of High Aptitude High School Graduates For Maximum Achievement In College," Personnel and Guidance Journal XLIII (Sept.。 1964), 33-40.
${ }^{11}$ Ben W. McKendall, Jr., "Breaking The Barriers of Cultural Dis-Advantage and Curriculum Imbalance," Phi Delta Kappan XLVI (March, 1965), 307-11.

Students from minority groups and other low income groups have been systematically denied opportunities for higher education based on assumptions that these students cannot or will not learn anything anyway. 12

Dyer refuses to place all the blame for college academic failures on colleges and their selection of students. According to him the real villains obviously are the uninformed students who often make unwise selections themselves. He admits that since colleges are not adapting to students that the real burden of selection lies with the high school. ${ }^{13}$

Coleman, in his celebrated 'Coleman Report,' noted that minority students were victims of colleges which they were forced to attend due to non-acceptance by other, more desirable institutions. In reporting figures relating to colleges who show varying degrees of success in moving its students through to graduation, he offered the following figures:

Finally, considering all degree-granting institutions in the nation, 66 percent of the nation's Negro students attend colleges that do not do as well as the average in moving their students through to graduation; and whereas 11 to 12 percent of the students are Negro in the poorest quarter schools (by this measure), only $2.51 \%$ are Negro in schools ranking in the top quarter.

[^6]
## Studies And Literature Related To Psycho-Sociological Characteristics of Dropouts

Objectively speaking, some writers imply that the success or failure of a college admission policy is directly proportional to the attrition rate among its students. Based on academic performance alone this statement seems valid. However, other factors are involved when a student leaves school. According to Summerskill, we must recognize that up to one-third of the college dropouts are due to poor grades and academic failure and it is equally important to realize that the majority of students who leave college do so for non-academic reasons. Quote:

In general, then, the attrition problems that predominate in colleges involve the students' failure to meet the psychological, sociological, or economic demands rather than the strictly academic demands of the college environment. 15

Millard cites both social and psychological reasons behind most dropouts. He stated:

Leaving school is nearly always a symptom indicative of overwhelming academic and social frustrations. To a great extent, they see themselves as 'misfits' in the currently prescribed curricula in social and life prepatory experiences. They mask their feelings of insecurity, inadequacy and loneliness by withdrawing from basic social learning. 16

Deutsch places the blame for the continuous rise in
dropout rates to the lack of effective changes in school
${ }^{15}$ Summerskill, p. 637.
${ }^{16}$ Thomas L. Millard, "Dropouts And The School," Educational Leadership, XXII (Jan. 1965), 247-50.
environment and methods of teaching, especially among economically and socially deprived students. ${ }^{17}$

Riessman also stresses the fact that schools must recognize the socially deprived youngster has a different style of thinking, a different way of learning, and that generally the schools are not attuned to this. ${ }^{18}$

Millard concluded that a random sampling of the life histories of most dropouts would seem to suggest the etiology of the dropout syndrome as falling into two groups. They are:
(a) Those syndromes which develop slowly out of social and academic failures on the part of the individual to incorporate in his life scheme orientation those attitudes and values which are in harmony with the larger society.
(b) Those syndromes which develop relatively rapidly, due to sudden deleterious influences in the person's social or academic milieu, precipitated either by the socio-physical difficulties of marginal living or the inadequacy of mutually reinforcing social interaction. 19

That there is a significant relationship between the way a person views himself and the way he looks upon others

[^7]has been shown by Berger, ${ }^{20}$ Sheerer ${ }^{21}$ and Raskin. ${ }^{22}$
There appears to be general agreement that how a child views himself is his most important belief. Snygg and Combs contend that this is actually the psychic foundations for his very being. They suggest that the child not only values his self identity, but that he will engage in certain activities designed to protect and/or enhance it. Therefore, the person derives meaning from his social situation only as he brings meaning to it. 23

In terms of the learning situation, Bills, in an article about perception and learning, suggests that learning is a self actualizing process and that the self-concept of the child influences his ability to function effectively. ${ }^{24}$
${ }^{20}$ E. M. Berger, "The Relation Between Expressed Acceptance Of Self and Expressed Acceptance of Others," Journal of Abnormal Social Psychology XLVII, (1953), 778-82.
${ }^{21}$ Elizabeth Sheerer, "An Analysis of the Relationship Between Acceptance of Self and Acceptance and Respect For Others In Ten Counseling Cases," Journal of Consulting Psychology, XIII, (1949) 169-75.
${ }^{22}$ Nathanial Raskin, "An Analysis of Six Parallel Studies of The Therapeutic Process," Journal of Consulting Psychology XIII (1949), 206-20.
${ }^{23}$ Donald Snygg and Authur $W$ : Combs, Individualized Behavior (New York: Harper and Brothers, 1949), p. 18.
${ }^{24}$ Robert Bills, "Believing and Eehaving: Perception And Learning," Learning More About Learning (Washington: Association For Supervision and Curriculum Development, 1959) , pp. 55-73.

In making specific reference to the problems involving educating the Negro, Full quotes from the Educational Policies Commission as follows:

From the Negro point of view, the greatest domestic challenge facing American Society is making manifest and real equal opportunity for all so that we may live constructively and independently in a modern snoiety...if the problems of the dis-advantaged are to be solved, the society as a whole must give evi $\overline{2}_{5}$ dence of its undifferentiated respect for all persons. ${ }^{2}$

Similarities of irregularities exist among other minorities relative to the problem of dropouts. Figures quoted by the Bureau of Indian Affairs (BIA) place the proportion of Indian children who graduate from high schools at less than two-thirds of that of the whites. ${ }^{26}$

The inadequacy of the federal government's efforts to "educate" the Indians through the BIA is called sordid by Roucek. He states: "In fact, this is one of the most pitiful stories of the misguided educational efforts in American Educational History in regards to America's original 'minority., 27

[^8]${ }^{26}$ Bulletin. Bureau of Indian Affairs: Today's
Dropouts. Tomorrow's Problems ${ }_{3}$ (Washington: Bureau of Indian Affairs, 1960), p. 2.

27 Joseph S. Roucek, "The Most Oppressed Race In The United States: The Indiang" The Education Forum. XXIX (May, 1965) . 477-85.

Barron states unequivicably:
Indeed, the Bureau of Indian Affairs has been accused of arbitrary methods that inadvertently reverse the advance of the Indians toward 'complete selfreliance' and delay the end of their paternalistic supervision by the government. 28

That deleterious influences appear to have perpetuated the insecurity of Indians was pointed up in research by Spindler who came to the conclusion, after administering the Rorschach to a group of Indians 'who had attained social status among whites,' that all those tested were insecure. 29

Roucek cites reasons for adverse influences affecting
Indian self concept that are common to all minorities.
The Indian youngster, even today, lives in a continuous state of conflict. This is especially true in regions where the color line is not sharply drawn, and where there are no absolute prescriptions marking off the role shared by all otner citizens and the role of Americans shared only by those with colored skin. Under such circumstances, the Indian can never be certain of his status or sure of his welcome. While restricting castaways are undoubtedly detrimental under any conditions, they are bound to be more traumatic to the individual when they are not an integral, inevitable, and therefore impersonal part of the social structure. Many, therefore, on the basis of surface impressions, develop defenses against their anxiety by repressions, substitutions, over-compensations, and anti-social behavior. 30

According to Roucek this presents, therefore, the
${ }^{28}$ Milton L. Barron, American Minorities (New York: Alfred Knopf, 1962), p. 154.
${ }^{29}$ Spindler, L. S. and Spindler, G. Do, "The American Indian Personality Types and Their Socio-Cultural Roots," The Amnals of the American Academy of Political and Social Science CCCXI (May, 1957), p. 152.
${ }^{30}$ Roucek, p. 479 .
abiding, perennial problem of American Education when confronted by the existence of 'minorities': How To Relate The Concepts of Cultural Pluralism To Total Assimilation. Should they be integrated into American society as minority individuals or should they be encouraged to acculturate as rapidly as possible to the typical 'American way of life' although this might lead to complete estrangement from their family background?

In speaking of this importance of the child's attitude toward himself as a contributing factor in achievement, Coleman stated:

If a child's self concept is low, if he feels he cannot succeed, then this will affect the effort he puts into the task and thus, his chance of success. It is true of course that his self concent is affected by his success in school and it is thus hard to discover the effect of self concept upon achievement, 31

## Studies And Literature Related To Labeling And Defining Minority Students

The difficult problem of categorizing or labeling students as culturally and educationally deprived is pointed up by Deutsch when he says:

Whale there are statistical relations and very important ones between socıo-economic status and social disadvantages of children, there are so many individual exceptions to the statistical generalizations that any educational policy aimed at identifying socially disadvantaged children should avold reliance upon general socio-economic characteristics as the decisive criteria 32

$$
\begin{aligned}
& \text { 31Coleman: p. } 218 . \\
& \text { 32 Deutsch: p. } 219 .
\end{aligned}
$$

He suggests that in racial and ethnic terms, these groups are about evenly divided between whites and non-whites in America; groups which make up about 15 per cent of the population of the United States. Of these groups, their children make up as much as 20 percent of the child population. The total number of socially disadvantaged children in America makes up about 15 per cent of the child population.

Havighurst defines socially disadvantaged pupils in three ways:

1--In terms of certain family chacteristics relating directly to the child.

2--In terms of their personal characteristics.
3--In terms of the social group characteristics of their families.

As for the use of the terms, culturally, intellectually or socially deprived, he offers this statement: "These names imply our belief that these children are not innately dull: but that they have been denied some experience that other 'normal' children have had." 33

Fisher discusses the inadequacies of trying to categorize children of the urban poor. Relative to the term culturally deprived, he says:

What people really mean to say when they use the terin 'culturally deprived' is that these children do not have the advantages of a culturally rich

[^9]environment with a capital 'c., 34
As early as 1849, Mann declared: "Education, then, beyond all other devices of human origing is to be the great equalizer of the conditions of men, the balance-wheel of the social machinery." 35

Wilson refutes this statement by saying:
A continuously accumulating body of research over the past decades has made it clear, however, that the utilization of educational opportunities follows, to a large degree, the lines of the stratification system of the society. It has been shown that students' academic achievements, and the division into sections, curricular, or streams within schools reflect the status distinctions of the community. 36

Clark suggests that it is clear that a fundamental task of the schools in stimulating academic achievement in disadvantaged children is to provide the conditions necessary for building in them positive images of themselves, building in these children positive self-esteem to supplant the feelings of inferiority and sense of hopelessness which is supported by an all-too-pervasive pattern of social realities. 37

[^10] 285-90.

35 Horace Mann, "Report for 1849" in Life and Works of Horace Mann Vol. IV: Annual Reports of the Secretary of the Bd. of Education of Mass. for the Years of 1845-48 (Boston: Lee and Shepard, 1891), p. 251.

36
Alan B. Wilson, "Social Stratification and Academic Achievement," from Education in Depressed Areas, edited by Harry Passow (New York: Teachers College Press, Columbia University, 1966), p. 217.

37 Kenneth B. Clark, "Educational Stimulation of Racially Disadvantaged Children," from Education in Depressed Areas, edited by Harry Passow (New York: Teachers College Press, Columbia University, 1966), p. 157.

Studies have generally indicated a direct relationship between social class and scholastic attainment. Barber has observed that the average difference in IQ scores among the social classes and the considerable dispersion of $I Q$ scores within any given sociai class, suggests that . .

- . . we must look into the social, cultural, economic, and political spheres to discover the sources of social-class differences in IQ scores and their effects cin differentials in educational lifechanges. 38

Edwards and Wilson concluded from research that the social-class composition of the school clearly modifies the ambitions, norms, and achievement of students in that school. 39

Hyman likewise reports survey data which indicate that this results in . . .
> - . . reduced striving for success among the lower classes, an awareness of lack of opportunity, and a lack of valuation of education, normally the major avenue to achievement of high status. 40

The danger of these students being stereotyped through the use of some unfortunate connotations of the terms based on faulty conceptualizations which detract from the potential of surrounding environment for learning is denounced by Fisher. He suggests the use of the concept of poverty as being the

38 Bernard Barber, "Social-Class Differences in Educational Life-Chances." Teachers College Record LXIII (November, 1961), 102-13.
${ }^{39} \mathrm{~T}$, Bentley Edwards and Alan B. Wilson. "A Study of Some Social and Psychological Factors Influencing Educational Achievementa" (Mimeographed) (Berkeley: University of California, Department of Education, June, 1961).

40Herbert H. Hyman, "The Value Systems of Different Classes: A Social Psychological Contribution to the Analysis of Statification," from Class, Status and Power edited by R. Bendix and S. Libset (New York: Free Press 1953), pp. 426-42,
most accurate and the least offensive of all connotations. 41

> Studies and Literature Related To Achievement Of Minority Students

Bloom published results of a study supporting the proposition that variations in the environment can produce changes in human characteristics and that such variations have the greatest effect at the period when the particular characteristic is changing most rapidly. He reported:

A conservative estimate of the effect of extreme environments on intelligence is about 20 I. Q. points. This could mean the difference between a life in an institution for the feebleminded or a productive life in society. It could mean the difference between a professional career and an occupation which is at the semi-skilled or unskilled level. 42

Bloom contends that steps must be taken to ameliorate these deficiences in the individual's development as early as educational and other social forces can be utilized.

In 1968 the percentage of colleges and universities offering special services to the disadvantaged, low-income student was approximately 50 percent. However, according to Williams, many of these programs were and are now only token programs as he states:

It is not yet possible to say which programs are the most effective. The areas covered include financial aid, special housing, intensive orientation to the University life, special courses,
${ }^{41}$ Fisher, p. 288.
42 Benjamin Bloom, Stability and Change in Human Characteristics (New York: John Wiley and Sons, 1964), p. 89 .
small group instructiong programmed instructiong a personalized teaching approach, tutorial assistance, personal counseling, compensatory study in language arts, a reduced course load, and an extended time period to obtain a degree. Assessment of individual components is based more on the personal testimony of programs personnel than on empir 43 ical fact due to the way the program is structured. ${ }^{4} 3$

Wiiliams' summation of his findings was that even though most programs are too new to have reached definite conclusion as to their effectiveness, it seems now that no more disadvantaged students are dropping out than regular students. Furthermore, from the institutions that have control groups, fewer high risk students are flunking out than when they were in special programs. There grades are low but are better than would have been expected based on past academic performance. He concludes:

Colleges can educate students with a history of mediocrity and failure. We do not yet know the full impact of high risk programs on a person's attitude toward himself, his future vocational success, or his contribution to society. Neither do we know how much waste of human resources and social discord will result from our failure to provide the disadvantaged a realistic chance to obtain a college education. 44

Additional evidence of the existence of similar programs on college campuses is found in the February, 1969 issue of School and Society.
${ }^{43}$ Robert L, Williams: "What Are We Learning From Current Programs For Disadvantaged Students"? The Journal of Higher Education XL (April, 1969), 274-85.

[^11]The educational needs of Black, Indian。 and Mexican-American students are receivins specinl attention on college campuses in 1968-69. Inblic universities and colleges increased their efforts to recruit minority group students whose high school records and family income might discourage them from applying to colleges. 45

The same article mentions a class of 50 high-risk
high school graduates starting as Freshmen in the fall of
1968. The University of Massachusetts enrolled 120 Negro
students in a special class. The following information
about a California project is also included.
The state University system of California is continuing successfully with its Educational Opportunities Program (EOP) for high school and Junior College students. At the Berkeley campus, since 1966, 424 students ( $60 \%$ of whom were not regularly admissable) have been supplied with intensive counseling services, scholarship monies, and on-campus nousing. A corps of undergraduate and graduate students provide tutors. Negroes comprise $75 \%$ of those enrolled in the program at Berkeley. However, at the Los Angeles campus, EOP's students are $49 \%$ Negro, $30 \%$ Spanish extraction, $15 \%$ Oriental, and $15 \%$ white. 46

In the summer of 1966 a program called Experiment in
Higher Education was begun at Southern Illinois University.
Fifty students from East St. Louis, a ghetto area, were selected to participate in this educational experiment. $A$ report of the success of the program was published in June, 1968 with positive results indicating its effectiveness. 47

In 1966 Stordahl conducted a study at Northern
45 ities," School and Society (February, 1969), p. 84. 46 Ibid.,$~ p .84$. 47 (A Commentary) (Edwardsville: Southern Illinois University, June, 1צ゙óó), p. 20.

Michigan University for the purpose of evaluating the academic progress of a group of students in a program designed for the poor academic risk. Resuits indicated that these students had a higher GPA (1.93) for their first enrollment. Findings also indicated that while in the program the students performed better than after they were out from uncier its influence. 48

Stordahl cites Lloyd G. Humphrey's article, "The Fleeting Nature of the Prediction Of College Academic Success," where he attributes success of marginal academic students in college to biological growth factors as well as environmental stimulation. 49

Moore speaks of many of these programs on our college campuses as nothing less than token gestures. He blames educational administrators for this situation:

Programs for the black and other disadvantaged students and staff who are a part of the programs on campuses all over the country are like satellites or appendages to the institutions. Both the programs and the people are tolerated, not integrated. 50

The assessment of these projects centers around achievement of the poor educational risk. Some of the factors involved in achievement among this type of student are presented
${ }^{48}$ Kalmer Stordahl, "Evaluation Of A Program For The Poor College Risk," College and University XLV, (Fall, 1969), 88. 49

Ibid. 9 pp. 93-94.
$5^{\text {Moore, p. }} 44$.
in the following studies.
Family influence was found to be an important factor in the educational attainments of college students by Barnsworth, Funkenstein and Wedge. These authors, working in a clinical context explain:

If a student comes from a family where educational and intellectual matters are highly prized, and if the student is not blocked in his ider.cification with his parents, he takes on these educational values. 51

Similarly, Perlman's investigation of the problem of underachievement among college students revealed that . . .
. . . overachievement is associated with the amount of parent's education; it is more likely to be found when the student's father had studied beyond the baccaluareate level $\frac{1}{5}$ or the mothers had attended high school or beyond.

Sudarth conducted a study in 1957 of 2118 students entering Purdue University in 1952. Results revealed that very few who went on probation one or more times ever graduated. She concluded that poor or failing grades at the beginning of a college career are highly predictive of dropouts. 5
${ }^{51}$ D. Farnsworth, D. Funkenstein and B. Wedge, "A Study Of The Social And Emotional Adjustment of 'early admission' College Students." (Mimeographed) from The American College, edited by Nevitt Sanford (New York: John Wiley and Sons, 1967), p. 632.

52s. Perlman, "An Investigation of the Problem of Academic Under-Achievement Among Intellectually Superior College Students," (Doctoral Thesis) New York University, 1952, cited by Summerskill in The American College, edited by Nevitt Sanford (New York: John Wiley and Sons, 1967), p. 632.

53 Betty Suddarth, "Factors Influencing The Graduation of Freshmen Who Enroll At Purdue University." Unpublished Report, June, 1957, ci.ted by Summerskill in The American College, edited by Nevitt Sanford, p. 634.

Carlson and Wegner concluded from studies that when we depart from course grades and achievement test scores, reasons for failure become more difficult to measure precisely. ${ }^{54}$

Meister and Tauber conducted experiments on students at Bronx Community College and concluded:
(1) Special remedial programs help
(2) Unreleased academic potential will emerge
(3) The highly motivated really soar
(4) Positive attitudinal changes occur
(5) The recommendations of high school counselors which deal with dynamic abilities such as perserverance and strong motivation are worth more consideration than they now receive, especially in dealing with students in the lower strata of verbal and quantitative abilities. 55

The importance of self concept in achievement was discovered by Charles Combs when he noted significant and consistent differences between underachievers and achievers. The underachievers saw themselves as less adequate, less acceptable to others and saw both their peers and adults as less acceptable. They showed an inefficient and less effective approach to problems and showed less freedom and adequacy of emotional expressions. 56

54 Carlson and Wegner, p. 325.
55Morris Meister and Abrahm Tauber, "Experiments In Expanding Educational Opportunity For The Dis-Advantaged," Phi Delta Kappan, XLVII (March, 1965), 340-42.

56 Charles F. Combs, "Perception of Self and Scholastic Underachievement in the Academically Capable," Personnel And Guidance Journal XLIII (September, 1964), 47-51.

The significance of personal attitude toward school is noted by Brodie who conducted a study of two groups of urban eleventh graders. He polled their attitude toward school as either being "satisfied" or "dissatisfied" with school. He found that students who were satisfied generally outperformed the dissatisfied student and theorized that the reason was because of their attitude toward the schooling process. 57

One of the most important research studies dealing with the problem of learning and the socially deprived was conducted by Schwebel. He conducted a study in New York of 150 socially deprived boys and raised their IQ from 92.9 to 102.2 from the 9 th grade to the 12 th grade. This was done by small classes, remedial and psychological assistance and tutoring. 58

Schwebel based his study on some of the contemporary learning of Piaget, whom he quotes relative to learning and intelligence:

A scheme arises as an adaptive measure but only as a consequence of the organism's interaction with his environment. At every level, experience is necessary to the development of intelligence.

He noted also the statement of Mannheim, who said:

57 Tom Brodie, "Attitudes Toward School and Academic Achievement," Personnel And Guidance Journal XLIII (December, 1964): 375-78.
${ }^{58}$ Milton Schwebel, "Learning And The Socially Deprived," Personnel and Guidance Journal XLIII (March, 1965), 646-53.

The mental functions of human beings develop in the process of learning. While mastering the experience of mankind the cerebral systems are formed. Man's perceptions are shaped by the environment in which he lives. 59

Adding credence to Schwebel's research. Rude and King made a comparison of 300 people from depressed areas and compared their aptitudes with a group selected from a normal population and found no significant differences. 60

Finally, among the many researchers who have concluded that more counseling and guidance services are needed for the marginal students are Hills: Gladney and Klock. They concluded that in addition to an increase in such services: many of these students need and deserve a second chance. They contend that even though a student may be a marginal academic risk, he deserves the opportunity to try to succeed. If he fails, he then has no valid complaint of inopportunity. 61

## Summary

This chapter presented a review of research and literature related to the study.

The first section reviewed problems faced by colleges In the selection of their students. It was fourd that some

59Milton Schwebel: p. 646-53.
${ }^{60}$ H. Neil Rude. Donald C. King: "Aptitude Levels In A Depressed Area." Personnel and Guidance Journal XLIII (April. 1965): 785-89

61John Hills. Marilyn Gladney. Joseph Klock: "Nine Critical Questions About Selective College Admissions." Personnel and Guidance Journal XLV (March, 1967), 640-47.
coileges are beginning to admit high risk minority and low income students on a limited basis.

The second section cited literature identifying some of the psychological and sociological factors prevalent among school dropouts. Only one-third of the dropouts leave school for academic reasons, while the other two-thirds give social, financial or personality adjustment as causal factors. Among minorities, negative self concept was cited as a reason for under-achievement and poor social adjustment to college life. The third section reviewed literature which attempts to label minority and low income students. Deprivation of educational opportunity generally experienced by these students appears to be the basic contributing factor leading to the use of the titles and labels they have acquired.

The fourth section reviewed research studies which dealt with academic achievement among minority and low income students. It was concluded that low income and minority students can succeed in college when afforded certain supportive educational services.

## CHAPTER III

## DESIGN OF THE STUDY

The purpose of this study was to evaluate the effects of special instruction, tutorial and individual guidance and counseling services afforded a group of minority freshmen at the University of Oklahoma who were a part of a special program entitled, Threshold. Answers to the following questions were sought:

1. Do minimally prepared students achieve above predicted grade point averages (GPA) when given special instructional, tutorial, and guidance services?
2. Are there significant differences in achievement among minority sub-groups of Negroes, Indians and Mexican-Americans who participate in these special services?
3. Do significant changes occur in individual self concept of minority students who have received special instructional, tutorial and guidance services?

The following null hypotheses were developed from the statement of the problem:
$\mathrm{H}_{01}$--There will be no statistically significant
achieve above their predicted GPA and those who achieve below their predicted GPA.
$\mathrm{H}_{\mathrm{O} 2}$--There will be no statistically significant difference in the number of Female Threshold students who achieve above their predicted GPA and Male Threshold students who achieve above their predicted GPA.
$\mathrm{H}_{03}$--There will be no statistically significant difference in the number of Negro Threshold students who achieve above their predicted GPA and Indian Threshold students who achieve above their predicted GPA.
$\mathrm{H}_{04}$--There will be no statistically significant difference in the number of Negro Threshold students who achieve above their predicted GPA and Mexican-American Threshold students who achieve above their predicted GPA.
$\mathrm{H}_{0} \mathbf{S}^{- \text {-There }}$ will be no statistically significant difference in the number of Indian Threshold students who achieve above predicted GPA and Mexican-American Threshold students who achieve above their predicted GPA.
$\mathrm{H}_{06}$--There will be no statistically significant difference in the percentage of Fall threshold students who achieve above their predicted GPA and the percentage of Summer Threshold students who achieve above their predicted GPA.
$\mathrm{H}_{07}$--There will be no statistically significant difference in the percentage of Threshold students who achieve below 1.4 GPA and the percentage of students in the freshman class, with ACT composite scores of 16 , or below, who achieve below 1.4 GPA for Fall semester.
$\mathrm{H}_{08}$--There will be no statistically significant difference in the percentage of dropouts of Threshold students and the percentage of dropouts in the entire fresiman class at the end of the fall semester.
$\mathrm{H}_{\mathrm{O}}{ }^{--T h e r e}$ will be no statistically significant difference in the percentage of Threshold females who drop out at the end of the fall semester, and the percentage of freshman females, not in
Threshold, whose ACT composite is 16 , or below,
who drop out at the end of the fall semester.
$\mathrm{H}_{010}$--There will be no statistically significant dif-
ference in the percentage of Threshold Males
who drop out at the end of the fall semester,
and the percentage of freshman males, not in
Threshold, whose ACT composite is 16, or below,
who drop out at the end of the fall semester.
$\mathrm{H}_{011}$--There will be no statistically significant rela-
tionship between changes in self concept of the
Threshold students, as measured on pre/post tests
of the TSCS, and changes in their academic achieve-
ment for fall semester.

## Data Collecting Procedures

The data necessary for computing a Predicted GPA for each student were obtained in the following manner.

A copy of the high school transcript for each Threshold student was examined and his high school average (HSA) computed from mathematics, English, social science and Natural science subjects. These data were compared with his ACT composite score. Through the use of specially compiled tables perfected by Donald Hoyt from the Research Division of ACT, a formula involving the use of Regression Constants was used to arrive at each student's predicted GPA. ${ }^{1}$ Exact procedures for obtaining a student's Predicted GPA were as follows:

1. The student's ACT composite score was recorded and his HSA (High School Average). The HSA was computed on a 4 point scale: $A=4 ; B=3 ; C=2 ; D=1 ; F=0$. A table showing the possible grade combinations appears in Appendix A.
$1_{\text {Hoyt, }}$. 27-45.
2. Table A-1 or Table A-2 (Appendix A) was used to develop a "general academic potential" index for the student. This was done by finding the column corresponding to the student's HSA, the row corresponding to his ACT Composite score, and the cell where this row and column intersect.
3. This index was then converted into a Predicted GPA by adding the college constant for the University of Oklahoma recorded in Table A-3 (Appendix A). Predictions were obtained by using the four point scale described above where $A=4, B=3, C=2, D=1$ and $F=0$ 。
4. The student's Achieved GPA was recorded from of ficial University IBM Grade Reports based on the same 4 point scale.

To test those hypotheses where comparisons were made with regular freshmen, a survey of all freshmen was made to determine the number of students, not in Threshold, who had ACT composite scores of 16 or below, since this is the approximate mean ACT composite score of Threshold students. These data were obtained by examining each freshman student's academic record.

A similar survey was made to determine the number of students who dropped out of school following the first semester. This was accomplished by comparing the fall and spring semester IBM class rolls.

To determine significant changes in self concept as it relates to academic performance, a comparison of the student's Predicted and Achieved GPA was made with the Total Positive Scale Scores on both the pre and post test scores of the Tennessee Self Concept Scale. This test was administered to the Threshold group during the first semester prior
to the first grade report and again a post test was administered using the same instrument after the students had received their final fall semester grades.

## Population

Data for this study were collected from the students enrolled in Threshold at the University of Oklahoma for the Fall semester: 1970. Total enrollment of this group numbered ninety-five students, which included Negroes, Indians, MexicanAmericans and others.

From the original group of 95 students the following eliminations were necessary to fully test the hypotheses as derived from the problem:

Five students were transfers from other colleges and could not be considered new freshmen.

Three students had participated in the Threshold program during the summer of 1969.

Twenty-three students had participated in the Threshold program during the summer of 1970.

Six students were Caucasian and this study was designed to assess the achievement of minority students only.

Two students had G.E.D. diplomas and no HSA could be computed from their transcript.

This left a total of 56 minority students who were being exposed to college for the first time in the Fall semester of 1970. The racial distribution was as follows: 35

Negroes; 16 Indians; and 5 Mexican-Americans. Complete data on these students were compiled to test the hypotheses.

It should be noted that the Summer Threshold group of 1970 , which totaled 23 students, was used for comparative purposes only in testing $\mathrm{H}_{06}$.

Treatment Of The Data
The nature of the research problem and the type of data needed to test the hypotheses suggested a statistical procedure which would compare an observed frequency, in this case the Achieved GPA, with a theoretical frequency, which was the Predicted GPA. The data permitted the assumption of nominal or ordinal measurement to be met and these factors dictated the use of Chi Square to test hypotheses 1, 2, 3, $4,5,6$, and $11 .^{2}$

The type of data needed for comparison of the Threshold group with other members of the Freshman class dictated the use of a $t$ test since the data were collected from two independent samples. These samples were assumed to be from normal distributions and possessing homogeneity of variance, while at the same time yielding at least an interval or ratio level of measurement. Therefore, the Student's test was used to test hypotheses $7,8,9$, and $10 .{ }^{3}$

Significance was set at the . 05 level, 1 tail.
${ }^{2}$ Ferguson, p. 191.
$3^{3}$ Ferguson, pp. 167-168.

## Instrumentation

The standardized instruments used in this study were:

1. The American College Test (ACT) ${ }^{4}$
2. The Tennessee Self Concept Scale (TSCS) ${ }^{5}$

A description and rationale for the selection of these two instruments for this study follows:

## The American College Test

All college freshmen in the state of Oklahoma are required to complete the $A C T$ before being accepted into one of the State's institutions of higher learning. A description of the general purposes of the ACT testing program and the contents of the test is presented below.

The American College Testing Program (ACT) founded in 1959, serves as a central agency for the collection, analysis, processing, and reporting of information for use in educational planning by college-bound students and their parents, high school counselors, college administrators, and educators.

More than 1,300 institutions of higher education participate in the ACT program and the test battery is administered at more than 2,000 test centers located in the 50 states, Canada, Mexico, and overseas.

The major portion of the ACT battery consists of four tests, one each in English, Mathematics, Social Studies, and Natural Sciences. These tests were developed to measure the abilities the students will have to apply in their college course work. The tests are designed to measure the student's
${ }^{4}$ ACT, The American College Testing Program, P.O. Box 168, Iowa City, Iowa, 52240.
${ }^{5}$ TSCS, Counselor Recordings and Tests, P. O. Box 6184, Acklen Station, Nashville, Tennessee, 37212.
ability to perform the kinds of intellectual tasks typically required of college students. Most of the items are concerned with what he has learned; they are not primarily concerned with specific and detailed subject matter. 6
A detailed description of the four tests is included in Appendix B.

## The Tennessee Self Concept Scale (TSCS)

The TSCS was chosen for this study because of its simplicity in dealing with the complex areas of self concept. It is standardized, has broad applicability and is multidimensional in its description of the self concept. It is easy to administer and to score and is published in two forms, the Counseling Form and the Clinical-Research Form. The Counseling Form was chosen for this study because it deals with essential variables which are appropriate for self interpretation and feedback to counselees in the educational setting. Change in self concept is detected by the examination of one Total Positive Score.

The test was standardized initially using a broad sample of 626 people and it is now possible to expand the norm group considerably. The test-retest reliability coefficients of both forms of the test ranges from .80 to . 90 . Tabled data presented in the test manual reveal that most

6 Handbook For Counselors) (Iowa City: American College Testing Program, 1966), pp. 1-2.
of the scores of the TSCS correlate with The Minnesota Multiphasic Personality Inventory (MMPI) in ways one would expect from the nature of the scores. Similar data are presented correlating the TSCS with Edwards Personal Preference Schedule. ${ }^{7}$

A brief description of the test follows:
The TSCS consists of 100 self descriptive statements which the subject uses to portray his own picture of himself. The Scale is self administering for either individuals or groups and can be used with subjects age 12 or higher and having at least a 6 th grade reading level. It is also applicable to the whole range of psychological adjustment from healthy, well adjusted people to psychotic patients. Most subjects complete the Scale in 10 to 20 minutes with the average time being about 13 minutes. 8

A description of the various scales of the test is included in Appendix B.

## Summary

A total of eleven hypotheses were developed from the problem of the study. An ex-post-facto design was chosen which allowed use of existing data from academic records in addition to ACT Composite Scores which were needed to arrive at a Predicted GPA for each student in the sample. Another measure, the Achieved GPA, was obtained from actual grades received by each student at the end of the fall semester.
$7_{\text {Fitts, }}$ (TSCS Manual), p. 24.
$8^{\text {Ibid., p. }} 1$.

Comparative data on the number of dropouts were determined from IBM institutionai rolls.

The population used to obtain data for the study were members of a special services program at the University of Oklahoma entitled Threshold. Statistics employed to test the hypotheses were the Chi Square formula and the Student's test. Significance was set at the .05 level, 1 tail. Instruments used were the American College Test (ACT) and the Tennessee Self Concept Scale. (TSCS).

## CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The purpose of this study was to evaluate the effects of special instruction, tutorial and individual guidance and counseling services afforded a group of minority Freshmen at the University of Oklahoma. This chapter presents data obtained from investigational procedures described in Chapter III which were used for the purpose of testing hypotheses.

A Predicted GPA and an Achieved GPA were recorded for the Fall Threshold group. The data for the Negroes in this group are presented in Table 1.

The data for the Indians and Mexican-Americans in the fall group are recorded in Table 2.

For comparative purposes, the same information was recorded for the summer Threshold group. These data are in Table 3.

Data reflecting the Total Positive Scores on a pre and post test of the Tennessee Self Concept Scale are presented in Table 4.

The racial distribution of the fall Threshold group is presented in Table 5 and the racial distribution of the summer Threshold group is recorded in Table 6.

TABLE 1
NEGROES IN FALL THRESHOLD PROGRAM
RESEARCH DATA


TABLE 2

INDIANS AND MEXICAN-AMERICANS IN FALL THRESHOLD PROGRAM
INDIANS RESEARCH DATA MEXICAN-AMERICANS


TABLE
SIUDENTS IN SUMMER THRESHOLD PROGRAM
RESEARCH DATA

| Student | SEX | RACE | H.S. GPA | ACT COMP | DER. SCORE | ADD CONST | PRED.GPA | $\mathrm{ACH} . \mathrm{GPA}$ | DIF |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| vB | F | N | 1.75 | 12 | 1.55 | -. 52 | 1.03 | 1.17 | $+.14$ |
| LB | F | I | 2.25 | 18 | 2.15 | -. 52 | 1.63 | 2.33 | + . 70 |
| CC | F | I | 2.50 | 17 | 2.21 | -. 52 | 1.69 | 2.60 | +. 91 |
| TI) | M | N | 3.75 | 18 | 2.64 | -. 46 | 2.18 | 1.09 | -1.09 |
| MD | M | N | 3.00 | 19 | 2.36 | -. 46 | 1.90 | 2.57 | $+.67$ |
| HF | M | N | 2.25 | 13 | 1.71 | -. 46 | 1.25 | 2.67 | $+1.42$ |
| IG | F | I | 3.75 | 21 | 3.04 | -. 52 | 2.52 | 1.67 | -. 85 |
| AG | M | N | 1.75 | 17 | 1.70 | -. 46 | 1.24 | 2.21 | +.97 |
| RH | M | N | 2.50 | 15 | 1.93 | -. 46 | 1.47 | 1.75 | -. 28 |
| SJ | F | N | 3.00 | 13 | 2.20 | -. 52 | 1.68 | 2.25 | +. 57 |
| BL | F | N | 2.75 | 11 | 1.97 | -. 52 | 1.45 | 1.71 | + . 26 |
| JN | F | N | 3.00 | 18 | 2.50 | -. 52 | 1.98 | 1.29 | -. 69 |
| RO | F | N | 2.50 | 15 | 2.09 | -. 52 | 1.57 | 1.22 | -. 35 |
| EO | M | I | 1.75 | 21 | 1.92 | -. 46 | 1.46 | 1.33 | -. 13 |
| BP | F | I | 2.25 | 18 | 2.15 | -. 52 | 1.63 | 3.18 | +1.55 |
| MP | F | I | 1.50 | 16 | 1.67 | -. 52 | 1.15 | 1.25 | + . 10 |
| JP | F | I | 3.00 | 18 | 2.50 | -. 52 | 1.98 | 2.00 | + . 02 |
| JR | M | N | 2.00 | 12 | 1.54 | -. 46 | 1.08 | 2.00 | +. 92 |
| JS | M | N | 3.00 | 17 | 2.25 | -. 46 | 1.79 | 2.00 | $+.21$ |
| SS | M | N | 1.50 | 19 | 1.70 | -. 46 | 1.24 | 2.00 | +.76 |
| AW | M | N | 3.25 | 15 | 2.26 | -. 46 | 1.80 | 2.25 | $+.55$ |
| KW | F | I | 3.75 | 19 | 2.92 | -. 52 | 2.40 | 2.25 | -. 15 |
| VW | F | N | 3.75 | 13 | 2.56 | -. 52 | 2.04 | 1.38 | -. 66 |
| $\mathrm{N}=23$ | Totals |  | - $\quad 16.30$ |  | $\overline{\mathrm{x}}$ |  |  |  |  |
|  |  |  | 1.64 | 1.91 |  |  | 1.02 |
|  |  |  |  | 8.11 | ${ }_{S_{S}^{2}} \cdot \mathrm{D} \cdot$ |  | .11 .17 | . .34 | .70 .49 |

TABLE 4
TOTAL POSITIVE SCORES RECORDED ON THE TSCS
RESEARCH DATA

| Student | $\begin{gathered} \text { Pre } \\ \text { tot pos } \end{gathered}$ | $\begin{aligned} & \text { Post } \\ & \text { tot pos } \end{aligned}$ | Dif | Student | $\begin{aligned} & \text { Pre } \\ & \text { tot pos } \end{aligned}$ | Post tot pos | dif. | Student | $\begin{gathered} \text { Pre } \\ \text { tot pos } \end{gathered}$ | $\begin{gathered} \text { Post } \\ \text { tot pos } \end{gathered}$ |  | if |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 101 | 336 | 276 | - 60 | 117 | 346 | 355 | $+9$ | 133 | 324 | 327 | $+$ | 3 |
| 102 | 319 | 331 | + 12 | 118 | 371 | 382 | + 11 | 134 | 325 | 338 | + |  |
| 103 | 346 | 368 | $+22$ | 119 | 328 | 307 | - 21 | 135 | 383 | 357 | - |  |
| 104 | 332 | 298 | - 34 | 120 | 284 | 311 | + 27 | 136 | 344 | 342 | - | 2 |
| 105 | 279 | 325 | + 46 | 121 | 302 | 284 | - 18 | 137 | 277 | 276 | - | 1 |
| 106 | 366 | 286 | -80 | 351 | 351 | 361 | + 10 | 138 | 319 | 321 | + | 2 |
| 107 | 410 | 360 | - 50 | 123 | 358 | 341 | - 17 | 139 | 373 | 337 | - |  |
| 108 | 359 | 373 | + 14 | 124 | 312 | 323 | + 11 | 140 | 342 | 327 | - |  |
| 109 | 317 | 322 | + 5 | 125 | 284 | 293 | $+\quad 9$ | 141 | 362 | 322 | - | 40 |
| 110 | 334 | 309 | - 25 | 126 | 308 | 295 | - 13 | 142 | 388 | 400 | + |  |
| 111 | 290 | 266 | - 24 | 127 | 310 | 314 | +4 +4 | 143 | 330 | 312 | - | 18 |
| 112 | 311 | 285 | - 26 | 128 | 344 | 319 | - 25 | 144 | 278 | 322 | + |  |
| 113 | 309 | 305 | - 4 | 129 | 308 | 301 | - 7 | 145 | 336 | 328 | - | 8 |
| 114 | 387 | 387 | 0 | 13 C | 341 | 363 | $+22$ | 146 | 328 | 305 | - |  |
| 115 | 343 | 309 | $-34$ | 132 | 386 | 360 | - 26 | 147 | 378 | 342 |  |  |
| 116 | 306 | 321 | + 15 | 132 | 368 | 340 | - 28 | 148 | 349 | 347 | - |  |
|  |  |  |  |  |  |  |  | 149 | 297 | 306 | + |  |
|  |  |  |  |  |  |  |  | 150 | 328 | 290 |  |  |

TABLE 5

> RACIAL DISTRIBUTION FALL THRESHOLD GROUP

| Sex | , | Negro | ' | Indian | ' | Mexican-American |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ' |  | $\cdots$ |  | ' |  |
| Male | , | 13 | , | 10 | , | 4 |
| Female | , | 22 | ' | 6 | ' | 1 |
|  | , |  | , |  | , |  |
| Total | , | 35 | , | 16 | , | 5 |

TABLE 6
RACIAL DISTRIBUTION SUMMER THRESHOLD GROUP

| Sex | ', | Negro | ' | Indian | ', | Mexican-American |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ' |  | 1 |  | 1 |  |
| Male | , | 9 | , | 1 | , | 0 |
| Female | , | 6 | ' | 7 | 1 | 0 |
|  | ' |  | , |  | 1 |  |
| Total | ' | 15 | , | 8 | , | 0 |

TABLE 7
FALL THRESHOLD GROUP MEANS


Group Means for the ACT Composite, the Predicted GPA and the Achieved GPA for the Fall group are recorded in Table 7. Similar data on the Summer group is recorded in Table 8.

TABLE 8
Summer Threshold Group Means

| Mean <br> ACT Composite | , | Mean Predicted GPA | , | Mean <br> Achieved GPA |
| :---: | :---: | :---: | :---: | :---: |
| GROUP $\overline{\mathrm{X}}=16.304$ |  | $\overline{\mathrm{X}}=1.6412$ |  | $\overline{\mathrm{X}}=1.9108$ |

Testing The Hypotheses
$\mathrm{H}_{\mathrm{O} 1}-$ There will be no statistically significant difference in the number of students who achieve above their Predicted GPA and those who achieve below their Predicted GPA.

The data used to test this hypothesis are found in
Table 9 below.
TABLE 9
Threshold Students Who Achieved Above
Or Below Predicted GPA

|  | Number Achieving <br> Above <br> Predicted GPA | Number Achieving <br> Below |
| :---: | :---: | :---: | :---: |
| $\mathrm{N}=56$ | 40 | Predicted GPA |

Application of the Chi Square formula indicates differences to be statistically significant at the . 001 level between
those who achieved above their Predicted GPA ( $N=40$ ) and those who achieved a GPA below what was predicted for them ( $\mathrm{N}=16$ ). $\mathrm{H}_{01}$ is rejected.
$\mathrm{H}_{\mathrm{O} 2}-$ There will be no statistically significant difference in the number of female Threshold students who achieve above their predicted GPA and male Threshold students who achieve above their predicted GPA.

The data used to test this hypothesis are presented in table 10 below.

TABLE 10

Threshold Males And Females Who Achieved Above Or Below Predicted GPA


Application of the Chi Square formula indicates that the number of females who achieved above predicted GPA when compared to males who achieved above predicted GPA was not statistically significant. $\mathrm{H}_{\mathrm{O} 2}$ is accepted.
$\mathrm{H}_{\mathrm{O} 3}-$ There will be no statistically significant difference in the number of Negro Threshold students who achieve above their predicted GPA and Indian Threshold students who achieve above their predicted GPA.

The data used to test this hypothesis are found in table 11 below.

TABLE 11
Threshold Negroes And Indians Who Achieved Above Or Below Predicted GPA

| Group | Number Who <br> Achieved Above:, | Number Who <br> Achieved Below |  |
| :---: | :---: | :---: | :---: |
| Negroes $(N=35)$ | 28 | 7 | 7 |
| Indians $(N=16)$ | 9 | 7 | 7 |
| $\left(\boldsymbol{X}^{2}\right)=4.6413 \quad P<.05$ |  |  |  |

Application of the Chi Square formula indicates these differences to be statistically significant at the .05 level and that there was a sufficient number of Negroes who achieved above their predicted GPA when compared to Indians who achieved above their predicted GPA to reject $\mathrm{H}_{\mathrm{O} 3}$ -
$\mathrm{H}_{04}$--There will be no statistically significant difference in the number of Negro Threshold students who achieve above their Predicted GPA and Mexican-Americans who achieve above their predicted GPA.

The data used to test this hypothesis are found in Table 12 below.

TABLE 12
Threshold Negroes And Mexican-Americans Who Achieved Above Or Below Predicted GPA


Application of the Chi Square formula indicates these differences are not statistically significant when comparing Threshold Negroes who achieved above predicted GPA with MexicanAmerican Americans who achieved above their predicted GPA. $\mathrm{H}_{04}$ is accepted.
$\mathrm{H}_{05}$--There will be no statistically significant difference in the number of Indian Threshold students who achieve above predicted GPA and Mexican-American Threshold students who achieve above their predicted GPA.

The data used to test this hypothesis are found in Table 13 below.

TABLE 13
Threshold Indians And Mexican-Americans Who
Achieved Above Or Below Predicted GPA

| Group |  | Number Achieved | Who Above' | Number <br> Achieved | Who Below |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Indians ( $\mathrm{N}=16$ ) |  | 9 | , | 7 |  |
| Mexican-Americans ( $\mathrm{N}=5$ ) | , | 3 | , | 2 |  |

Application of the Chi Square formula indicates these differences are not statistically significant when comparing Threshold Indians who achieved above predicted GPA with Threshold Mexican-Americans who achieved above their predicted GPA. $\mathrm{H}_{05}$ is accepted.
$\mathrm{H}_{06}-$ There will be no statistically significant difference in the percentage of Fall Threshold students who achieve above their predicted GPA and the number of Summer Threshold students who achieve above their predicted GPA.

The data used to test this hypothesis are found in

Table 14 below.
TABLE 14
Threshold Fall And Summer Students Who Achieved Above Or Below Predicted GPA

$\left(x^{2}\right)=0.364 ; \mathrm{df}=\mathrm{df}=1: \mathrm{P} \longrightarrow .05$

Application of the Chi Square formula indicates these differences are not statistically significant when comparing Threshold students in the fall program with Threshold students in the summer program who achieved above predicted GPA。 H06 is accepted.
$\mathrm{H}_{0} 7^{--T h e r e}$ will be no statistically significant difference in the percentage of Threshold students who achieve below 1.4 GPA and the percentage of students in the freshman class, with ACT composite scores of 16 , or below, who achieve below 1.4 GPA.

The data used to test this hypothesis are found in Table 15 below.

TABLE 15
Percentage Of Thireshold And Freshman Class Students Who Achieved Below 1.4 GPA

$t=6.84 ; \mathrm{df}=228: \mathrm{P}<.005$
Application of the Student $t$ test formula indicates the differences to be statistically significant beyond the . 005 level when comparing the percentage of Threshold students who achieved a GPA below 1.4 with the percentage of freshman class students with ACT composite scores of 16 or below who achieved a GPA below 1.4. We reject $\mathrm{H}_{07}$.
$\mathrm{H}_{08}{ }^{--T h e r e}$ will be no statistically significant difference in the percentage of dropouts of Threshold students and the percentage of dropouts in the entire freshman class at the end of the fall semester.

The data used to test this hypothesis are found in Table 16 below.

TABLE 16

Percentage Of Threshold And Freshman Class Dropouts

| Group | Total | ', | Total Dropouts |  | Percentage Of Dropouts |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Threshold | 95 | , | 7 | ' | 7.36942 |
|  |  | , |  | ' |  |
| Freshman | 3655 | ', | 379 | , | 10.36842 |
|  |  | , |  | , |  |

$t=2.36 ; \mathrm{df}-3,748: \mathrm{P} \longleftarrow .05$.

Application of the Student $t$ test formula indicates the differences to be statistically significant at the . 05 level when comparing the percentage of University freshmen who dropped out of school at the end of fall semester and the percentage of Threshold students who dropped out at the end of the fall semester. $H_{08}$ is rejected.
$\mathrm{H}_{0}$--There $^{-}$will be no statistically significant difference in the percentage of Threshold females who drop out at the end of the fall semester, and the percentage of freshman females, not in Threshold, whose ACT Composite is 16 , or below, who drop out at the end of the fall semester.

The data used to test this hypothesis are found in Table 17 below.

TABLE 17

## Percentage Of Threshold And Freshman <br> Class Female Dropouts

| Group | ' | Total | ' | Total | Dropouts | ' | Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ' |  | , |  |  | , |  |
| Threshold | ' | 29 | , |  | 4 | ' | 13.79 |
| Freshman | ' | 96 | , |  | 20 |  | 20.833 |
|  | , |  | ' |  |  | , |  |

$t=5.5469 ; \mathrm{df}=123: \mathrm{P}<.001$

Application of the Student $t$ test formula indicates the differences to be statistically significant at the . 001 level when the percentage of female Threshold students who dropped out at the end of the fall semester is compared to the percentage of female freshman students with ACT Composite scores of 16 , or below, who dropped out at the end of the fall semester, We reject $\mathrm{H}_{09}$.
$\mathrm{H}_{010}$--There will be no statistically significant difference in the percentage of Threshold males who drop out at the end of the fall semester, and the percentage of freshman males, not in Threshold, whose ACT Composite is 16 , or below, who drop out at the end of the fall semester.

The data used to test this hypothesis are found in
Table 18 below,

TABLE 18

# Percentage of Threshold And Freshman <br> Class Male Dropouts 

| Group | ' | Total | 1 | Total | Dropouts | 1 | Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | , |  | ' |  |  |  |  |
|  | , |  | , |  |  | , |  |
|  | , |  | ' |  |  | ' |  |
| Threshold | ' | 27 | ' |  | 3 | ' | 11.1111 |
|  | , |  | ' |  |  | , |  |
| Freshman | , | 72 | 1 |  | 10 | ' | 13.8889 |
|  | , |  | , |  |  | , |  |

$$
t=2.4681 ; \mathrm{df}=97: \quad \mathrm{P}=.05
$$

Application of the Student $t$ test formula indicates the differences to be statistically significant at the . 05 level when comparing the percentage of Threshold males who dropped out at the end of the fall semester with the percentage of freshman males with ACT composite scores of 16 , or below, who dropped out at the end of the fall semester. We reject $\mathrm{H}_{\mathrm{O} 10}$.
$\mathrm{H}_{011}$--There will be no statistically significant relationship between changes in self concept of Threshold students, as measured on pre-post tests of the Tennessee Self Concept Scale and changes in their academic achievement during fall semester.

The data used to test this hypothesis are found in
Table 19 below.

Relation of Negative And Positive Changes In Concept To Changes In Predicted GPA


Analysis of Table 19 Data:
Those students ( $\mathrm{N}=3$ ) in cell 1 achieved higher than was predicted for them but showed a negative change in self concept.

Those students $(N=18)$ in cell 2 achieved higher than was predicted for them and showed positive change in self concept.

Those students $(N=12)$ in cell 3 achieved lower than was predicted for them and also showed negative change in self concept.

Those students ( $N=17$ ) achieved lower than was predicted on GPA but showed positive change in self concept.

Application of the Chi Square formula indicates these differences to be statistically significant at the .05 level and show that a significant relationship exists between the direction of change in attitude about "self" and the direction of achievement from the predicted GPA. We reject $H_{011}$.

## Summary

This chapter described the methods of obtaining the research data and presented tabulated results of procedures presented in Chapter III. Additional analysis of the data was also presented.

Samples consisted of a Fall Threshold group totaling 56 students. It was made up of 29 females and 27 males. Ethnic classifications were: 35 Negroes, 16 Indians and 5 Mexican-Americans. A Summer Threshold group totaling 23 students contained 13 females and 10 males. The ethnic classifications were 15 Negroes and 8 Indians.

A total of 50 pre and post test samples of the Tennessee Self Concept Scale was collected from Threshold students in the fall program. A comparison of the total positive scale scores on this test was made with changes which occured in predicted and achieved GPA for each student.

A total of 11 hypotheses were tested using either the Chi Square or the Student $t$ statistical formula. Level of significance was set at .05 level. Of the 11 hypotheses tested, 7 were rejected and 4 were accepted.

CHAPTER V<br>SUMMARY, FINDINGS, CONCLUSIONS,<br>AND RECOMMENDATIONS

## Summary

The purpose of this study was to evaluate the effects of special instruction, tutorial and individual and guidance and counseling services afforded a group of minority Freshmen at the University of Oklahoma. Answers to the following questions were sought:

1. Do minimally prepared students achieve above predicted grade point averages (GPA) when given special instructional, tutorial, and guidance services?
2. Are there significant differences in achievement among minority sub-groups of Negroes, Indians and Mexican-Americans who participate in these special services?
3. Do significant changes occur in individual self concept of minority students who have received special instructional, tutorial and guidance services?

The need for the study arose from a desire for improved techniques in evaluating the procedures being utilized to help minority students succeed in college. The purpose was to provide evidence to determine the feasibility of programs such as Threshold for reducing dropouts among minorities.

The review of research and related literature revealed some of the problems faced by college admissions offices. The increase in numbers of minority students on many campuses has caused existing policies to be re-evaluated. Many colleges have initiated special service programs similar to the one dealt with in this study. Literature and research studies involving academic achievement among minority students provided a rationale for offering academic assistance to this type of student.

The importance of psycho-sociological factors involved in self esteem were emphasized as contributing factors in achievement of minority students. Research studies contributed to the justification for existing programs and for the development of new, more broader experiments in learning for minorities.

The population consisted of students who were members of a special services program at the University of Oklahoma. The group totaled 56 students and was made up of Negroes, Indians and Mexican-Americans.

A total of eleven (11) null hypotheses were derived
from the problem of the study.
Statistical treatment of the data through the use of the Chi Square and Student's $t$ Formulas enabled the rejection of seven (7) and the acceptance of four (4) of the hypotheses.

Instruments used in this study were the American College Test (ACT) and the Tennessee Self Concept Scale (TSCS). The ACT was used to provide academic information about the students and the TSCS provided individual measures of self esteem.

## Findings

An analysis of the data produced the following findings:

1. There were significant numbers of Threshold students who achieved above the level that had been predicted for them.
2. There was no significant difference in the number of female and male students who achieved above the level that had been predicted for them.
3. There was a significant difference in the number of Negroes whs achieved above predicted GPA when compared to Indians who achieved above predicted GPA.
4. There was no significant difference in the number of Negroes who achieved above predicted GPA when compared with the number of Mexican-Americans who achieved above their
predicted GPA.
5. There was no significant difference in the number of Indians who achieved above their predicted GPA and the number of Mexican-Americans who achieved above their predicted GPA.
6. Comparison of a group of minorities who received a summer's college experience with those who started in the fall showed no significant difference in the number of students who achieved above their predicted GPA.
7. Comparison of Threshold students with a sample of regular freshman students with like ACT Composite Scores revealed that the Threshold group achieved significantly better academically.
8. Comparison of dropout rates of the Threshold group with the regular freshman class showed significantly fewer dropouts among the Threshold students at the end of the fall semester.
9. A comparison of female dropouts from Threshold with female dropouts from the regular freshman class showed a significantly smaller proportion of Threshold female students who dropped out at the end of the fall semester.
10. Comparison of dropout rates of the males in Threshold with those males in the regular freshman class showed a significantly smaller proportion of Threshold male students who dropped out at the end of the fall semester.
11. Based on the Total Positive Scores of the Tennessee

Self Concept Scale, there was a statistically significant relationship between the direction of change in self esteem and the direction of GPA achievement.

## Conclusions

The following conclusions were drawn from the findings of this study:

1. Students who are potential dropouts from college can be kept from academic fāilure if given special educational and supportive services such as those provided in Threshold at the University of Oklahoma.
2. Minority and low income students who are minimally prepared for college can achieve significantly higher Grade Point Averages than what had been predicted for them when afforded special instruction, tutorial and guidance services.
3. Significant psycho-sociological changes occur among minorities when they are given special educational and supportive services which affect their academic achievement.

## Recommendations

The findings and conclusions of this study support the following recommendations:

1. A follow-up study should be made on the students in Threshold to test the influence of the program
beyond the freshman year.
2. A resear=h study using a control group of matched samples would provide additional data for evaluating methods and techniques used in special service programs like Threshold.
3. Comparative studies of similar projects on other campuses could offer additional valuable data。
4. Although a statistically significant number of students in this study achieved at a higher level in college than was predicted for them, it is not known which of the supportive services, if any, contributed most to the individual's achievement. A combination of special instruction, tutorial services or individual guidance may have provided the motivation needed to produce significant results. On the other hand, maturation factors may have been the deciding cause for the increases. Research designed to test the effectiveness of the various services within such programs is needed to maximize the techniques now being used.
5. Comparisons of academic progress based on subjective criteria such as teacher assigned grades leaves the student's achievement subject to value judgements of individual instructors. This limitation, which is common to most achievement studies, could have been a determining factor in whether a student achieved above or
below what had been predicted for him. Additional research controlling this variable is suggested.
6. The impact of the sociological factors experienced by minorities on a predominantly white university campus were not conclusive in this study. Although it was established that a significant relationship exists in the way a minority student perceives himself and the way he performs academically, it was not determined if the direction of positive change was a result of the services rendered in the program, or to maturation factors, or to increases in 'test-wiseness.' Conversely, it was not determined if drops in achievement and in self esteem were due to a lack of better supportative services, individual motivation, or the failure of the student to avail himsein of the services provided. Additional studies designed to test the significance of affective factors as they contribute to achievement among minorities are recommended.

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APPENDICES

## APPENDIX A

## HIGH SCHOOL AVERAGE CHART

High School Grades HSA
AAAA
4.00

AAAB 3.75
AAAC; AABB 3.50
AAAD; AABC; ABBB 3.25
AAAF; AACC; AABD; ABBC; BBBB 3.00
AABF; AACD; ABBD; ABCC; BBBC 2.75
AACF; AADD; ABBF; ABCD; ACCC; BBBD; BBCC 2.50
AADF; ABCF; ABDD; ACCD; BBBF; BBCD; BCCC 2.25
AAFF; ABDF; ACCF; ACDD; BBCF; BBDD; BCCD; CCCC 2.00
ABFF; ACDF; ADDD; BBDF; BCCF; BCDD; CCCD 1.75
ACFF; ADDF; BBFF; BDDD; BCDF; CCCF; CCDD 1.50
ADFF; BCFF; BDDF; CCDF; CDDD 1.25
AFFF; BDFF; CCFF; CDDF; DDDD 1.00
BFFF: CDFF; DDDF 0.75
CFFF; DDFF 0.50
DFFF 0.25
FFFF 0.00

Procedures: From the student's transcript, determine his most recent term grade, prior to his senior year, in English, mathematics, social studies and natural science. Then from the chart determine his HSA.

GRADE PREDICTION FOR MEN
High School Average (HSA)
A-1

|  |  | 4.00 | 3.75 | 3.50 | 3.25 | 3.00 | 2.75 | 2.50 | 2.25 | 2.00 | 1.75 | 1.50 | 1.25 | 1.00 | 0.75 | 0.50 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 20 | 2.86 | 2.75 | 2.64 | 2.53 | 2.41 | 2.31 | 2.20 | 2.09 | 1.98 | 1.87 | 1.75 | 1.64 | 1.53 | 1.42 | 1.31 |
| C | 19 | 2.81 | 2.70 | 2.59 | 2.48 | 2. 36 | 2.25 | 2.14 | 2.03 | 1.92 | 1.81 | 1.70 | 1.59 | 1.48 | 1.37 | 1.26 |
| T | 18 | 2.76 | 2.64 | 2.53 | 2.42 | 2.30 | 2.20 | 2.09 | 1.98 | 1.87 | 1.76 | 1.65 | 1.53 | 1.42 | 1.31 | 1.20 |
|  | 17 | 2.70 | 2.59 | 2.48 | 2.25 | 2.15 | 2.03 | 1.92 | 1.81 | 1.70 | 1.59 | 1.48 | 1.37 | 1.26 | 1.15 | 1.04 |
| C | 16 | 2.65 | 2.54 | 2.42 | 2.31 | 2.19 | 2.09 | 1.98 | 1.87 | 1.76 | 1.65 | 1.54 | 1.43 | 1.31 | 1.20 | 1.09 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P | 15 | 2.59 | 2.48 | 2. 37 | 2.26 | 2.14 | 2.04 | 1.93 | 1.82 | 1.70 | 1.59 | 1.48 | 1.37 | 1.26 | 1.15 | 1.04 |
| 0 | 14 | 2.54 | 2.43 | 2.32 | 2.20 | 2.08 | 1.98 | 1.87 | 1.76 | 1.65 | 1.54 | 1.43 | 1.32 | 1.21 | 1.09 | 0.98 |
| S | 13 | 2.48 | 2.37 | 2.26 | 2. 15 | 2.03 | 1.93 | 1.82 | 1.71 | 1.60 | 1.48 | 1.37 | 1.26 | 1.15 | 1.04 | 0.93 |
| I | 12 | 2.43 | 2.32 | 2.21 | 2.10 | 1.98 | 1.87 | 1.76 | 1.65 | 1.54 | 1.43 | 1.32 | 1.21 | 1.10 | 0.99 | 0.87 |
| T | 11 | 2.37 | 2.26 | 2.15 | 2.04 | 1.92 | 1.82 | 1.71 | 1.60 | 1.49 | 1.38 | 1.27 | 1.15 | 1.04 | 0.93 | 0.82 |
| E |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S | 10 | 2. 32 | 2.21 | 2.10 | 1.99 | 1.87 | 1.77 | 1.65 | 1.54 | 1.43 | 1.32 | 1.21 | 1.10 | 0.99 | 0.88 | 0.77 |
| C | 9 | 2.27 | 2.16 | 2.04 | 1.93 | 1.81 | 1.71 | 1.60 | 1.49 | 1.38 | 1.27 | 1. 16 | 1.04 | 0.93 | 0.82 | 0.71 |
| 0 | 8 | 2.21 | 2.10 | 1.99 | 1.88 | 1.76 | 1.66 | 1.55 | 1.44 | 1.32 | 1.21 | 1.10 | 0.99 | 0.88 | 0.77 | 0.66 |
| R | 7 | 2.16 | 2.05 | 1.93 | 1.82 | 2.70 | 1.60 | 1.49 | 1.38 | 1.27 | 1.16 | 1.05 | 0.94 | 0.83 | 0.71 | 0.60 |
| E | 6 | 2. 10 | 1.99 | 1.88 | 1.77 | 1.65 | 1.55 | 1.44 | 1.33 | 1.21 | 1. 10 | 0.99 | 0.88 | 0.77 | 0.66 | 0.55 |

Procedure. Find the student's HSA in one of the columns across the top; then find his ACT Composite in one of the rows down the side. The "derived score" for the student is given in the cell where this row and column intersect. Add the college constant (-.46) to the "derived score" to obtain the predicted Grade Point Average (GPA) for men at the University of Oklahoma.

## GRADE PREDICTTON FOR WOMEN

> High School Average (HSA)

|  |  | 4.00 | 3.75 | 3.50 | 3.25 | 3.00 | 2.75 | 2.50 | 2.25 | 2.00 | 1.75 | 1.50 | 1.25 | 1.00 | 0.75 | 0.50 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| C | 20 | 3.10 | 2.98 | 2.86 | 2.74 | 2.62 | 2.51 | 2.39 | 2.27 | 2.15 | 2.03 | 1.91 | 1.79 | 1.67 | 1. 56 | 1.44 |
| T | 19 | 3.04 | 2.92 | 2.80 | 2.68 | 2.56 | 2.45 | 2.33 | 2.21 | 2.09 | 1.97 | 1.85 | 1.73 | 1.61 | 1.50 | 1.38 |
|  | 18 | 2.98 | 2.86 | 2.74 | 2.62 | 2.50 | 2.39 | 2.27 | 2.15 | 2.03 | 1.91 | 1.79 | 1.67 | 1.55 | 1.44 | 1.32 |
| C | 17 | 2.92 | 2.80 | 2.68 | 2.56 | 2.44 | 2.33 | 2.21 | 2.09 | 1.97 | 1.85 | 1.73 | 1.61 | 1.49 | 1.38 | 1.26 |
| 0 | 16 | 2.86 | 2.74 | 2.62 | 2.50 | 2.38 | 2.27 | 2.15 | 2.03 | 1.91 | 1.79 | 1.67 | 1.55 | 1.43 | 1.32 | 1.20 |
| M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 15 | 2.80 | 2.68 | 2.56 | 2.44 | 2. 32 | 2.21 | 2.09 | 1.97 | 1.85 | 1.73 | 1.61 | 1.49 | 1.37 | 1.26 | 1.14 |
| S | 14 | 2.74 | 2.62 | 2.50 | 2. 38 | 2.26 | 2.15 | 2.03 | 1.91 | 1.79 | 1.67 | 1.55 | 1.43 | 1.31 | 1.20 | 1.08 |
| I | 13 | 2.70 | 2. 56 | 2.44 | 2.32 | 2.20 | 2.09 | 1.97 | 1.85 | 1.73 | 1.61 | 1.49 | 1.37 | 1.25 | 1.14 | 1.02 |
| T | 12 | 2.62 | 2.50 | 2. 38 | 2.26 | 2.14 | 2.03 | 1.91 | 1.79 | 1.67 | 1.55 | 1.43 | 1.31 | 1.19 | 1.08 | 0.96 |
| E | 11 | 2.56 | 2.44 | 2.32 | 2.20 | 2.08 | 1.97 | 1.85 | 1.73 | 1.61 | 1.49 | 1.37 | 1.25 | 1.13 | 1.02 | 0.90 |
| S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| C | 10 | 2.50 | 2.38 | 2.26 | 2.14 | 2.02 | 1.91 | 1.79 | 1.67 | 1.55 | 1.43 | 1.31 | 1. 19 | 1.07 | 0.96 | 0.84 |
| 0 | 9 | 2.44 | 2.32 | 2.20 | 2.08 | 1.96 | 1.85 | 1.73 | 1.61 | 1.49 | 1.37 | 1.25 | 1.13 | 1.01 | 0.90 | 0.78 |
| R | 8 | 2.38 | 2.26 | 2.14 | 2.02 | 1.90 | 1.79 | 1.67 | 1.55 | 1.43 | 1.31 | 1.19 | 1.07 | 0.96 | 0.84 | 0.72 |
| E | 7 | 2.32 | 2.20 | 2.08 | 1.96 | 1.84 | 1.73 | 1.61 | 1.49 | 1.37 | 1.25 | 1.13 | 1.01 | 0.90 | 0.78 | 0.66 |
|  | 6 | 2.26 | 2. 14 | 2.02 | 1.90 | 1.78 | 1.67 | 1.55 | 1.43 | 1.31 | 1.19 | 1.07 | 0.95 | 0.84 | 0.72 | 0.60 |

Procedure. Find the student's HSA in one of the columns across the top; then find his ACT Composite in one of the rows down the side. The "derived score" for the student is given in the cell where this row and column intersect. Add the college constant ( -.52 ) to the "derived score" to obtain the predicted Grade Point Average (GPA) for women at the University of Oklahoma.

## ACT Composite Means and Regression Constants

For 985 Four-Year Colleges*

Oklahoma Colleges Section

| College Name | $\frac{\text { Predicted Measure }}{\text { ACT Comp. Mean }}$ | Constant |  |
| :---: | :---: | :---: | :---: |
|  | Interval | Men | Women |
| Bethany Nazarene | 18.1-21.1 | -. 15 | -. 19 |
| Central State Univ. | 16.6-19.7 | -. 22 | - . 24 |
| East Central State | 17.1-20.2 | -. 13 | - . 16 |
| Langston Univ. | 14.4-17.5 | -. 03 | -. 05 |
| Northeastern State | 16.7-19.8 | -. 15 | -. 17 |
| Northwestern State | 18.1-21.1 | - . 12 | -. 15 |
| Okla. Baptist Univ. | 19.3-22.4 | -. 24 | - . 28 |
| Okla. City Univ. | 21.1-24.2 | -. 44 | -. 49 |
| Okla.Col. Lib. Arts | 14.3-17.4 | -. 20 | -. 22 |
| Okla. State Univ. | 20.2-23.3 | -. 43 | -. 48 |
| Panhandle State | 16.3-19.4 | -. 13 | -. 15 |
| Phillips Univ. | 19.5-22.6 | - . 20 | -. 24 |
| Southeastern State | 16.4-19.4 | - . 06 | -. 08 |
| Southwestern State | 18.2-21.3 | -. 27 | -. 30 |
| UNIV. OF OKLAHOMA | 21.0-24.1 | -. . 46 | -. 52 |
| Univ. of Tulsa | 19.9-23.0 | -. 35 | -. 40 |

* ACT Research Report No. 27. 1968.
** Predicted mean $\pm 1$ Standard Error of Estimate


## APPENDIX B


#### Abstract

The American College Test Battery consists of four tests. They are the English Usage, Mathematics Usage, Social Studies Reading and Natural Sciences Reading examinations. A description of each follows:


## English Usage

This examination consists of an 80 item, 40 minute test that measures the student's understanding and use of the basic elements in correct and effective writing, punctuation, capitalization, usage, phraseology, style, and organization.

Mathematics Usage
This examination consists of a 40 item, 50 minute test that measures the student's mathematical reasoning ability. This test emphasizes the solution of practical quantitative problems that are encountered in many college curricula. It includes a sampling of mathematical techniques covered in high school courses.

## Social Studies Reading

This examination consists of a 52 item, 35 minute test designed to measure the evaluative reasoning and problem-solving skills required in the social studies.

It measures the student's comprehension of reading passages taken from typical social studies materials. It also contains a few items that test his understanding of basic concepts, knowledge of sources of information, and knowledge of special study skills needed in college work in the social studies.

## Natural Sciences Reading

This examination consists of a 52 item, 35 minute test that measures the critical reasoning and problem solving skills required in the natural sciences. Emphasis is placed on the formulation and testing of hypotheses and the evaluation of reports of scientific experiments.
("Using ACT in Secondary Schoois" A Handibook for Counselors. The American College Testing Program, Iowa City, Iowa.)

## THE TENNESSEE SELF CONCEPT SCALE

## Nature And Meaning of Scores (Counseling Form)

A. The Self Criticism Score (SC) This scale is composed of 10 items. These are all mildly derogatory statements that most people admit as being true for them. Individuals who deny most of these statements most often are being defensive and making a deliberate effort to present a favorable picture of themselves. High scores generally indicate a normal, healthy openness and capacity for self-criticism. Extremely high scores (above the 99 th percentile) indicate that the individual may be lacking in defenses and may, in fact, be pathologically undefended. Low scores indicate defensiveness, and suggest that the Positive Scores are probably artificially elevated by this defensiveness.
B. The Positive Scores These statements convey three primary messages: (1) This is what I am; (2) This is how I feel about myself, and (3) This is what I do. The total positive scores derived directly from a classification scheme used in scoring the test represent an internal frame of reference within which the individual is describing himself. Additional item analysis during standardization procedures permitted further distribution and pooling of items allowing the entire set of items to be divided both vertically and horizontally. The vertical columns forming the external frame of reference and the horizontal rows forming the internal frame of reference of statements such as what I am physically, morally, socially, etc.

1. Total Positive ( P ) Score; This is the most important single score on the Counseling Form. It reflects the overall level of self esteem. Persons with high scores tend to like themselves, feel that they are persons of value and worth, have confidence in themselves, and act accordingly. People with low scores are doubtful about their own worth; see themselves as undesirable; often feel anxious, depressed, and unhappy; and have little faith or confidence in themselves.
2. Identity Scale Score: These are the "what I am" items. Here the individual is describing his basic identity, what he is as he sees himself.
3. Self-Satisfaction Scale Scores: This score comes from those items where the individual describes how he feels about the self he perceives. In general this score reflects the level of selfsatisfaction or self-acceptance.
4. Rehevior Scale Scores: This score comes from those items that say "this is what I do, or this is the way I act." This score measures the individual's perception of his own behavior or the way he functions.
5. Physical Self Scale Scores: Here the individual is presenting his view of his body, his state of health, his physical appearance, skills, and sexuality.
6. Moral-Ethical Self Scale Scores: This score describes the self from a moral-ethical frame of reference such as moral worth, relationship to God, feelings of being a "good" or "bad" person, and satisfaction with one's religion or lack of it.
7. Personal Self Scale Scores: This score reflects the individual's sense of personal worth, his feeling of adequacy as a person and his evaluation of his personality apart from his body or his relationships to others.
8. Family Self Scale Scores: This score reflects one's feelings of adequacy, worth, and value as a family member. It refers to the individual's perception of seli in reference to his closest and most immediate circle of associates.
9. Social Self Scale Scores: This is another "self as perceived in relation to others" category but pertains to "others" in a more general way. It reflects the person's sense of adequacy and worth in his social interaction with other people in general.

In addition there is a Variability Score which provides a simple measure of the amount of variability, or inconsistency, from one area to another. Also a Distribution score which summarizes the way the testee distributes his answers across the five available choices. Finally there is a Time Score which indicates a general ability of sufficient education, intelligence, and reading ability to handle the task of writing the test. Average time is less than 20 minutes.

# TENNESSEE SELF CONCEPT SCALE 

William H. Fitts, PhD.

## Instructions

On the top line of the separate answer sheet, fill in your name and the other information except for the time information in the last three boxes. You will fill these boxes in later. Write only on the answer sheet. Do not put any marks in this booklet.

The statements in this booklet are to help you describe yourself as you see yourself. Please respond to them as if you were describing yourself to yourself. Do not omit any item! Read each statement carefully; then select one of the five responses listed below. On your answer sheet, put a circle around the response you chose. If you want to change an answer after you have circled it, do not erase it but put an $X$ mark through the response and then circle the response you want.

When you are ready to start, find the box on your answer sheet marked time started and record the time. When you are finished, record the time finished in the box on your answer sheet marked time finished.

As you start, be sure that your answer sheet and this booklet are lined up evenly so that the item numbers match each other.

Remember, put a circle around the response number you have chosen for each statement.

Responses:

| Completely | Mostly | Partly false Mostly | Completely |  |
| :---: | :---: | :---: | :---: | :---: |
| false | false | and | true | true |


| 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- |

You will find these response numbers repeated at the bottom of each page to help you remember them.
83The Tennessee Self Concept Scale (Fitts) Page 1 No.

1. I have a healthy body ..... 1
2. I am an attractive person ..... 3
3. I consider myself a sloppy person ..... 5
4. I am a decent sort of person. ..... 15
5. I am an honest person ..... 21
6. I am a bad person ..... 23
7. I am a cheerful person. ..... 37
8. I am a calm and easy going person ..... 39
9. I am a nobody ..... 41
10. I have a family that would always help me in any kind of trouble. ..... 55
11. I am a member of a happy family ..... 57
12. My friends have no confidence in me ..... 59
13. I am a friendly person. ..... 73
14. I am popular with men ..... 75
15. I am not interested in what other people do ..... 77
16. I do not always tell the truth. ..... シ1
17. I get angry sometimes ..... 93
18. I like to look nice and neat all the time ..... 2
19. I am full of aches and pains. ..... 4
20. I am a sick person. ..... 6
21. I am a religious person ..... 20
22. I am a moral failure. ..... 22
23. I am a morally weaik person. ..... 24
24. I have a lot of self-control ..... 38
Item No.
25. I am a hateful person ..... 40
26. I am losing my mind ..... 42
27. I am an important person to my friends and family ..... 56
28. I am not loved by my family ..... 58
29. I feel that my family doesn't trust me ..... 60
30. I am popular with women ..... 74
31. I am mad at the whole world ..... 76
32. I am hard to be friendly with ..... 78
33. Once in a while I think of things too bad to talk about ..... 92
34. Sometimes, when I am not feeling well, I am cross ..... 94
35. I am neither too fat nor too thin ..... 7
36. I like my looks just the way they are ..... 9
37. I would like to change some parts of my body. ..... 11
38. I am satisfied with my moral behavior ..... 25
39. I am satisfied with my relationship to God. ..... 27
40. I ought to go to church more. ..... 29
41. I am satisfied to be just what I am ..... 43
42. I am just as nice as I should be ..... 45
43. I despise myself. ..... 47
44. I am satisfied with my family relationships ..... 61
45. I urderstand my family as well as I should. ..... 63
46. I should trust my family more ..... 65
47. I am as sociable as $I$ want to be ..... 79
48. I try to please others, but I don't overdo it ..... 81
Item
49. I am no good at all from a social standpoint ..... 83
50. I do not like everyone I know ..... 95
51. Once in a while, I laugh at a dirty joke. ..... 97
52. I am neither too tall nor too short ..... 8
53. I don't feel as well as I should. ..... 10
54. I should have more sex appeal ..... 12
55. I am as religious as $I$ want to be ..... 26
56. I wish I could be more trustworthy. ..... 28
57. I shouldn't tell so many lies ..... 30
58. I am as smart as $I$ want to be ..... 44
59. I am not the person $I$ would like to be. ..... 46
60. I wish I didn't give up as easily as I do ..... 48
61. I treat my parents as well as I should (Use past tense if your parents are not living) ..... 62
62. I am too sensitive to things my family say. ..... 64
63. I should love my family more. ..... 66
64. I am satisfied with the way I treat other people. ..... 80
65. I should be more polite to others ..... 82
66. I ought to get along better with other people ..... 84
67. I gossip a little at times ..... 96
68. At times $I$ feel like swearing ..... 98
69. I take good care of myself physically ..... 13
70. I try to be careful about my appearance ..... 15
71. I often act like $I$ am "all thumbs". ..... 17
72. I am true to my religion in my everyday life. ..... 31
73. I try to change when I know I'm doing things that are wrong ..... 33
74. I sometimes do very bad things ..... 35
75. I can always take care of myself in any situation ..... 49
76. I take the blame for things without getting mad . ..... 51
77. I do things without thinking about them first . . ..... 53
78. I try to play fair with my friends and family . . ..... 67
79. I take a real interest in my family ..... 69
80. I give in to my parents. (Use past tense if par- ents are no longer living) ..... 71
81. I try to understand the other fellow's point of view ..... 85
82. I get along well with other people ..... 87
83. I do not forgive others easily. ..... 89
84. I would rather win than lose in a game. ..... 99
85. I feel good most of the time. ..... 14
86. I do poorly in sports and games ..... 16
87. I am a poor sleeper ..... 18
88. I do what is right most of the time ..... 32
89. I sometimes use unfair means to get ahead ..... 34
90. I have trouble doing the things that are right. ..... 36
91. I solve my problems quite easily. ..... 50
92. I change my mind a lot. ..... 52
93. I try to run away from my problems. ..... 54
94. I do my share of work at home ..... 68
95. I quarrel with my family. ..... 70
96. I do not act like my family thinks I should ..... 72
97. I see good points in all the people I meet. ..... 86
ItemNo.
98. I do not feel at ease with other people ..... 88
99. I find it hard to talk with strangers ..... 90
100. Once in a wile $I$ put off until tomorrow what $I$ ought io do today. . . . . . . . . . . . . . . . 100

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